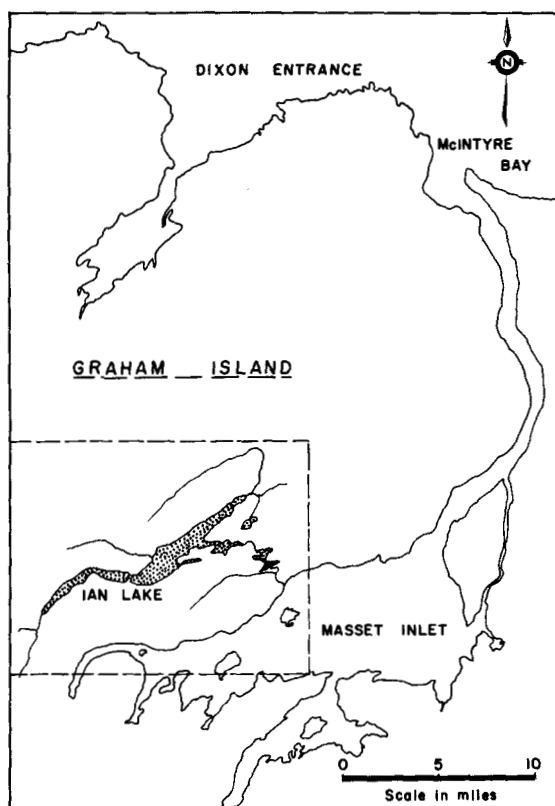




## BC HYDRO EXPECTED TO PAY FOR STUDY



map showing site of proposed development.

B. C. Hydro and Power Authority has recently indicated an interest in developing the hydroelectric potential of the Ain River on the Queen Charlotte Islands. The development would initially meet all energy requirements on Graham Island and would replace existing diesel plants at Sandspit, Port Clements and Masset.

Preliminary plans for the development entail the construction of a 100' high dam on the Ain River a short distance below Ain Lake. This would raise the water level of Ian Lake by 84 feet to allow an average regulated discharge of 680 cfs through the powerplant. The powerplant would be located on the Ain River approximately 1 mile below the dam and would be connected to the reservoir by a pipe and penstock arrangement. The flooded area behind the dam is estimated at 5500 acres, which is equivalent to the present combined area of Ian, Skundale and Ain Lakes.

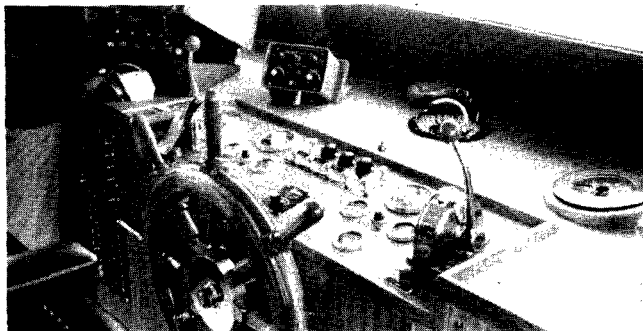
The Ain River system is utilized by all species of Pacific salmon except chinook. Chum and pink salmon spawn in the lower reaches of the Ain River, but it is not known whether their spawning grounds extend upstream of the proposed powerplant. Coho and sockeye migrate into the lakes and are believed to spawn primarily in three tributary streams of Ian Lake. Raising the lake by 84 feet would inundate these spawning grounds.

In addition to contributing significantly to the commercial fishery, these salmon runs form an important part of the Indian food fishery. An Indian reserve is located at the mouth of Ain River and salmon are taken annually by the Masset Band from the river within this reserve. The Band has expressed concern over the development and they will undoubtedly require assurance that salmon runs will not be significantly affected before ratifying the project.

Feasibility studies are now being carried out by International Power and Engineering Consultants Ltd. on behalf of B. C. Hydro. These will be paralleled by a two year fisheries study by the Environmental Quality Unit in collaboration with the Fish and Wildlife Branch of the Provincial Government. The studies will commence early in 1974 and are expected to be financed by B. C. Hydro. Included in these studies will be an inventory of anadromous fish species by means of counting fences on the Ain River and at least three tributary streams of Ian Lake; a lake sampling program to obtain data on water chemistry, nutrients and temperature; a lake sounding program; a surveillance of the upper reaches of tributary streams of Ian Lake to locate potential spawning areas or spawning channel sites to replace all areas lost by flooding; an inventory of spawning areas between Ain Lake and the mouth of the Ain River; and engineering surveys of these spawning areas to determine minimum flow requirements.

Bob Robertson,  
Environmental  
Quality Unit.

# SOOKE POST CHRISTENED.



"Sooke Post control console."

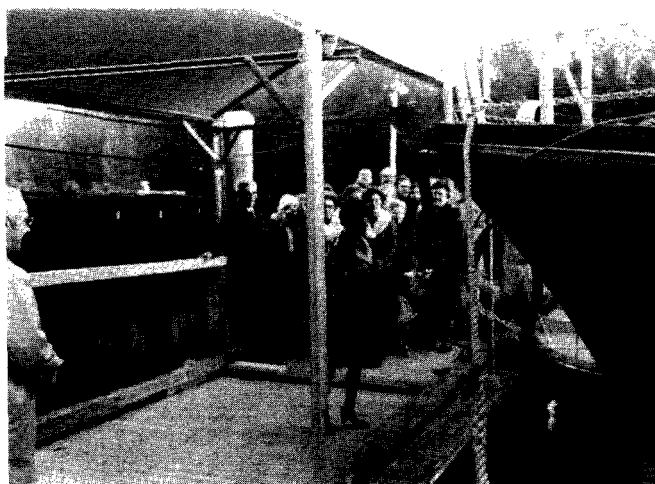
The new "Sooke Post", a 63 foot fibreglass hulled vessel, was christened on November 14, 1973 at the New Westminster Marine Base by Mrs. D. E. MacIntyre, wife of the supervisor for the Queen Charlotte Islands District.

Mr. W. R. Hourston, Director, paid tribute to the old 60 foot "Sooke Post", now the "F.D.I." and her years of service on the Queen Islands. She was originally a Royal Canadian Air Force tender vessel constructed in 1944 to service isolated radar outposts on the Queen Charlotte Islands including Cape St. James, Langara Island and Marble Island from her base at Alliford Bay. She also towed targets during this time. In her years of service with Fisheries Operations she served most of her time in Queen Charlotte Island waters. The present skipper, Captain Ken Harley, has served 10 years as master of this vessel - the longest term served by any of her approximate dozen skippers while Mr. Teddy Squires, her engineer, has been servicing the engines for a total of 17 years.

The new "Sooke Post" was designed by the architectural firm of Jackson Talbot and Associates of Vancouver and constructed by Philbrooks' Shipyard of Sidney. She has a 17 foot beam with a cruising speed of 17 knots. She carries a crew of four with accommodation for an additional four persons. The "Sooke Post" is equipped with two G.M. 12V71's, an automatic pilot, two Marconi radios, a VHF radio, citizen band radio, Audio Gonio direction finder, Loran, Ecolite, Furuno Sounder, Wesmer Sonar and Furuno Radar.

The new "Sooke Post" skippered by Captain Harley and crew will be based in Queen Charlotte City. The fate of the "F.D.I." is undecided but is presently on stand-by in Prince Rupert.

Frances Dickson,  
Q. C. I.



Mrs. MacIntyre christens the "Sooke Post."  
photos by Gerry Buxton.

## Manager's Report-north

I wouldn't have known a month had gone by since the last issue, but the editor assures me that this is a monthly publication. Something about age and the passage of time, it's caught up with me!

Went to Masset to attend the annual convention of the Native Brotherhood of B. C. Very enjoyable get together. I reviewed the salmon expectations for 1974 which, generally, are good and this, coupled with the sense of well-being arising out of this year's prosperity in the fishing industry, made for a good atmosphere. Renewed acquaintances with a great many Indians (and a few fishery officers).

The fishing season we are now leaving behind has been the most prosperous on record for both the primary and secondary levels of the industry. There has been a spectacular increase in boat building - shipyards have waiting lists of from seven months to over a year before start of construction. Uncertainty of material supply is adding to the difficulties. Fishermen who have long endured discomfort and awkwardness in their vessels now have the money to do something about it, if they can find a shipyard to do the work. Jack Ellis was commenting that since September there have been over 1,000 applications or appeals relating to upgrading licenced salmon vessels; by way of comparison, there were 1,500 appeals in the initial year of licence control and about 200-300 per year thereafter.

The fishing season we are about to begin has a few clouds hanging on the horizon. Doubts about market stability are beginning to concern operations and fishermen. Will the energy crisis create situations in Japan and Europe that ultimately result in import restrictions? And, if so, will fish products be affected? With the exception of halibut, supply should be good. Fishing effort in the groundfish fishery should expand considerably. The shrimp fishery may take off or at the least, expand off the westcoast of Vancouver Island and start up in the Namu area. Salmon and herring should be in good abundance.

In January, the week of the 14th, to 19th, I will be visiting a number of fishing communities to talk about the 1974 salmon expectations and to discuss fisheries matters in general. Pender Harbour, Sointula, Bella Bella, and Bella Coola are the ports of call on this trip. In early February the show will move on to the Prince Rupert area where meetings will be held with both processors and fishermen.

To all of you, Merry Christmas and Happy New Year.

Ron MacLeod,  
Manager, N.O.B.

## Five more Wildlife officials for Smithers

Smithers is to get at least five new professionals in its Fish and Wildlife office, and a number of additional support technicians and office staff as well.

The announcement was made by Information and Education officer Milt Warren in his after-dinner speech at the Wild Game Banquet Saturday evening.

Warren said that within the next six months, and possibly in as soon as two months, the Smithers office will acquire a Regional Director, a Regional Protection Officer, a Habitat Protection Biologist, a Wildlife Biologist, and a Fisheries Biologist to work in this area.

The area is presently being served by Fish and Wildlife professionals working out of Prince George.

The increase in staff here is only one part of a general rebirth of the Fish and Wildlife Branch all over the province. "We have been given the green light to raise hell, if we can back it up," Warren told the diners.

The impetus for the new outlook has come from several sources. Largely, it is part of a world-wide awakening to the dangers which wildlife and the environment are facing right now. It also comes partly from the general realization that "A land fit for wildlife is a land fit for people".

"It is easy for people not to

notice what is happening to our environment," Warren said. "When they built the pyramids, there was one square mile of land on the earth for every person. Now there are only 8 1/2 acres each, and the population is expected to have doubled by the turn of the century. There are already incidents in which certain places have temporarily been without enough oxygen to support human life normally. If a recent temperature inversion over New York City had not lifted when it did, thousands of people would have died soon from the bad air."

Referring to the damming of rivers and the logging practices of certain companies, which he termed a "bloody disgrace", Warren warned the guides and their guests that "We are losing much more than we realize."

The funding for the strengthened department will come largely from an expected increase in the cost of hunting and fishing licenses and tags.

Instead of putting the revenue from these sources into the general fund, Warren said, the department hopes that it will be used to make up 60 percent of their new budget, with the remaining 40 percent to come from general revenue.

"We hope this will double our current \$4 1/2 million budget," Warren said.

- from the Smithers Interior News.

## MORGAN ON

**A** This reporter was given a very special assignment from the editor of the Sounder. This being my first attempt, I wanted to impress her with my abilities of becoming a great writer, then the idea came to me. Maybe other people would notice I was capable of handling bigger assignments, raising myself from the CR category to the PM 4 or 5 category. With pen in hand, I rushed up to Jock R. Embleton's desk and said "Hi! I've come to interview you, Jock." The remainder of the conversation goes as follows:

Jock: "What for?"  
Me: "I heard you got married."  
Jock: "Yeh!"  
Me: "When?"  
Jock: "What do you want to know for?"  
Me: "I'm writing an article for the Sounder. You're my first assignment."  
Jock: "Well, what do you want to know?"  
Me: "Date you were married and who would help."  
Jock: "Date? I can't remember! Oh, yeh, it was when I took some annual leave last month."  
Me: "When was that?"  
Jock: "Hold on, let me look at my weekly reports. Oh, here it is! That's right, I was on leave here so that means I must have gotten married Saturday, November 24th."  
Me: "What's your wife's name?"  
Jock: "Shirley."  
Me: "Anything else you want to add to make the article more interesting?"

Jock: "My sex life is personal!"  
Me: "I didn't mean that, Jock!"

So here you have my first assignment:

Jock R. Embleton married the former Shirley Raven of Vancouver on Saturday, November 24th, 1973. They have rented a five bedroom house to raise 9 children - 7 girls and 2 boys.

Barbara Morgan,  
Records.

Editor's Note: Well done, Barbara! Your next assignment will be to coax a certain Mr. G. R. Morgan into writing an article about F. I. P.

## DIRTY TRICKS ON TEN

MY DARLING MAXINE:

The time has come. Longfellow says "Tis time for us to say farewell, tis time for us to part."

I feel that you should know that this is none of my doing. I was framed. I will tell you the sad story.

I thought that, by offering my resignation, I would at least be offered a SUB-Chief or at the most a Chief's Position. Well, my bluff was called. Thank heavens I have good friends in Regional Office. We pulled a Watergate. We bugged the (in hallowed voice please) TENTH FLOOR. Here is part of the result:

Tap-tap.

Voice 1. "Enter." (Shuffle, shuffle)  
Voice 1. "You may get off your knees now."  
Voice 2. "Sir, I have a letter of resignation from Seymour at Tofino."  
Voice 1. "Tofino? Tofino? Where is that - it sounds a Spanish name."  
Voice 2. "Well Sir, it is a Spanish name but-."  
Voice 1. "That's what I said, didn't I? Don't tell me we have a sub-district office in Mexico or somewhere like that???"  
Voice 2. "No, Sir, but all the time Seymour spends there we may as well have. Some of his monthly and weekly reports have Mexican stamps on them."  
Voice 1. "Seymour, you say? Seymour? Is this the disgusting fellow who writes snide things in the 'Sounder'?"  
Voice 2. "Well, yes Sir, but you see-"  
Voice 1. "Enough! Accept his resignation at once or he will be writing about ME in the 'Sounder' next and you know whose head will be on the block then, don't you, boy?"  
Voice 2. "Well, yes Sir, mine, Sir, at once Sir, I will tell him that I accept at once Sir."  
Voice 1. "I should think so. You may go and this time there is no need to back out."

Shuffle, shuffle, and door closes.

So you see, I was took. One of these days I will expose the system the same as I was going to expose the Army years ago.

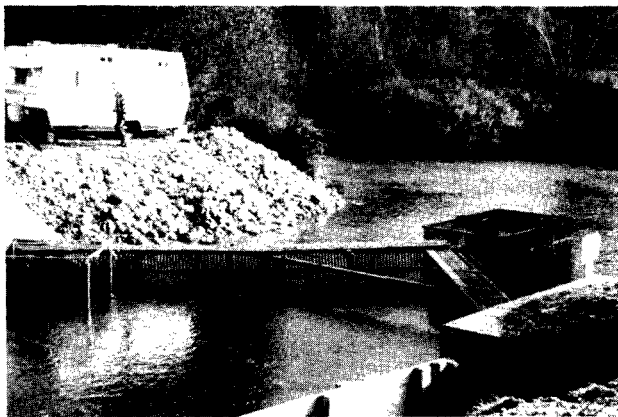
However, I want to thank all my friends at the Office for their card and the lovely present. My wife and myself say 'Thanks so very much and God bless you all'. I know everyone thinks that they have got rid of me and no doubt there was a huge party of celebration. But I have NEWS for them. I intend to send letters to the 'Sounder' from Mexico! This will shake 'em to the roots but, Maxine, love of my life, hide the letters until the day of printing so that they won't be stolen and destroyed.

Well, on Saturday I should be well across the border on my way south. If those Yanks muck me about with gasoline, there will be TROUBLE and I will expose them, too. I shall be stopping off at San Blas for a few weeks and then, God and money willing, pushing on to Campeche and Chiapas. Back to San Blas to meet my compadre Phil Meyer. Of course, they may not let him over the border as I hear that, metal being short down Mexico way, the chastity belt factory had to close. Still, I'll have time to warn 'em at San Blas anyway before he gets there. (By the way, what WAS he doing during MY party in Port A. last Saturday night?????????) I hear wild stories but surely he couldn't have gone THAT far?????????????)

My love to you all. May you succeed at whatever you have your sights set on. I will drop in to see you on my way back from wherever I'm going. Do you know? I am now a person of no fixed address!

As Ever,  
Nick the Greek.  
(El Greco)

## CHUMS HUM AT BLANEY, HANEY



Blaney Creek fish fence and trap  
photo by Larry Kahl

Blaney Creek, near Haney, is a tributary of the Alouette and Pitt river systems. The project in progress on this creek is a first step in a rehabilitation and enhancement program for chum salmon stocks of Fraser River origin. The main concept of the project involves taking a small, unidentifiable and virtually uneconomic race of salmon and building it to a size that is economically significant. The current operation utilizes three upwelling incubation boxes having a capacity of 1.5 million eggs. The final stage, operational by 1975, will utilize 12 boxes with a 6 million egg capacity.

Construction of new fish collection facilities, consisting of a combination fish fence and trap located in the lower flood plain section of Blaney Creek, was completed in October. Of the 1034 chum salmon trapped, 749 were transported for egg takes. A truck carrying an aerated fish tank was utilized in transporting the fish 6 miles from the trap to holding tanks at the incubation box site on upper Blaney Creek in the U. B. C. Research Forest. The fish were held in the tanks for up to two weeks until eggs were to be taken. The total escapement to Blaney Creek is estimated at 1150. Approximately 400 of the total escapement remained in the creek to spawn naturally.

529 females were used in four egg takes with approximately 2600 eggs obtained per female. This number of eggs is undoubtedly lower than the actual

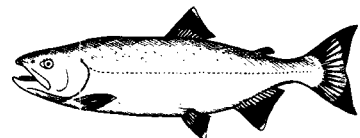


Egg planting at Blaney Creek incubation box  
photo by Pat Brennan

mean fecundity of the females. Several eggs were lost during handling and transport and not all the eggs in each female were taken for planting.

In 1972, about 250,000 eggs were collected and planted at Blaney. A 97% egg to fry survival resulted and all of the fry were marked by fin-clipping (adipose-left ventral) and released into lower Blaney Creek. In 1973 a total of 1.38 million eggs were planted in the three incubation boxes. Assuming the 97% survival rate is maintained, about 1.34 million fry will be released in the spring. Of these, 250,000 will be marked by fin clipping.

Larry Kahl,  
Southern Operations  
Branch.



### CHUM

Resembling sockeye, chums have black specks over their silvery sides, and faint grid-like bars. Living three to five years, they weigh up to 10 pounds, are used only for canning.

William Donald Anderson died in Port Alberni on December 13, 1973. Mr. Anderson had been a Fishery Officer for twelve years in Port Alberni, before he resigned in 1972. He was buried in the Field of Honour, Greenwood Cemetery, Port Alberni. He is survived by his wife Leone, and children Donna, Laurie, Garry and Craig.



# WOLVES PREY ON SALMON

Sitting here in the middle of the annual chore of filling in salmon spawning ground reports, as I come to the "Comments re Predators" line, I think over the various mammals, birds, etc., that prey on salmon. It is common knowledge that salmon are taken by eagles, bears, man, otters, and according to a Departmental film that I recently saw on the life of the sockeye, MUSKRATS! However, it seems less well known that wolves, also, kill considerable numbers of salmon on the spawning grounds.

Although I have never seen these animals in the act of killing fish, I have seen plenty of evidence that they do belong on the list of predators. While serving the Rivers Inlet and Bella Bella sub-districts as a relatively inexperienced Fishery Officer, I frequently came across large numbers of unspawned pink salmon carcasses, mostly along the smaller creeks, that had apparently been killed by having had a nip taken out of the back of the head and having no other signs of damage. In some instances, signs of bear predation could also be seen, but bears usually take chums in preference to pinks where both species are present. A bear normally starts on the abdominal portion of the fish, presumably to get the eggs, then strips the flesh off the sides. Upon asking a number of knowledgeable people, including local Indians, I was told that such kills are the work of wolves. Having investigated further, I concur with this. Invariably where numbers of salmon, usually pinks, are seen with nips taken out of the back of the head, signs of wolves can be seen, and in many instances, there are no signs of other large animals.

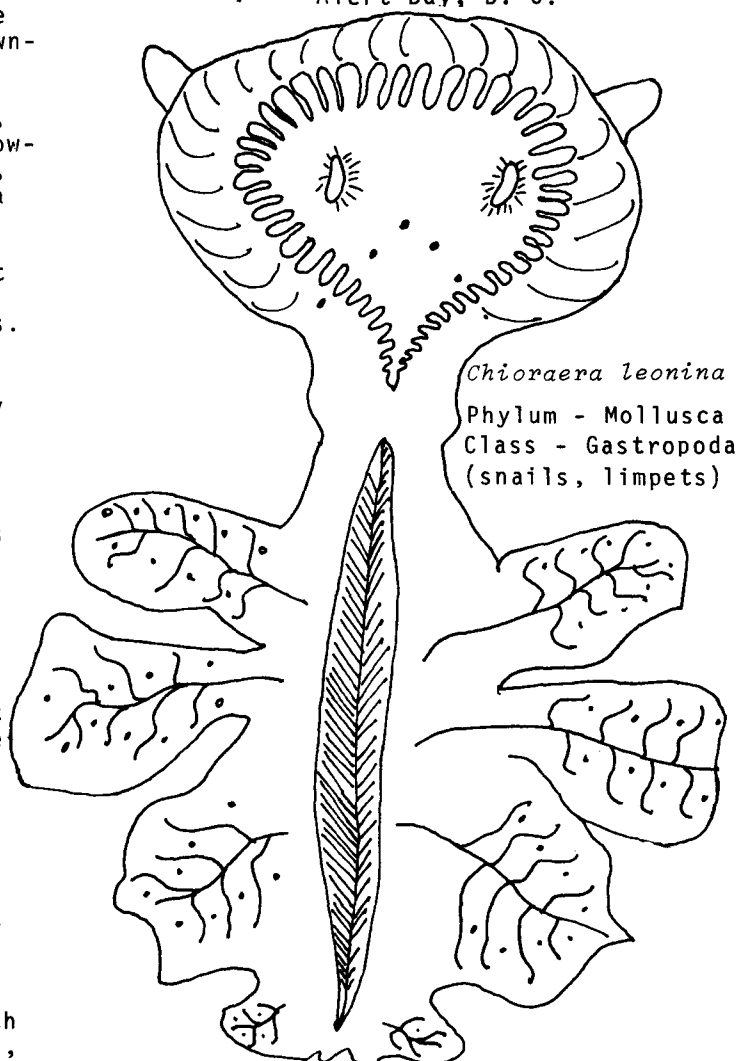
Very rarely are the salmon that are killed eaten, even partially. Nearly always, the kills are made in small shallow creeks with very dense spawning, and only at or near the peak of spawning, when the animals would find it easiest to catch the fish. Since the fish are apparently not killed for food, and are taken only when conditions make capture easy, I have reached the conclusion that wolves actually fish for the joy of fishing.

Just how extensive are losses of salmon to wolves? I have seen on a number of occasions, hundreds, even thousands, of pink salmon killed in this manner, most notably on the Klatse River in the Bella Bella area in 1966 where, if memory serves me correctly, the number was in the order of ten thousand. Should we not, then, treat wolves as a threat to the resource and initiate control programs along salmon spawning streams? I think not. In all kills of large magnitude that I have seen, the numbers of pinks in the grounds have been well above the requirements for spawning, as in the instance quoted where the number of fish was around 75,000 in a stream where the optimum is probably not over 50,000. Predation by wolves may, as in this case, be beneficial in preventing over spawning. Besides, who was here first, the wolf or man? Give them a break!

John Macdonald,  
Kitimat

## WHAT IS IT?

Dennis Brock, Alert Bay, B. C.



A B. C. garbage gobbler? An ant flattened by a steam roller? A jumpin siff bug? No, it's a hooded nudibranch. This chap was picked up in a seine net in Double Bay just 8 miles east of Alert Bay.

It is up to 4" long, free swimming and so transparent that its internal organs are easily visible. The oral hood around the head opens on the lower side and extends widely to catch food by contracting about it. The animal may be abundant in kelp beds and eelgrass where it lays egg cases in broad spiral ribbons. It is common in Puget Sound where it feeds almost entirely on crustacea larvae. It is hermaphroditic and indulges in mutual coitus as do most nudibranchs. The nudibranch is a voracious feeder; its stomach has been found so completely filled with minute animals that the body bulged in an almost perfect sphere. A hooded nudibranch does not use its poorly developed foot much, for the animal is in almost constant motion, swimming dorsal side downward with the head and tail nearly touching each other. The hood also serves in floating the animal. On the upper surface of the body there are inflated leaf like appendages or cerata, which gradually become smaller toward the posterior end. A strong offensive odor is given off when the animal is touched and it feigns death most cleverly.

1. Ref. Flora, Charles J. Fairbanks Eugene M.D. 1966. "The Sound and The Sea". Pioneer printing Co., Bellingham, Washington.
2. Guberlet, Muriel Lewin 1962 "Animals Of The Sea Shore." Binfords and Mort Portland, Oregon.

# WAUKWASH

September. A dry wind caressed the barren peaks and whispered in the spruce along the riverbank. The sweet smell of spruce pitch hung heavy in the air. Flies droned listlessly in the golden sun. In the crystal waters of the Waukwash, silver shadows darted from pool to pool. The sockeye had arrived. The plopping and slapping of 30,000 tails became a dull roar in the mainstream and breakthrough channels.

Woolly clouds swept over the western mountains. The sky darkened and raindrops danced on the swelling river. Once more the fish became active and alert - jumping and leaping upstream as the downpour increased.

A week later the rain stopped. Now 165,000 sockeye lay in the river. Spawning had begun. Everywhere crimson fish fought and manoeuvred for position. Soon the banks were littered with the carcasses of spent salmon.

The sky darkened and the air turned cold as autumn ran into winter. Snowflakes swept down on the north wind and crystals of ice clung to stark branches overhanging the Waukwash. The last of the sockeye had spawned and died. Beneath the gravel pink sparks of life glow brightly.

Russ Hilland,  
Central Coast  
Division.

## FROM CORKLINE TO LEADLINE - A DIARY

### QUINSAM APPROVED

January Some excitement in the Division - after nearly three years of development and planning, Treasury board approved calling of tenders for the Quinsam River Hatchery. This proposal was entered as a complete package which included both capital costs and the additional man-years and goods and services required to operate the facility. Approval in principle was granted on the total package.

Meetings of note included a session with the Amalgamated Conservation Society in Victoria - a vocal, energetic group sincerely determined to improve sport fishing in the Victoria region. A frustrating series of experiences from our point of view, since actual potential for increasing local salmon production is minimal to say the least.

### BEHIND CLOSED DOORS

February Vancouver honoured to host the FAO International Technical Conference on Fisheries. This conference was established to focus attention on world wide Fisheries problems as a prelude to the Law of the Sea Conference expected for late 1973 or early 1974. The papers submitted to this Conference covered a broad range of topics and are worthwhile reading. Oral presentation at the Conference itself was extremely limited, and in my view fell far short of what I would expect of a truly technical conference. I suspect that greatest advances were made between delegates behind closed doors in sounding out initial national positions regarding the Law of the Sea Conference.

Technical preparations were also started for meetings scheduled with the United States to re-negotiate the Reciprocal Fishing Privileges Agreement and to resume stalled discussions on Salmon Problems of mutual concern.

Tenders for Quinsam Hatchery were opened February 22. Although there were nine bids from major companies, prices were as usual disappointing. The low bid of approximately \$4,200,000 entered by Cana Construction Co. was about \$500,000 above our expectations. A great part of the difference was the result of fantastic increases in lumber prices which occurred over the winter.

March Preparations continued for forthcoming meetings with the United States - early in the month met with Canadian advisors to establish negotiating positions and draft memoranda to Cabinet to provide C.R. Levelton, as head of the Canadian delegation, with authority to reach agreement under certain conditions.

Foolhardily, I agreed to brush off some rusty biology and speak to the Pacific Fishery Biologists annual meeting at Harrison Hot Springs on chum salmon management. Managed to stay out of hot water (sic!) and escaped without too many open wounds.

Rest of month spent trying to figure out how we do \$1.00 worth of work for 60¢ during the coming fiscal year.

### AGREE NOT TO AGREE

April A month to forget. Horrible week in Washington, D.C., where little progress was made in re-negotiation of the Reciprocal Fishing Privileges Agreement. Basically agreed only that no decisions could be made on this overall problem of allowing the fleets of both nations to continue fishing within each other's fishing zones until some satisfactory progress could be agreed to on the specific problem of salmon interception. Possibility appeared great at this point that this Agreement would not be re-negotiated successfully.

Also learned that four man-years and associated operating dollars promised for Quinsam would have to be found within Region. Plans for construction continued, with news that Treasury Board awarded contract to Cana Construction Co., the low bidder.

May Eight Days in May in Seattle on salmon discussions. Hard positions put forward by both countries, with Canada attempting to develop mutually acceptable proposals. No inclination on the part of the United States to accept or even shift initial position. (On reflection, though, United States probably felt the same about our position). Talks broke off with animosity evident on both sides. Reciprocal agreement now will expire June 15 (which would mean exclusion of our troll fleet and halibut fleet from U.S. 3-12 mile zone and exclusion of U.S. fleet from our 3-12 mile zones), unless agreement can be reached beforehand. New meetings scheduled for week of May 21. Agreement on extension of Reciprocal Fishing Privileges Agreement for one year was reached at this meeting. Important features are that Canadian salmon trollers still are permitted to operate in a restricted area within the 3-12 mile zone off Alaska; and U.S. trawl fleet may continue to operate within 3-12 mile zones off the B.C. Coast. Atlantic implications are few and minor by comparison.

## U.S. CONCEDES SOME POINTS

An important concession was gained at least in principle with regard to United States Point Roberts chinook and chum salmon fisheries; within a restricted area of United States internal waters Canadian Fraser River fishing regulations will apply in the spring prior to I.P.S.F.C. control and in the fall following I.P.S.F.C. release of control. Probably will not reduce catches of Fraser River fish by United States fishermen substantially, but an important concession nevertheless.

June The salmon season upon us! Early catches of Fraser chinooks a little better than expected, but no great shakes. Meetings, meetings and more meetings; Fishing Vessel Owners, U.F.A.W.U. to discuss prospects for the year; meetings with District staff to review programs and finances; meetings of a task force struck to prepare a Regional salmon enhancement program.

## RECORD FRY MIGRATION

A bright note - greatest number of chum salmon fry in thirteen years of study recorded past Mission on the Fraser River - in excess of 61 million. Incubation boxes at Inches Creek and Blaney Creek produced egg-fry survivals of more than 90%. Blaney Creek fry were marked, so adult returns will be evaluated.

## QUINSAM GOING, BUT SLOWLY

July Construction well under way at Quinsam, although initial progress much slower than desired, considering the excellent weather conditions.

Salmon fishing in the Fraser looking much better than expected as the largest run in years of early Stuart sockeye showed up. Major diversion of sockeye through Juan de Fuca, though, so prospects for a strong Johnstone St. sockeye fishery appear slim. Pinks in Johnstone St. appear below expectations.

August Salmon fishery continuing unabated. Preparations begun for another round of discussions with the United States on salmon interceptions. Trips to Ottawa, troubles at Quinsam, Johnstone St. pinks not good, Fraser pinks a question mark - a month of jumbled hectic activity for all concerned.

September Pinks poor, but fortunately escapements satisfactory in most streams except Glendale. Early chum salmon catches higher than anything on record for September. A true indication, or?

Meetings with the United States held in Vancouver this time.

## U.S. PROPOSAL REJECTED

Maybe this climate helped, but for the first time it appeared that substantial progress was made. The United States conceded, for the first time, that benefits from enhancement should accrue only to the country that has produced the fish. Proposals and counter-proposals flashed back and forth across the table, with the United States finally presenting a "compromise proposal" which their delegation felt would be satisfactory. It was complicated from a technical point of view so a

recess was agreed to during which both sides would subject this proposal to an intensive technical scrutiny. This has been carried out for Canada by Argue, Pitre, Zyblut, McDonald, Godfrey, Aro and myself. Our analysis was presented to the Canadian Industry Advisory Group in December and showed in essence that acceptance of this proposal as it stood would not be equitable from Canada's point of view. This technical team is now preparing further statements in preparation for the next round of talks which is scheduled for Seattle in January, 1974.

## October, November and December

The big news is chum salmon! Catches in Areas 12 and 13 of about 2.3 million are the largest since records were initiated in 1944. In total, a catch of around 3.0 million was recorded in the Johnstone St. Gulf of Georgia - Fraser River Area - if not the highest on record, second best by about 100,000 fish. In addition, escapements to all areas, on first report, appear to be excellent.

These have been my personal highlights of the year, with the odd hint of occasional low lights thrown in. Many other things have happened during the year within the area of the Division, such as oil spills at Alert Bay and Vancouver Harbour and rock slides in the Chilcotin - but these are stories for field staff to tell.

A belated Happy New Year to everyone, and may the Easter Bunny bring us an extra basket of lettuce come April!

Ian Todd  
Fraser River Division

## Our claptrap exposed

ANCHORAGE DAILY TIMES

December 10/73  
Vancouver Sun

An editorial in an Alaska daily.

Oh, the irony of it all.  
Perhaps you noticed.

The story was told in a short Associated Press dispatch from Canada. It related how crude oil from Alberta would be carried to refineries in eastern Canada to relieve the pinch caused by the Arab oil embargo.

After listening for years to Canadian leaders protest and howl against plans to transport Alaska oil to market you probably don't have to take many guesses on how the Canadians plan to meet their own petroleum shortages.

You're right the first time.

The Canadian plan is to move the oil by pipeline from Alberta to Vancouver and there load it on tankers. It will then

be trans-shipped via the Strait of Juan de Fuca, past the pristine coastline of British Columbia, down the West Coast of the United States, through the Panama Canal, and up America's East Coast to the Eastern Canada refineries.

Well, so much for the environmental threat to British Columbia caused by modern American tankers sailing from Valdez to Cherry Point in Washington State.

The Canadians who yelped so much against the trans-Alaska pipeline while pitching for a trans-Canada pipeline now have had their whole argument blow up in their faces.

Since it is now perfectly proper to ship Canadian oil south by tanker, it can hardly be terrible for Alaska to use the same route.

Hopefully, we finally have heard the last of that kind of claptrap.

GO TO CHA



PORT ALBERNI- The Royal Canadian Legion No. 55 was the scene of a combination Christmas party and surprise retirement bash for Nick Seymour on December 8th. Fishery officers, boat captains and crews, patrolmen, office staff and wives and husbands from District No. 4 attended. Mr. Seymour couldn't take the rains of Tofino any longer and will reside in sunny, dry Yuma, Arizona (At least for a while). Accompanying him will be his engraved "Safari Kit" complete with two Thermos bottles (one for ice and one for coffee?) and his hand-made wallet filled with 100 pesos. (Oh yes, I guess his wife will go too). Au revoir, mon amour!

The River Boat Inn in Mission City, piloted by "Captain" Tom Long, and just recently launched, nearly floundered on Wednesday, December 12, 1973.

The reason was a dinner and party held by the staff of District 2 to honor Harry Burrow on his retirement from the Fisheries Service. Harry retires effective December 28, 1973. Members of the field staff, marine staff and the staff of the district office and their wives/girlfriends gathered for dinner. The dinner was arranged originally to celebrate the opening of The Riverboat. This was planned when it was found that Tom Long, who readers will recall, was a long time member of the service as crewman of various patrol vessels, announced that he was leaving to open a restaurant at Mission.

Originally Harry organized the dinner but when he announced that he was about to retire plans were quickly expanded without his knowledge to honor him.

Guests of the gala affair were Ian Todd, Chief of the Fraser River Division and his wife Joan. Also attending was Larry Ottman, (now of Prince Rupert), who has done time in District 2 and his companion, Peggy Christie.....(Did you notice Larry, that she had a black watch band)

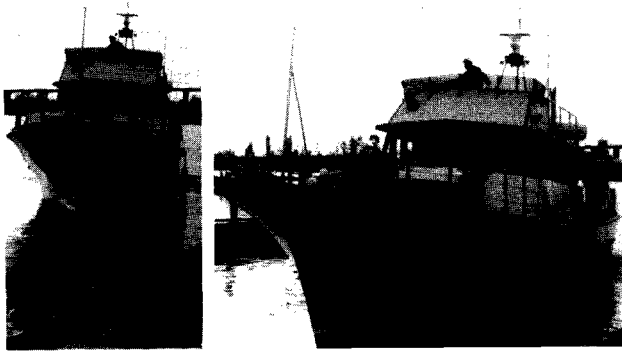
At the dinner, a presentation of a gardening book and an engraved desk lamp was made to Harry by Tom Moojalsky.

Wayne Lowden,  
New Westminster.



photos by Wayne Lowden

# CAPT SAYS



the new "Sooke Post" leaving the New Westminster repair station following her christening.

photos by Wayne Lowden

We left Philbrooks Shipyard at Sidney on November 28th, and arrived in Prince Rupert December 2nd. We only travelled daylight hours and our speed for the trip was approximately 15 knots.

It was a fairly uneventful trip with all electronic equipment and engines working satisfactorily.

Weather conditions were not too good, with south east winds blowing every day, and either rain or snow showers. The strongest winds encountered on the trip north was approximately south east 20, which was on our stern and the vessel rode very well.

The vessel seems to be a good sea boat, but I hesitate to say too much about her sea qualities until we have had her on the West Coast of the Queen Charlotte Islands in different sea conditions.

Crossing the Hecate Straits a gale warning was forecast for south east 35, but I would estimate the wind force on our trip across not to exceed south east 25, with a moderate sea. Under these conditions we did not have to slow the new "Sooke Post" down and the trip was comfortable, even though this sea was on our port beam.

The Cook, Engineer and myself all agreed that had we been on the old "Sooke Post" we would have been rolling heavily on this trip over.

Considerable spray is thrown upon the vessel with any moderate sea on the bow and we find we have leaking doors and windows which will have to be weather-proofed.

We have trouble also, keeping the ship's batteries fully charged and this will have to be looked into when we go back to Prince Rupert.

There are a few minor problems to be corrected, such as weak windshield wiper units but so far we have found no major problems.

The regular crew of the "Sooke Post" find this vessel very superior to the one it replaced, with its better living accommodation, nice galley, and increased speed.

In the wheelhouse, we now have room to move around and it is certainly well equipped with Loran, Direction Finder, Sonar, Automatic Pilot, Depth Sounder and four radiophones and a decent chart table at last.

I have high hopes that this vessel will turn out to be a credit to the Department.

Ken Harley,  
Captain "Sooke Post".

## R.I.P.-M.B.O.

Someone put a copy of the latest Purchasing magazine on my desk the other day. The cover of the article has a gravestone on it with the scripture "R.I.P. Management by Objectives". It also poses the question "Is management by objectives dead? Not yet, but it's dying". The title of the article is "Management by Objectives: A Requiem is Due" by Claudia H. Deutsch, Associate Editor.

The main criticisms of the management by objectives process as outlined in the article are that that MBO programs place too much emphasis on dollars and cents. It stymies creativity and there is a strong temptation to ignore budget constraints in return for accomplishing a particular goal. The article also states that the MBO process encourages ill-will between departments.

It is an interesting article if for no other reason than it provides a different perspective of this management process. The reader should be cautioned that MBO is criticised only for its use effectiveness in a purchasing department. The criticisms do not necessarily apply to a government office or another type of organization. However, it should be remembered that MBO was not developed as a government management tool but as a tool of the business enterprise. Further, even to those of us whose basic training in management techniques is somewhat limited, it would appear that many of the points made in the article might easily be applied to this organization.

## R.S.V.P.

Box 38  
Bella Bella, B. C.  
November 28, 1973.

To the Letter Addresser:

On September 1, 1973, I moved to Bella Bella from Prince Rupert. I then completed a change of address form and dutifully sent it into the Vancouver Office. For some strange reason my mail still travels from Vancouver to Prince Rupert back to the post office at Vancouver and is then sent to Bella Bella. Not only does it mean that my paycheck is late but I am not too popular with the secretarial staff at the Prince Rupert office as a result of readdressing letters and letters and letters.

So if the letter addresser is out there somewhere would you please address mine, Box 38 Bella Bella, B. C.

Lyle Enderud.

Editor's Note: Pat suggests that you send in C. of A. cards to specific sectors, e.g. - NOB, Personnel.



# ALUR EXPLAINED

The Department of Indian and Northern Affairs is responsible for the management of land and water resources in the Yukon and N.W.T. and for ensuring that the benefits produced by the development of those resources are not obtained at the expense of extensive or unnecessary environmental degradation. The Arctic Land Use Research Program (ALUR) was established by the Department in order to generate baseline information and provide research support for the application of regulations designed to protect the northern resources. As part of the ALUR program, a series of land use information maps is being prepared. The maps summarize information on renewable resources and related human activities, and are an essential component of the information base which is being established to facilitate comprehensive regional planning in the north. The maps must be regarded as interim since the information is incomplete or based on preliminary or reconnaissance surveys for some areas

Much of the basic data from which these maps are compiled is provided by federal and territorial agencies, of which Fisheries Service is one. Our involvement in the program began in the summer of 1971 in conjunction with the Yukon Pipeline Survey with bases at Old Crow and at Herschel Island in the Beaufort Sea. Submissions to the program were made of fisheries information gathered during surveys of approximately top one-third of the Yukon Territory. The kinds of information requested included species composition, relative or absolute abundance, seasonal migrations, habitat characteristics, domestic, commercial and recreational fishing areas, and critical or sensitive areas for fisheries. These represented, to a large degree, the requirements for the ongoing regional inventory program in south and central Yukon in 1972, and the two programs were integrated in the 1972 season. As well, considerable information was gathered from interviews with local residents engaged in recreational fisheries and commercial activities.

The collection of fisheries data in the 1973 ALUR program was focused on an area of approximately 40,000 square miles in East Central Yukon from 62 degrees N. to 66 degrees N. latitude, and an area in the extreme S.E. corner of the Yukon Territory. The region is drained by tributaries of four major river systems: the Pelly and Stewart Rivers (Yukon River system) and the Peel and Liard Rivers (Mackenzie drainage). The only settlement in the area is the recently built mining town of Faro, and the only road is the North Canol, built to service the World War II Canol pipeline from Whitehorse to Norman Wells in the N.W.T. Human activities were until very recently restricted to the brief forays of prospectors, hunters and trappers. Mineral exploration was intense in parts of the area in 1973 because of the discovery of attractive lead - zinc deposits along the Yukon - N.W.T. border.

No regular Fisheries Service programs are conducted in this area, so the three-man ALUR field party was perforce self-sufficient. Base camps were established at key locations throughout the study area by fixed-wing aircraft, usually on the mainstems of the major rivers involved. Each camp was maintained

for approximately one week, then we moved on to greener pastures. The universal northern plague of mosquitoes was most intense at the Margaret Lake campsite, just bad in other locations, but the discomfort occasioned by their degradations was more than compensated for by the opportunity to travel through some of the most beautiful country in North America. Moose and Woodland Caribou were notably abundant, bird-life was myriad, and excellent sport-fishing opportunities existed for northern pike, Arctic grayling, lake trout and Dolly Varden char.

From each camp, seining and gill-netting programs were conducted as far upstream as the range of 10 foot Canova inflatable boats (with 9.5 h.p. motors) permitted. Helicopter supported synoptic surveys of accessible tributary streams were undertaken from most base camps. Using a canoe lashed to the float of a Beaver aircraft, gill nets were set for twenty-four hour periods in approximately 30 lakes in various parts of the study area. Some proved highly productive. Extensions of recorded range for many species were disclosed by the 1973 work, and many new spawning and rearing areas for several species were discovered (one for chinook salmon in a small creek off the Pelly). Previously unauthenticated reports of the presence of Dolly Varden char in the headwaters of the Peel were confirmed, and a race of non-migratory least ciscoes twice the size of those previously recorded was discovered in Dragon Lakes up the North Canol Road. Two small but tasty bull moose were captured on the first day of the hunting season.

Preliminary information on fish resources for the entire Yukon Territory has now been assembled for the current map series. Because of the vastness of the Territory, and the unique and costly logistical problems to be surmounted, much of the information is incomplete. Tentatively, the current map series will be revised and updated as new information becomes available.

Mike Elson,  
A.L.U.R. Program.

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## CHANGING MEASURE

In Great Britain they are gradually changing over to the metric system in all forms of measurement since they moved to decimal currency. The trend is also developing in North America and it is predicted by experts that in ten years time we shall be completely converted. Probably there is merit in the change but it sure makes a mess of some of our favorite English expressions -

*A miss is as good as 1,609 kilograms.*

*Beat him within 2.54 centimeters of his life.*

*Peter Piper picked 8.81 liters of pickled peppers.*

*Missed it by 1.609 country kilograms.*

*28.350 grams of prevention are worth 453.59237 grams of cure.*

Better start practicing before the system gets here, or it'll hit you like 1,000 kilograms of bricks!

- from the Fisherman - Aug. 73.

# LETTERS TO THE EDITOR



Maxine,

Our talk last month started me thinking, so I made some light ning-fast\* calculations and came up with the following:

A random sample of 116 "A" licenced boats from the "LIST OF LICENCED COMMERCIAL FISHING VESSELS IN BRITISH COLUMBIA" showed a mean net tonnage equivalent (Schedule H, B. C. Fishery Regulations) of 10.03 tons per boat. As of November 14, 1973, there were 4681 "A" catagory vessels in B. C. The total net tonnage equivalent of these "A" vessels is therefore approximately 46,950 tons. The going price for "A" licences is around \$2,500 per ton at the present time (though a licence cannot be sold by itself, of course). That means that the total value of all the "A" licences is over 117 million dollars. These licences had no cash value five years ago. That, then, is one side effect of the salmon licence limitation. It sure makes it tough for a person to get into the salmon fishing industry.

\* On an electric adding machine even at the risk of worsening the energy crisis.

Wishing I owned an "A" class boat,

Laurie Gordon,  
F.V.I.P. Prince Rupert, B. C.



The licence on this 35' troller is worth about \$17,500. The boat is worth about \$6,000.

photo by L. Gordon.

Editor, The Sounder.

Maxine, I was unable to come up with any words of wisdom or to expound at any length on the varied and interesting subjects that each sub-district officer has to offer.

Also, not having had the opportunity of your company, and being basically reserved, I cannot enlarge on, (or improve on) the eloquent discouse put forth by Nick Seymore.

So again the Sounder will be spared my bad spelling bad grammer and inane thoughts.

Wayne Lowden,  
New Westminster.

To: The Sounder

Merry Xmas and Happy New Year from the Accounts Section! We have enjoyed reading about all your great and exciting projects, and appreciate the opportunity to get a larger view of the Fisheries Operations. Tied to our desks and pens, and buried in paper-work, as we are - it is nice to get some idea of what our efforts actually DO! Because we are a necessary part of the end result! As keepers of the "purse strings" we may not be the most popular department - but without us - the various projects would grind to a halt!

So come up an' see us sometime - and give us a kind word in passing!

*Editor's Note: We asked accounts to write an article about their beefs, and how we could improve things for them at our end. This is all they could come up with. (They ain't so bad.)*

"Bud" Graham, technician with the Northern Environmental Quality Unit, and Barbara Maclean will celebrate their first anniversary on December 29, 1974. The wedding took place in St. Aidan's Church at Roberts Creek.

Technician Lee Christensen and wife Susan are the proud parents of their first son, Erik Holmstrom. Erik was born 5:13 a.m. December 8, 1973, and weighed 8 lb. 8 oz. Brother for Daphne.

Technician Gerry Buxton and wife Erma, after three tries (called Troy, Kevin, and Ian), finally got their girl. Born at 12:17 p.m., November 18th, she weighed 6 lb. 10 oz. At press time, her name was still undecided, but "Brenda" seemed likely.

Overheard in elevator:

"There's one born every minute".

Fred said;

"But how come they all work here?"

## JONES AND ENVIRONMENT

Jones was laboring in bondage in the muddy flood plain of the Nile River, wondering how to make his daily quota of bricks without having access to any straw. Kussat appeared to him and said, "Jones, I have some good news for you, and some bad news, which would you like to hear first?"

"It having been a hard day," JONES said, "Oh, Lord, I would like to hear the good news first."

"Then hear," said KUSSAT, "I shall devastate the land of your oppressors; I shall change water into blood, I shall turn day into night, I shall send locusts to ravage the land, I shall part the Red Sea and I shall lead your people out of slavery and into the promised land."

"Oh, wonderful," said JONES, "And, what Lord is the bad news?"

"Well, JONES," replied the Lord, "You will have to prepare the environmental impact statement."

Division 3  
Kanata School  
March 12 1973

✓ Dear, Mr. Gray  
Thank you for coming and showing us  
the film salmon. We learned a  
lot about salmon. We hope to go  
to the cannery next week.  
And we want you to come  
back some day to show us all  
about all different kind of fish  
and big ones and little ones you  
are so good that you know all  
kinds of fish and know what they eat  
and what they do and how they  
breathe and how they move and  
all the other things.  
And you are very nice and  
we hope we can get there  
soon and we hope we can see you  
there. And we hope we see some  
fish too.

Your friend,  
Cheyl Tingstad

Dear Editor:

Attached you will find one letter which I have chosen from some 35 which I received after spending an hour with the Kanata School Grade 1's and 2's. The film "Salmon's Struggle for Survival" was shown (it was very poor for this age group) and then had a short question period. It is very clear from the letter that children at this level are already very interested in the ways of life and nature around them.

The expression "We are building for future generations, our children" is commonly used, but we are failing to show and explain to them what we already have, how it is being used as a resource and as a recreational pastime, how the Fisheries is involved with the resource and what we are doing to maintain it for future generations.

The best way to guarantee the future of the resource is to promote and stimulate interest and understanding in the children - the adults of the future.

Larry Gray  
Prince Rupert

# RESOURCE MANAGEMENT— THE OBJECTIVE

BY DR. M. P. SHEPARD  
Resource Management Branch  
Fisheries and Marine Service  
Environment Canada, Ottawa.

These are difficult times for Canada's fisheries. But the cause of our difficulties is, at the same time, the source of our opportunities - that cause is the buoyant market situation which is placing greater and greater demands on available supplies of fish and, in many cases, pressing the resources to or beyond their limits.

Twenty years ago the problem was to find markets for our fish; now the problem is to find enough fish to meet market demand. The problem is not only a domestic one - foreign nations were even quicker than Canada to realize the potential of the stocks off our shores and recently have brought the stocks under fishing pressures so great that their well-being has been threatened. One by one the fish stocks of the world have been burdened by overfishing, and one by one they have declined.

In this light, what is the objective of resource management - indeed, what is resource management? Right now it is a child born of crisis, of declines in stocks unprecedented in history - its first objective must be to prevent disaster. The tragic examples of the decline of haddock stocks on Georges Bank as the result of vacuum-cleaner foreign fisheries or a dozen other cases of resource failures - some close to home - must not be repeated. The fight to prevent disaster must be waged both nationally and internationally, and sometimes the solutions are unpalatable - increasing restrictions by quota regulation, closed seasons, etc. But the price is worth the agony if we are to preserve the resource base for future fisheries.

*The economic welfare of our fishing industry must always be number one on our priority list.\**

## STEPS IN THE PROCESS

In closing, I would like to suggest that resource management must be viewed as a process in which all of us, processors, fishermen, governments, must play full and positive roles. The steps in this process are:

First, a dialogue with the resource users community to determine the aspirations of Canadians for resource use;

second, research to determine the capacity of the resources to meet these wants, and exploration and technological development to enhance supplies, improve harvesting, processing and marketing;

third, array of alternatives for matching resource use to resource capacity;

fourth, selection of alternatives which will provide maximum benefits to the Canadian community at least cost;

fifth, defining the roles of resource users and governments in carrying out the selected alternatives;

sixth, developing programs of legislation, research, development, harvesting, processing and marketing to provide the desired benefits.

*We have begun the intensive consultations needed to gain a clear picture of where our resource users think we should be going. Such consultations must be consolidated and expanded - despite the fact that we are all short of people to carry out our day-to-day work, we must be sure that we have enough planners and thinkers free to participate in this paramount activity.\**

On the government side, we are looking hard to the implementation stages of the system. *Research, development, legislation, enforcement, must be viewed as parts of the single process and we must organize them into a single machine - there can only be one fisheries policy - not separate policies which revolve about whether one's particular job is policing or scientific investigation or development.\** We need resource managers who will form focuses for matching the needs of the resource users to available supplies. We will be looking to development of unified fisheries programs in which our skills are blended together rather than being exercised separately for their own sakes.

\* Based on a speech given at the annual meeting of the Fisheries Council of Canada, at Charlottetown, P.E.I., April 25, 1973.

\* *Editor's Note: our emphasis.*

## MORE ON SOOKE

On December 6th, 1973, the newly commissioned "Sooke Post" arrived home after a very rough ride across Hecate Strait. The arrival of Captain Harley's vessel culminated years of anticipation and waiting for the replacement of the old legendary "Sooke Post." People of the Islands have regarded the "Sooke" as an integral part of the Island Community, its status achieved by its many search and rescue missions over the past years, and by its work as a fisheries management unit which has gained the respect of both industry and public.

On the afternoon of Thursday, December 6th, approximately 15 minutes after the "Sooke" had docked, people started to inspect the vessel, although officially the open house was to be held Friday afternoon. On Friday, the people of the Islands were given the opportunity to view the new vessel, which was christened on November 14 by Mrs. D.E. MacIntyre. Messages were sent to the general public via C.F.P.R. Radio in Prince Rupert about the open house, and personal invitations went out to the local businessmen by departmental staff. Visitors were all welcomed

more on Sooke cont'd -

aboard on Thursday, Friday, Saturday and Sunday. All told, approximately 235 people viewed the boat and all praised it highly. During Friday's open house Captain Harley had all the electronic equipment working and he and his crew explained the operations to the public.

On Friday evening a small but enjoyable reception was held in honour of the "Sooke's" return home and approximately 80 people were in attendance. Donations of food were received from Nelson Brothers and W. Funk, of Christy Bay Enterprises, Queen Charlotte, B.C.

Keith Hebron  
Queen Charlotte City

## DISCUSSION OF JOB ROLES IN THE NORTH COASTAL DIVISION

At a North Coastal Division meeting in Prince Rupert in November, time was set aside for a discussion of job roles in fisheries resource management.

The following is a summary of some of the more pertinent comments and opinions of the group related to Divisional assignments.

It should be pointed out that there was not necessarily consensus on these opinions and they are certainly not an expression of policy at this stage.

### BRANCH MANAGER HAVE NO INVOLVEMENT

Branch Manager - The Branch Manager is considered the major policy decision maker for the Branch. He should present and clarify National, Regional and Branch policy to the Branch, and represent Northern Operations Branch in the development of Regional policy and plans. A major responsibility is to obtain sufficient funds to carry out Branch operations. The Branch Manager should have no direct involvement in fisheries management.

Division Chief - The Division Chief is considered an administrator responsible for the overall organization and operation of the Division. The Division Chief should transmit Branch and Regional policy to the Division, and integrate the Districts and work groups within the Division. He should also present Division proposals and work resource requirements to the Branch Manager. The Division Chief should have little or no involvement in the ongoing management of the fisheries.

### SUPERVISORS HOLD "BIG WHIP"

District Supervisor - It was indicated that the District Supervisor has a major role in the management of the fisheries and other operations in his District. He advises Sub-district officers and co-

ordinates the regulation of fisheries. Another major responsibility is the training of Fishery Officers in the District. Emphasis was placed on the degree of involvement of the District Supervisor. It was proposed that the District Supervisor should be less involved in the details of fish management and District operations, and Fishery Officers should be given more freedom and opportunity for decision making. District Supervisors have been described as holding the "big whip", and the close contact between Fishery Officers and the District Supervisor results in conflict.

### F.O. WANT THE LEAD ROLE

Fishery Officers - The Fishery Officers feel their first priority is management of the fisheries, and they desire greater input into the regulation and decision making process. They would prefer to take the lead role with less control from the District Supervisors. They would like to see biologists and technicians take over more of the enumeration and stock assessment work. They would also prefer to eliminate the work load related to Environmental Protection Service, Buy Back Program, Licencing and sales slip data. They also feel that they have been inadequately prepared to deal with public relations.

### BIOLOGISTS IN FIELD OFFICES

Fisheries Management Biologists - The major role of the fisheries management biologists is to conduct studies related to fisheries management including stock assessments, predictions, development of regulations and fishing patterns. The biologist should have considerable input into the development of new fisheries (e.g. sea urchins, kelp, etc.). It was suggested that biologists are frequently not used as effectively as they should be because they are headquartered in Vancouver. There is a degree of alienation between headquarters and field staff. It was recommended that biologists be located in field offices.

### TECHNICIANS IN LAW ENFORCEMENT

Biological Technicians - It was felt that the Division technicians should be specifically involved in salmon enumerations, and stock indexing and assessments. Technicians should take over more spawning ground enumerations when resources are available. It was suggested that Fishery Officers should do enumeration work only in the minor tributaries. Technicians should also carry out stream assessments and specialized sampling and studies. It was suggested that some technicians should be involved in law enforcement in their work areas. It was also suggested that technicians should have greater opportunity to change assignments and work areas.

### MASTERS UNDERUTILIZED

Vessel Masters - It was proposed that Vessel Masters should have a greater role in both the pre-season prediction and planning of fisheries, and in the ongoing management and regulation during the season. Vessel Masters are not always used effectively at the present time. As job roles change classification of some Vessel Masters should also be changed.

Rod Palmer,  
North Coastal Division.

# SPURIOUS EMISSIONS

A story emitted by a Crown Zellerbach logging operation in Naysash Inlet (Area 10) is about a large body of anchovies so large that on December 17, 1973, they were reported jumping out of the water onto the C.Z. "A" frame float - in numbers. Fisheries is checking out the story.

\*\*\*

A new biological technician for Central Coastal Division, namely Dave McNeil, came on staff in November.

\*\*\*

Some feedback comes from Gerry Buxton re: the spare bunks on the new Sooke Post. He claims the bunks are 17" wide at the foot (bow) and 23" at the head (of the bed, not the boat). He didn't mention the clearance above the bunk, but it is somewhat small. Rather than try the bunk he chose the wheelhouse floor.

\*\*\*

For those of you who thought OD was overdose, overdraft, etc. in the context used it meant organization development (Manager's report in December issue).

\*\*\*

Inches Creek facility is rapidly nearing capacity. It should be filled very soon. The very high proportion of 3's in the adult returns (5% 3's coastwide; 25% 3's at Inches Creek) suggest that these are the returns from the 400,000 chum fry released 3 years ago.

\*\*\*

Gas restrictions or threats of same seems to have had an impact on tourism during the summer of 1973. Although the total angler days on the Skeena-Morice-Bulkley were up 45%, the American participation was down about 18%. The

groups significantly down were largely from the mid-west and eastern seaboard. It is surmised that the increased Canadian participation resulted from people not wanting to travel in the U.S. Those fishing lodges, etc. which are heavily reliant on U.S. fishermen appear to have suffered financially this year.

\*\*\*

Recent demonstrations by staff suggest the need for oral hygiene coverage in our medical plan. Barring that, some mouth wash.

\*\*\*

The S.O.B. has grabbed the initiative and let George Wilson go to Hawaii for a couple of weeks to check out the possibility of setting up some upwelling incubation boxes on the Waikiki Beach. There may be some problem with that location as spawning is illegal there.

\*\*\*

A bit of a different twist at Big Qualicum this year. A clean up fishery followed by an end of season followed by more fish and reopening of fishery for further clean up. Good catch and lots of escapement.

\*\*\*

Approximately, 17% of the adult population of the Bulkley-Morice valley, sport fished in 1973.

\*\*\*

Case IGroot has been named the head of the recently formed Salmon Enhancement Group at the Biological Station, Nanaimo.

\*\*\*

Just a last reminder - the deadline of the Sounder Photo Contest comes before the next issue of the Sounder. Good booze is being offered to you for your good photos.

## ☆☆☆ AND ☆☆☆ INTRODUCING



Left to right: Lyle Enderud, Jack Broome, Byril Kurtz, John MacDonald, Jim MacKay, Gus Gjaltema, Ed Christiansen.  
Photo by Gus Gjaltema



John Balentine  
Formerly of the New Westminster Repair Station, now engineer on the "Vedder Rock"  
photo by Wayne Lowden

Maxine Haugen, Editor  
THE SOUNDER

1090 West Pender St.  
Vancouver 1, B.C.

Opinions expressed herein do not necessarily reflect Fisheries Service Policy.

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JAN 74



Reg McLellan,  
Master, "Tanu".

# INUVIK

THE **sounder**

By Chuck Walker,  
Northern B.C. and  
Yukon Division



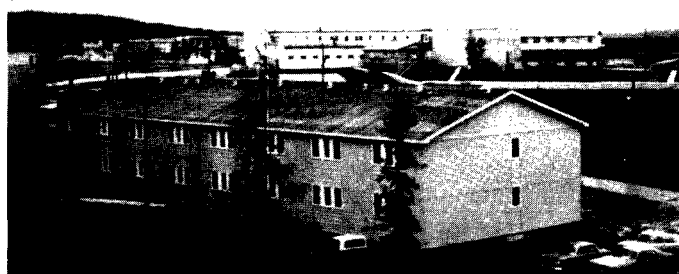
For those engaged in studies in the high north, the unique town of Inuvik serves as nerve centre. This town is located on the east channel of the Mackenzie River immediately east of the YT-NWT border.

Modern Inuvik was born in 1950 or thereabouts when the federal government selected the site of a small village to be the new town of the high north. Subsequently Inuvik has been developed to serve as communication, transportation, supply and military centre for the western Arctic.

Interestingly the buildings stand on stilts (pilings), generally uncovered, with the main floor above ground level. Thus heat from the buildings is dissipated and the permafrost remains intact. Perhaps surprisingly, the town is spread out and thus is unlike the arctic cities in the U.S.S.R.

Another interesting feature is the spiderweb Utilidor. This insulated contraption carries water, heat, electricity and phone from a central distribution point to each building; sewage is taken out by the same system (different pipes however).

Inuvik is reached by PWA jet from Edmonton, direct by Int. Jet Air Electra



photos by Chuck Walker  
Top Note the buildings on pilings

The Utilidor provides all buildings with heat, water, electricity, phone and sewage services.

from Whitehorse and by Northward DC3 by way of Mayo, Dawson City, and Old Crow. The Electra flight is recommended because beautiful Judy serves free drinks (of good quality and quantity) en route, and without doubt it is "the least painful way to travel." Even Inuvik looks good in blinding snow after such a trip.

The permanent population numbers approximately 3000. During the summer many travellers pass through; these are largely engaged in oil and gas exploration and various government studies - environmental, social, etc. Groups of guided tourists also swell the summer population and tax the three hotels to the limit.

Inuvik has been frequently visited by those working on Yukon pipeline and Fishing Branch studies. Next summer the town will be invaluable to our personnel involved with the Beaufort Sea program, a new study to be implemented under special support monies.

## DOES IT WORK?

Dennis Deans, Technical  
Support Unit

A typical Stream Report (F381) includes the following excerpt:

### OBSTRUCTIONS

- a) Passable or impassable... If nil, indicate from mouth to furthest point of access.
- b) Nature of obstruction
- c) Distance from mouth of stream
- d) Do you recommend that obstruction be removed

The F381 is received annually from the field offices and describes the escapement and various conditions in the river or stream. It is completed by the responsible fishery officer in each location.

In the past this section of the report was allegedly overlooked year after year by headquarters staff and now officers are tired of being redundant. What a pity. This staff now wants to investigate and rectify these obstructions but they can't find out where to start looking, except via the grape vine. Even more tragic is that when an obstruction removal job is done, and a few have been completed this past year, officers don't check out the success of the work done (for what ever reason). If they do, they do not consider it important to inform the

Does it work cont'd  
people that did the work for them as to whether or not it worked. Most of this work must be done on a trial and error basis. To help us overcome some of the error in our trial projects it would greatly benefit us to know what happens afterwards, i.e., are fish passing through with or without difficulty, or at all? Are there increases on the spawning grounds above? The method used now are not new to any of us. They have been used extensively by stream clearance people in the past, and in most instances were successful, but they were always assessed. The logical people to assess the results are those who made the recommendation in the first place because they know the results to be expected.

How about it people? We all take pride in our work so keep us informed and keep the recommendations coming so we can do a little planning with our very limited budget.



WOMAN

A chemist's description of the creature known as woman:

Symbol-- Woman.

Accepted Atomic Weight-- 119.

Physical Properties-- Boils at nothing and freezes at any minute. Melts when properly treated. Very bitter if not well used.

Occurrence-- Found wherever man exists.

Chemical Properties-- Possesses great affinity for gold, silver, platinum and precious stones. Violent reactions if left alone. Able to absorb great amounts of food matter. Turns green when placed beside a better-looking specimen.

Uses-- Highly ornamental, useful as a tonic in acceleration of low spirits and an equalizer of the distribution of wealth. Is probably the most effective income-reducing agent known.

CAUTION-- Highly explosive in experienced hands.

-- Gorton-Pew's THE MAN AT THE WHEEL  
August 1948.

*Editor's Note:*

*This was found in the weighty tome  
"Progressive Fish Culturist", 1949 - 52.*

## AGE OLD QUESTION

AL WOOD TSU CHIEF

Do salmon of one age beget offspring of the same age? (i.e. 3's beget 3's; 4's beget 4's; 5's beget 5's).

A number of scientists have demonstrated for a number of different species that:

1. large fish produce large eggs (large fish in any age class produce larger eggs than smaller fish in the same age class; also older age classes (which are usually larger fish) produce larger eggs than younger age classes).
2. large eggs produce large fry (large and small eggs fertilized at the same time and incubated under the same conditions hatched at the same time. The large eggs hatched as larger fry than those resulting from the small eggs).
3. large fry tend to grow faster than small fry (studies only covered the first few months).
4. scale studies show that 4's grew faster and were probably larger when they first laid down scales than 5's.
5. earlier maturity is associated with faster growth (sockeye separate into fast growing (Sub 1's) and slow growing (Sub 2's) groups in freshwater and each group again divides into fast (early maturing) and slow (late maturing) growing groups in the ocean. In the ocean, early returning fish grow faster during summer and growth slows less in winter.

Bringing all this information together one might predict an alternation of age classes (4's in 1950 beget 5's in 1955 beget 4's in 1959 beget 5's in 1964 etc.) A nine year peak might be predicted when cycles are in phase. Neither of these situations has been demonstrated. Numerous stocks consistently return at a predominant age class. In many stocks there is a strong suggestion that a heavy 4 year old spawning often results in heavy 4 year old returns. In many stocks no regularity of age of returns can be demonstrated.

It is known that food available (freshwater, estuarine, coastal, oceanic) will affect growth rate and thereby affect age of return. Excessively large populations may result in competition for food which would retard growth rate.

Temperature, predation, current patterns, etc., can all effect growth rates.

It is possible that:

- a) stocks which return as a predominant age class have strong

selection within their specific ecosystem for characteristics of that particular age class.

- b) as local or ocean environments fluctuate, selection for different age class characteristics fluctuates.

In short, there are reasons to doubt simple genetic determination of age of return. Maternal egg (egg size) influences may effect age of return. Environmental conditions may effect age of return. The general question can not be answered generally or specifically.

Study of specific stocks may provide the information necessary to predict what age of returns to expect from any spawning of that stock.

Editor's Note: If you have a technical question (s) you would like answered, write to the Sounder and we will endeavour to find an answer to it.

## Ashlee's Law

ASHLEE'S LAW

$$TD = (P=A^2)$$

Ashlee's Law, expounded in non-scientific terminology for the erudition of the laity can be simply expressed as follows:

Time of Departure from home port (TD) occurs when the weight of paper (P) including correspondence in duplicate, time sheets in triplicate, discharge papers in quadruplicate and assorted memoranda in quintuplicate equals the square of the weight of the starboard anchor ( $A^2$ ).

E. J. Ashlee

*(Editor's Note: This law applied only if one is lefthanded).*

## Advice to a Son

At Home on June 2nd 1936

To my dear boy Charlie:-

I take this method of trying to show you your real Dad as I am somewhat afraid that you must think that he is more or less an old grouch, one who is continuously trying to curb your fun and trying to make you feel that you are always wrong.

Whether you believe it or not, your Dad and Mother would and will do anything for you that is within their power, if that thing will honestly help you. My own wish is to try and give you the benefit of my experience so that you will not fall into as many pitfalls as I have done.

Your Dad has been no saint, nor for that matter, he is not one now, but on another piece of paper I am putting down a few rules which I know, if you follow will be of great assistance to you in your journey through life. You will do well to keep both this letter and the sheet of rules as a keepsake and to read sometimes when you are so inclined.

I know what you feel at your present age, and that is, that you are almost ready to leave the home nest, you would try your wings if you only had a chance. The old folks are a trifle slow, behind the times, not too bad, but not just quite what you would like them to be. This feeling is quite natural for a lad of your years and is to be commended. However, it also is to be thought of rather seriously, I assure you. For, as we love you we have the greatest desire to see you make a real man of yourself.

Now what is a man - a man? Well, a man is one who has to face the world and rely constantly on his own integrity for no other thing will offer a peaceful life as a reward. What do I mean by integrity? I will tell you. Integrity is something that will enable you at all times to be unafraid of anything that

comes along. It is not merely being honest with other folks, which is most desirable, but also to be honest with yourself which is even more important. I know that if I am honest with myself I need not worry my head about being honest to others. This does not apply merely to - not stealing anything - that is - money articles etc.

I want you to know that you or anyone can steal something from me which is far more valuable than any article. First you can steal one's pleasure, you can steal another's happiness and if you do so you might as well steal their life. How are these things done? By looks, by actions, by words and general conduct.

You are at a time of life when someone has to be your hero. Son, pick the right kind of hero. The best is not too good to pattern your life upon. This is not a request to take your pattern from Dad. I do not ask that but I do ask that you please recognize that I have travelled over fifty years a long lifes rugged highway. That you and the other children, along with your dear Mother, are all that I care about. That in a few short years we shall be gone and it is my duty to give you all I have in the way of direction, which I assure you will be with the sole desire of equipping you to meet the storms of life.

I intend to say no more in the letter except to appeal to you again to be true to the best that is in you. Your doctrines of theology are very vague at present. You exhibit a tendency to deride religion. Your Mother and I are perhaps as far apart as the poles in this regard, but that is no reason why you should throw the whole business overboard without any careful thought. Leave this question open for later convictions and you will never be sorry. Let your ideas on immortality and the Christian religion be developed by your own experience and I am not afraid as to the kind of flower that will eventually bloom in

Advice to a son cont'd  
your life. The men you meet, generally speaking, are not number one in my opinion. Most is froth and no substance in all their utterances and take this as true from one who loves you.

So now a few rules which Dad has found to be worth following which I ask you to try and find out for yourself.

Yours loving Dad.

Keep this to read even when you are older and perhaps you will value it.

Merely a few general rules which your Dad has found helpful in shaping his life and giving peace and happiness to him, which is all that really counts.

-----  
Be industrious, idle hands generally get into trouble.

Concentrate on the job you are doing. It is difficult to do something with wandering thoughts.

Feel that what you are doing is right and honest and fear nothing or anybody.

Respect the other fellow and his ideas. They may be right. This applies to men of equal, lower or higher stations in life. He may be able to teach you something.

Absorb all the education you can attain. It is easily carried along with you and serves as a lever to lift you out of the heap of struggling humanity and permits you to breathe a little easier.

Never be rude. It does not pay. It brings you down to as low or lower elevation than the person you are rude to.

Regard personal appearance as an asset not to be lightly regarded. Remember first impressions generally stick, just as your impressions of the other fellow stick with you.

Never think yourself above any grade or class of work. All work is honourable.

View, if possible, all your work as something more than a means to get something to eat or wear. Creation is a divine attribute.

Have ambition with contentment. That is, realize that it is worthy to strive for something better, without being miserable in your present condition.

Cast out envy or jealousy. They are bad companions. The other fellow probably got there by concentrating more than you have done. Give him the credit he deserves.

Regard a man as a man without relation to nationality. It is an accident you are what you are, as well as the other fellow. True greatness is not confined to nationality.

The best way to get to the top is by being the best man at the bottom.

## THE **souder**

### Letters to the Editor

My Darling Maxine:

I cannot sleep thinking of you. My total thoughts are of you. My only release is in drink. This I have to take (in a medicinal way) several times daily. In a fog, I am apt to think of you and this is only cured by a shot of fog-producer. I am nearly broke due to this. Can you help me forget you with a small donation of \$500.00?? My address is Mexico.

Your lover.

My darling Nick,

*I wept when I read of your plight, but I do not have \$500.00.*

*Fear not, Nick! I read somewhere that everyone loves a lover, so I am sure that the collection boxes I have placed by the elevators in the lobby will soon be bursting with \$5 and \$10 dollar bills.*

## Producer

Christy Suzanne MacLean, new daughter of technician Iain MacLean and wife Eileen, was born on December 28, 1973. The new sister for Elizabeth weighed in at 8lb. 6 oz.

## In the Hands of Experience

The sky was dark  
The moon was high  
We were alone  
Just her and I.  
Her hair was brown  
Her eyes were blue  
I knew just what  
She wanted to do.  
With all my courage  
I did my best  
I put her hands  
Upon her breast.  
I knew she was ready  
I heard her sigh  
So I ran my hand  
Between her thigh  
I trembled with shock  
As I felt her heart  
And with so much grace  
Her legs eased apart.  
I knew she was ready  
But I didn't know how  
For this was my first  
experience at  
milking a cow.

photos by Jerry Lowe  
Rod Palmer  
Allen Wootton  
Kerry Delaney

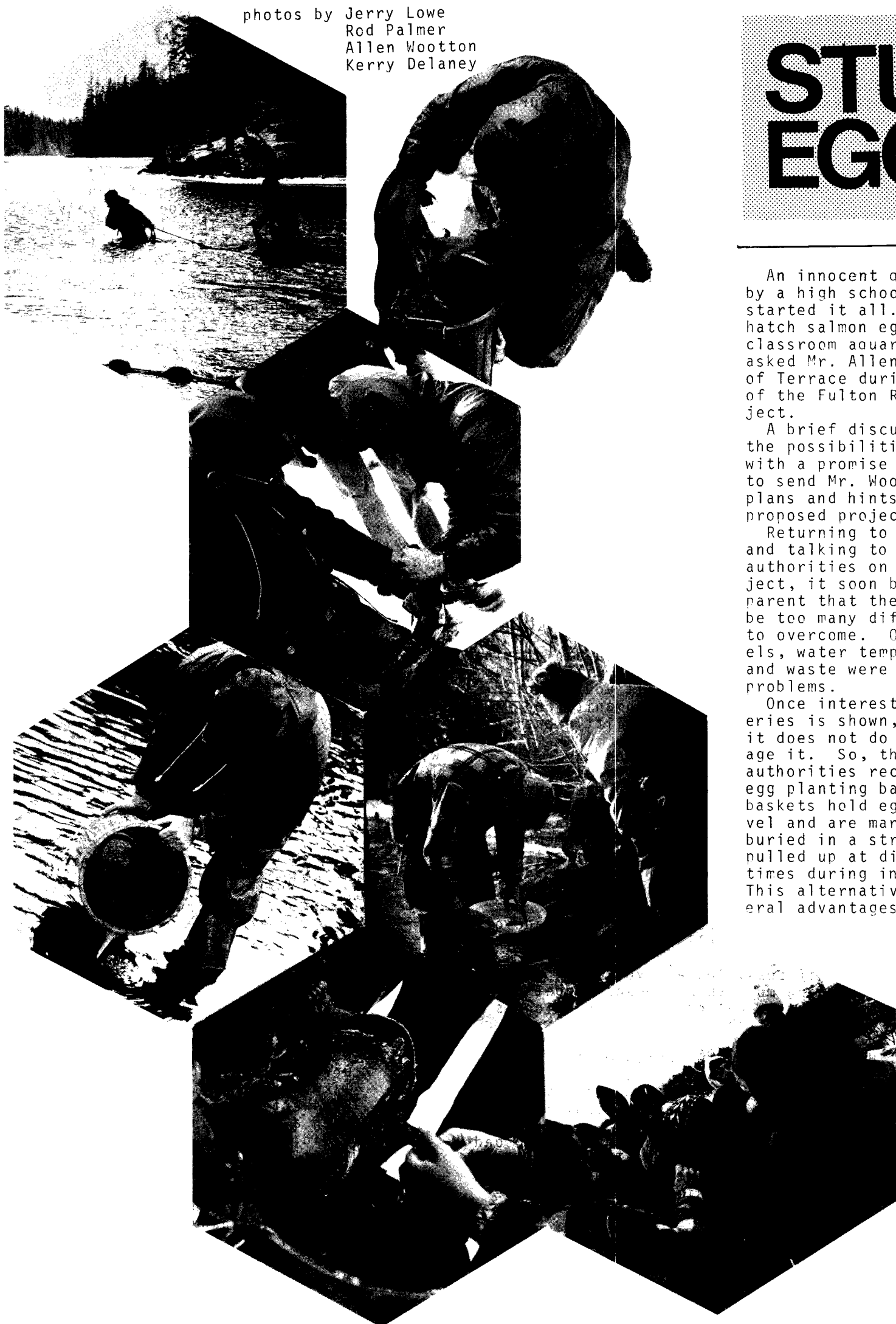
# STU EGG

An innocent question by a high school teacher started it all. "Can I hatch salmon eggs in a classroom aquarium?" asked Mr. Allen Wootton of Terrace during the first meeting of the Fulton River Project.

A brief discussion of the possibilities followed with a promise (from the project) to send Mr. Wootton plans and hints for his proposed project.

Returning to Vancouver and talking to numerous authorities on the subject, it soon became apparent that there would be too many difficulties to overcome. Oxygen levels, water temperature and waste were the major problems.

Once interest in the project is shown, however, it does not do too much to discourage it. So, the school authorities recommended egg planting baskets. These baskets hold eggs in gravel and are marked with numbers. They are buried in a stream and pulled up at different times during incubation. This alternative has several advantages.





# DENT PLANT

MAXINE HAUGEN

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could hatch in a "natural setting" with no maintenance involved, the baskets would produce a better quality alevin and fry than a school aquarium ever could and, the class would have a few field trips.

The school was receptive to the idea so plans were made to catch the fish in mid-November. Fishery Officer Bogart recommended a site to catch spawning coho in the Lakelse River, and a planting site.

Saturday, in 14° weather, approximately thirty children, mostly of junior high age, and several of their teachers picked and cleaned suitable gravel sizes for the baskets.

On Sunday, the same cold weather prevailed and became a problem during the egg take and when counting the eggs into the gravel filled baskets. Twenty-four baskets, with about 100 eggs/basket were planted in Herman Creek, a tributary of the Lakelse River.

The class pulled and examined the first basket just before Christmas, and the rest will be removed throughout the incubation period.

Further instruction to the class on egg-fry development and feedback from them regarding the project is anticipated. This project would be suitable for other high schools in areas on the Pacific Coast. Further details can be obtained by contacting me. Maxine Haugen.

Thanks Wendy



## Fish Catalogued At Teslin Lake

A catalogue of fish and stream resources of the Teslin watershed, the first of a series covering major drainage basins in the Yukon, was recently completed by the Fisheries Service here.

"We're mainly trying to find out what and where fish populations are, movement and critical spawning areas," Fisheries officer Perry Savoie said today.

"The rapidity with which unnatural change now takes place in the north makes it essential that managers be able to control such developments or changes so that environmental damage is avoided or at least minimized," the foreword to the catalogue says.

"Harvest of the fishery resources must be controlled by sensible management based on biologically sound facts; this catalogue provides a tool towards these ends," it continues.

Savoie said the information is for inservice use and in case of resource harvesting, like logging or mining, near a spawning area treatment will be much different than with a natural stream.

He estimated that it will be another five or six years before

the cataloguing is completed in the Yukon.

Savoie added that the Alsek drainage basin may be catalogued next or cataloguing may continue on the Yukon with the Stewart headwaters being studied next summer.

Fourteen species of fish are represented in the 12,000 square-mile Teslin watershed area; however, details on life history and abundance are known to a limited degree for chinook salmon only, according to the catalogue.

The dominant water body of the study was the Teslin Lake where the fish populations have been exploited by commercial, recreational and subsistence fisheries since the turn of the century.

Currently the fish are taken commercially by about six local residents in winter gillnet operations and recreational fishing is carried out largely for lake trout and grayling during the summer, the report says.

The salmon are exploited by a subsistence fishery in the Teslin River within five miles of the outlet of the Teslin Lake.

## Successful Course

**Peter Ryan**

A successful course in echo sounding and sonar was held for all the N.O.B. vessel captains from January 7 - 11 in Prince Rupert.

The weather co-operated for the first four days.

The students stayed awake during the lectures on the land.

The lecturers kept their food down while at sea.

Neither students nor lecturers located any Unidentified Submerged Objects.

Both Students and lecturers learnt a lot from the week long encounter.

Bob Mallory was the only loser - he was so sure that the southerners would be weathered in but CPA got us out.

## Shocked

Herrings shocked by new fishing method

A NEW method of catching herring is being developed in a coastal town in south-west Sweden.

The fish are located by echo sounder, then lured to the ship by strong underwater lights.

Then they are stunned by an electric shock and pumped directly into the hold.

The equipment is estimated to cost only a quarter of the price of a new herring seine, and the risk of underwater damage by obstacles is almost non-existent.

The new method is also being tested by Soviet fishing vessels with equipment bought from Sweden.

(Fishing Gazette).

## FLASHBACK

ALBUQUERQUE, 1967



A budding engineer closely examines fresh run coho salmon

## Dear Ms Dickson

January 9, 1974

Ms Dickson:

Due to pressures from other sources, the dynamic duo of "Shallow Dive Buxton" and "Embolism Alf Stephanson" will not be available for Abalone diving on the Queen Charlotte Islands until February 14th. The duo in the company of their intrepid tender "Clunkush Buxton" (translated from Haida means "He who sits fat in rubber raft and bitches loudly") are required to appear at a meeting of technicians on February 12th under the benevolent sponsorship of Mr. R. MacLeod (alias Big Ron). If this situation does not meet with your approval I would respectfully suggest that you get yourself over to my desk and inform me so I can make alternate plans. Mr. E. Zyblut (alias "Joe") will be informed of this matter also.

Yours affectionately,

"Shallow Dive"  
"Embolism Alf"

## Parksville

**Andy Skipper**

PASSING OF "1973" IN BUSTLING-BOOMING PARKSVILLE:

The frantic pace of activities by the 28 real estate firms operating in Parksville and environs during 1973 made the proverbial busy beaver seem like a slothful animal. In an area where a new sub-division pops-up almost every afternoon problems related to water supplies, sewage disposal, access roads etc., etc., ensure that sooner or later water courses become involved. In the year 1965 only 4 real estate firms were active at Parksville as compared to 28 firms - (incl; all the "biggies") - in 1973. Other signs of progress include the new mortuary reported to be the "largest north of Victoria". Despite present vicissitudes the local Fisheries Operations staff have decided to withhold patronage from the enterprise for "the time being".

# Spurious Emissions

For Vancouver staff who haven't noticed and for field staff, Vancouver office recently acquired a number of potted plants (the expensive kind supplied by Public Works). Installation of these plants has necessitated the letting of a "plant service" contract (i.e. paying somebody to water the plants.) In Ottawa, where this is old hat, there were a number of exchanges concerning allowing plant waterers (with no security clearance) into the buildings at night to water plants (watch out for spies carrying watering cans). The plants in some Ottawa buildings have to be watered during the day because of this. Not having noticed anybody watering the plants during the day, I assume we get watered at night. I guess it doesn't matter, there isn't any security in the building anyway, and almost all the small calculators and anything else worth stealing has been.

\* \* \* \* \*

The Washington Dept. of Fisheries has removed the minimum size limit for sport caught salmon in Puget Sound and some adjacent waters. This is to allow the angler "to set his own standards for the size of salmon he wants to keep." A three fish daily bag limit controls the number of fish harvested. The move is to get better use of small salmon which used to have to be released (dead or alive) if caught.

\* \* \* \* \*

A fair bit of personnel action this month. Ray Kendel has been appointed the new Yukon biologist. Also in the Yukon, Jim Bryan was the successful candidate for a biologist position with the Pollution Control Board in Vernon.

Howard Mann of Inspection took advantage of the improved pension benefits and retired on December 28th.

A new consumer consultant, Mrs. Donna Aldous, is now firmly ensconced in the Howe Street test kitchen. (word has it she may write a regular column in the "Sounder")

Bud Southgate is the new N.O.B. engineering technician.

Fisheries prodigal son, Bill Scholey has returned to Fisheries from E.P.S.

A move from Prince Rupert to Victoria for Inspection's Len Limpus. Replacing Len in Prince Rupert lab is new bacteriologist, Veda Money. Another new bacteriologist is on staff in the Vancouver lab, namely John Yonish.

It's formal now. Ken Jackson is our new Sanitary Shellfish Coordinator.

Carl Kennedy, Master of "Vedder Rock" is now a Fishery Officer at the Vancouver waterfront.

Joe Van Dyk transferred from Edmonton to become an Engineering Technician for Habitat Protection.

A follow up on last month's story in this column concerning S.O.B. scouting trips to Hawaii. Eldon Stone, manager of Capilano Hatchery, has just returned from a trip to Hawaii in search of brood stock to increase the size and fighting ability of the chinook and coho of the Capilano. Eldon managed to land a 14 1/2 foot (715 lb.) blue marlin but he had one hell of a time bending it over his knee to take sperm from it.

\* \* \* \* \*

Gulf of Georgia Division has sent Ed Armstrong and Bill Winsby to Mexico to scout out new division headquarters.

\* \* \* \* \*

Ken Bond is now a biological technician for Habitat Protection.

\* \* \* \* \*

Lee Straight tells us that the Fisheries Association has purchased a print of Dick Harvey's (Big Qualicum Resident Technician) "Living River". The Association will loan the film from their 100 W. Pender office (684-6454). No, we don't have a print.

\* \* \* \* \*

Meanwhile down the road - parties for staff and a little gratitude from the fishing industry. It's nice to see the customers satisfied.

\* \* \* \* \*

Someone asked if the next Branch the federal government was going to form a "Discrimination Branch" to provide the recently formed "Anti-discrimination Branch" with something to do. If A prevents B from discriminating against C, is A discriminating against B?

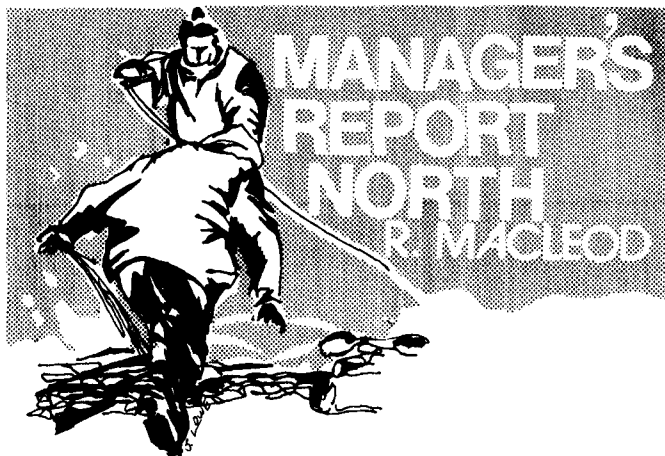
\* \* \* \* \*

The Canadian Technical Group of Iar Todd (head) Sandy Argue, Ken Pitre, Ed Zyblut and Alan Gibson from Fisheries Operations, and Jack McDonald, Harold Godfrey and Vic Aro from R. & D. Nanaimo are making final preparations for another go round on U.S. - Canada salmon problems from Feb. 11 to 15.

\* \* \* \* \*

You might have seen or read any of a number of those double title "this, or how I" stories, but you haven't experienced "it" until you have been exposed to "Dimensions of a salt water sport fishing trip (your definition), or what do people look for in a fishing trip besides fish." I understand Dick Bryan (the author) will have a few unexpurgated editions of the first printing of those who write him in the Vancouver office.

\* \* \* \* \*



## NOSE TAGS PROVIDE CLUES

Steve Heizer; Head, Recovery Program

The Georgia Strait Head Recovery Program, conceived to recover coho and chinook salmon released from hatcheries with a coded wire nose tag and clipped adipose fin, has enjoyed a remarkable success to date. The program grew out of an informal request from the Washington State Department of Fisheries to assess their hatchery chinook contribution to the Gulf of Georgia and a desire on Canada's part to assess our hatcheries.

Just returned from a wild trip to the central coast to discuss Salmon Expectations for 1974 and a number of related fisheries issues. When we arrived at Bella Bella we were greeted by a snowfall of about two feet. That was nothing compared to the Bella Coola - Hagensborg area, however. Over a two-day period preceding our arrival Hagensborg had about five feet, something of a record for the area. On the way home to Vancouver we encountered southeast gales with gusts to 70 mph between Egg Island and Pine Island in Queen Charlotte Sound.

Despite the unfavourable weather and the fact that I wound up with a dilly of a cold, the trip was worth the effort. At Pender Harbour, Sointula, Bella Bella, and Bella Coola we found receptive audiences. Of particular note, to my mind, is the very strong protective attitudes towards fisheries in these communities. These fishermen obviously identify with the resource and the most common questioning of our program relate to whether we are doing enough to conserve the resource, to protect against abuses, and to protect fish environments. I also noted an anxious desire on the part of fishermen to understand our thinking, to get a feeling for the rationale behind our approach to resource management. These meetings are to be followed by a series of meetings in Prince Rupert with the various segments of industry - Co-op, U.F.A.W.U. processors and vessel owners during the first week of February.

On January 29th and 30th, I will be attending a government and industry policy development seminar on resource enhancement. All segments of the fishing and processing side of industry will be represented, along with Ottawa and Vancouver headquarters staff. The purpose of the seminar will be to elicit and discuss industry views on development of our fisheries resources. The operative word in this case is "elicit" - Mr. Lucas our Senior Assistant Deputy Minister, is anxious to hear the views of our customer as expressed by our customers.

Sport and commercial fishermen were requested to turn in the heads of adipose clipped coho and chinook salmon, and the tags were removed and decoded at the Qualicum and Capilano hatcheries. The information resulting from the periodic collections were then analysed and sent to interested parties in the form of our "Information Bulletin" characterized by the cartoons artfully conceived by Tony Gould.

As of the last collection at the end of November, 1,035 heads were turned in, (71%) containing coded wire tags. Of the 736 salmon heads with tags, 584 were chinooks, 151 were cohos, and 1 was a "masu" salmon, a species transplanted from the western Pacific to Puget Sound by the Washington Department of Fisheries.

The 331 American chinook caught in the Gulf of Georgia (58% of all marked chinook turned in) out numbered the 242 (42%) Canadian chinook. Eleven chinooks had indecipherable tags. Puget Sound hatcheries, which provide the vast majority of American chinooks to the Gulf of Georgia, tagged approximately 4.5 chinooks to each Canadian chinook in the 1970 and 1971 brood years.

Of the 151 cohos caught 22 (14%) were of American origin, 128 (85%) were Canadian and 1 (1%) had an indecipherable tag. Approximately equal numbers of Canadian and American chinooks were released. These data show that American coho made an insignificant contribution to the fishery in the Gulf of Georgia.

In a nutshell, our findings are that chinook move northward from their release site and tend to stay on the side of the Gulf on which they were released. This pattern seems to be breaking down during the winter months, but we can't be sure until further winter collections are made. The northward movement of chinook explains the numbers of chinook in the Gulf. American hatchery chinook are most common south of a line drawn from Nanaimo to Gibson. Canadian hatchery chinook are most common north of this line.

Coho seem to spread both north and south from their release site, and are found on either side of the Gulf.

The various contributions and associations of hatchery fish are too varied to be dwelt on here, but several of these deserve mention. At the Big Qualicum River project, approximately 10 hatchery reared chinook were tagged for each wild chinook tagged in the 1971 brood year tagging. There were about 2 hatchery marks returned for each wild mark returned. This means the wild marked fish had a relative success of 5 times that of the hatchery marked fish.

## THE Sounder

Maxine Haugen, Editor  
Graphic Art Jerry Lowe  
1090 W. Pender St.  
Vancouver 1, B.C.

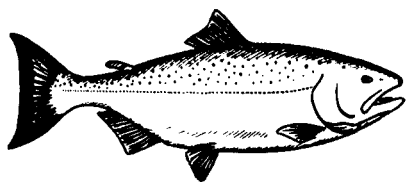
Opinions expressed herein do not necessarily reflect Fisheries Service policy.

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Another strong producer was the Puntledge "super-smolt" group. Only 5,070 chinook were tagged but their relative contribution was, in the October/November collection, for example, at least 6 times the relative contribution of any other group of chinook. The relative contribution allows for differences in numbers of marks out, and is perhaps a better indication of contribution than is absolute numbers. In the fall and winter months when coho began to show in significant numbers, both the Capilano and Qualicum hatcheries did quite well. The Big Qualicum River coho spread from Campbell River to Saanich Inlet on the western side of the Gulf only. Capilano coho were generally found along both sides of the Gulf but heavily concentrated only from Hornby Island south to Sannich Inlet on the western side of the Gulf.

The primary contributor of American chinook salmon was the Nooksack Hatchery. This hatchery is almost due east from Saanich Inlet on the Washington coast, and released many marked chinooks. Given the northward migration of released chinooks. The Nooksack contribution comes as no surprise.

Plans for the 1974 Head Program include a continuation of our present collections in the Gulf of Georgia and, tentatively, a voluntary sampling of west coast trollers as well as a sampling of the Juan de Fuca and Johnstone Strait net fisheries. The program seems to be providing good data on questions of hatchery contributions and movements of fish never before investigated this thoroughly. We hope that the expanded program for 1974 will enjoy the success our 1973 program has had.



### CHINOOK

Lightly spotted on blue-green back; black pigment in mouth along bases of teeth. Chinooks live from five to seven years, weigh up to 120 pounds. They are most famous game salmon, are sold commercially mainly in fresh or frozen state.

## Sounder Complimented

Ernie Lalonde, Victoria

As a new fishery officer I have spent a great deal of time reading past annual reports. This gives me an idea on problems and duties in the district.

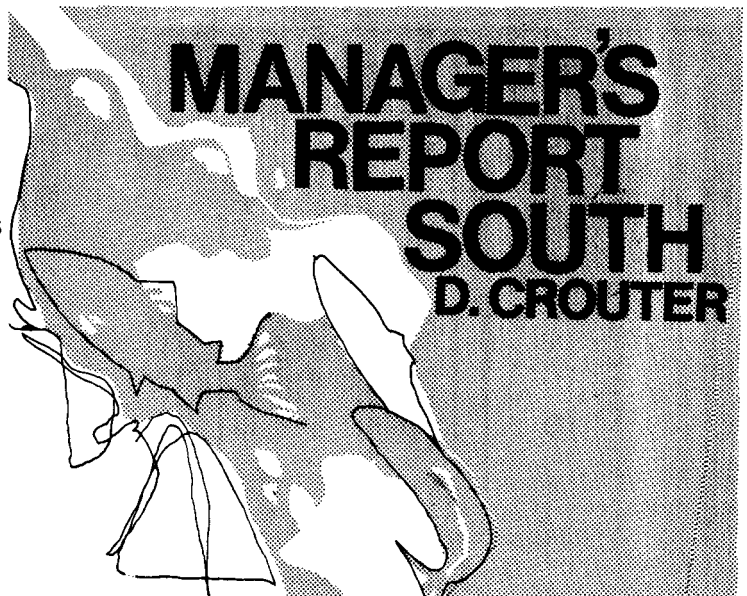
One problem that draws a lot of attention is the predation of salmon by wildlife. In the last issue of "SOUNDER" there was an article on wolf predation on salmon. Other species of concern are bears, seals and otters - not to mention many different kinds of birds. Because of this concern, I have decided to enter your Photo Contest pertaining to the control of these predators. Enclosed is said photo which I hope meets with your approval.

Thank you for a fine magazine.

## What!

BELIEVE IT OR NOT!  
THE HUNCHBACKED SALMON REACH THE KAMCHATKA RIVER IN SIBERIA FROM THE SEA, BUT THE STRENUOUS ASCENT OF THE RIVER ALWAYS CAUSES THEIR UNIQUE CURVATURE OF THE SPINE

from Ripley's "Believe It or Not" series.



Once again I report on herring. It would appear now that we finally do have a herring licencing scheme in place, one that will lead over the next two or three years to a real limitation on the number of vessels participating. The final date for licence application, January 15, has now passed, and while a review of certain applications must yet be made the number of licences to be issued will approximate 287 seines, and 1321 gillnets of which 28 and 181 respectively will be Indian-owned and operated. We are now faced with the urgent task of developing a field management program for 1974.

I might comment just briefly on the basic status of the roe herring fishery. Reports received on market conditions indicate quite clearly that Japan currently has a major carryover from 1973, partly as a result of late season purchases from China and Russia and this surplus may seriously affect the pricing of the British Columbia product. Superimposed on this is the possibility that Japan may be caught up in a financial recession which may seriously affect the marketability of gourmet products such as herring roe. Because of these potential marketing problems there is a real possibility that the U. F. A. W. U. - Fishing Industry price negotiations could be prolonged to the extent that the start-up date for many fishermen could be affected.

I would also like to report on the activities related to Program Forecast. We have yet to receive our 1974 - 75 budget and although we anticipate very little in the way of increase I would expect we will at least get an adjustment for escalation of costs. I feel much more encouraged about the prospects for 1975 - 76. We have at least been able to discuss requirements and priorities at four meetings called by the Senior Assistant Deputy Minister, Mr. Lucas. As a result of those discussions, Mr. Lucas is prepared to support the following:  
(1) A 3 percent increase in staff which has been broken down into 14 man-years for Fisheries Management and 4 man-years for Habitat Protection.



Mgr's report con't

- (2) A 10 percent increase in Goods & Services dollars. The disparity between the proposed increase in man-years and dollars reflects an anticipation on the part of Senior Management that dollar expenditures can be more easily justified than increases in staff. This obviously means that we must seriously review the possibility of having a greater proportion of our present and future workload done by contract.
- (3) A special submission is currently being prepared related to the generation of revenue from the fishing industry.
- (4) Following and related to this, another submission on salmon enhancement will be made. This will be based on a proposal to more than double salmon production on the coast over a period of 10 - 20 years. Our thinking at this time is that a major share of the \$200 million capital expenditure involved for this program would be generated from industry.
- (5) Yet another special submission will be made for an Indian training and employment program. As that submission stands now approximately 16 positions would be added in 1975 - 76, the initial year.

## and Introducing



Top: Herb Lang, Off in His Own World.  
Photo by Lyle Freeman

Bottom: Phil Meyer (?)  
Photo by Rob Taylor

# THE COLUMBIA BE DAMMED

Nelson, B. C. May 16, 1924.

RE: SALMON RUN - UPPER COLUMBIA RIVER.

Dear Sir:

I beg to acknowledge receipt of yours of the 6th instant, in connection with a request received from the Chief Inspector with regard to the extent of which salmon frequent the head waters of the Columbia River and tributaries. From information previously obtained and recent inquiries, I beg to submit the required information which is authentic.

The salmon which ascend the Columbia are locally called dog salmon, which are no doubt spring salmon, weighing up to 50 pounds or more. The first stream they frequent in my District is the Kettle River, tributary to the Columbia, during September and October, running up to Cascade Falls and Christina Lake, but not in large numbers, only between 50 and 100 arrived there last year. Following the Columbia to Castlegar, a few salmon ascend up the Kootenay River to Slocan Pool and River, less than 50 spawned there last year, and sometimes a few are caught; these fish appear to be scarcer each year.

Going back to the Columbia thence through the Arrow Lakes a few salmon are seen where they may spawn in the tributaries, one stream in particular at Beaton called the Incomappleaux River or Fish Creek, the salmon run was good, but between Arrowhead and Revelstoke, salmon cannot ascend the Illecillewaet River owing to a high dam constructed by the Revelstoke Power Company, but the obstruction does not affect the main stream. From Revelstoke to Athalmer the stream is open and free from obstructions. Up to the year 1900 there used to be a large run of salmon to the salmon beds at Athalmer. The Indians in the season would be camped on the Athalmer flats to the number of fifty teepees, and they would spend their time spearing salmon, but from that time on the number of salmon have quickly diminished, and last year less than a dozen reached the salmon beds which used to be the principal grounds of the upper Columbia.

In conclusion, I might say the salmon generally reached the salmon beds at Athalmer during August and there are still a few spawn in the tributaries below Athalmer, but there is no particular run. Over twenty years ago the salmon ran in thousands up to the head waters of the Columbia. I am of the opinion that the approximate run of salmon in the Canadian waters including the upper Columbia River and tributaries during the season does not exceed 500 salmon, in fact it is a good deal less, but the cycle year there might be that number.

I understand the American Authorities have a large irrigation scheme in view down the Columbia, and no doubt the information is required before a dam is constructed.

I am, Sir,  
Yours obediently,

(SGD) C. H. Robinson.





MARCH, 1974 Vol. II No.6 \*\*\*

Fisheries and Marine Service

THE **Sounder**

THE WINNERS



FISH JUMPING AT SUNRISE

- Photo by Peter Brown

BEST OVERALL  
BEST SLIDE  
FIRST PRIZE

#### The Entries and the Judges

Some forty entrants submitted a total of 108 prints and 98 slides for judging.

Each entry was given a number, and known thereafter only by its number.

The judges, as mentioned in an earlier issue, were the donators of prizes. Fortunately, they also have reasonably good reputations for being fair and honest.

Also they were not entrants in the contest.

The judges then, were:

Dick Crouter, Manager, S.O.B.  
Ron MacLeod, Manager, N.O.B.  
Al Wood, Chief, Technical Support Unit,  
Rod Palmer, Chief, North Coast Division,  
Pat Phillips, Head, Statistical Support,  
Maxine Haugen, Editor, Sounder.

#### Categories and Criteria

The categories became those listed below more because of the number of prizes than for any other reason.

Criteria for judging were very broad. Each picture was judged on technical quality, composition, and suitability for use in any type of a fisheries information display.

Each judge independently made his choices for first, second, and third in each category. Then, points were awarded for the number of times and placement of an entry in the top three. Thus, a photo appearing as a first choice received three points for each first place, two points for each second place, and one point for each third place.

# The Winners



MOTOR TROUBLE

-Photo by konrad Johansen

## Prizes

As promised, the winners received their choice of booze. (You don't want to know what each winner picked, do you?) Peter Brown's prize for "Best Overall" was a transistor radio donated by Total Electronics. Second prize winners received "mickeys".

## Comments

Peter Brown's outstanding slide cannot possibly show its "true colours" as reproduced here, in the Sounder.

But as an indication of its excellence, of the six judges, five zeroed in on this slide as their first choice for best slide, and first choice for best overall. The picture is a winner, all right, and we have some big plans for its use!

## Now and Soon

Time and space prevented us from showing all the winners in this issue. The others may or may not appear in future issues, depending on how well the subject might copy for Sounder purposes.

However, not only the winners, but some of the other entries that were particularly good will be (with the photographer's permission) put on a "central file" for your use. More details on this later; in the meantime, address all inquiries to the Sounder editor.

Maxine Haugen.

*And the winners are ....*

## Best Colour Print

First Prize: JERRY LOWE, fishing net on dock  
Second Prize: Hugh McNairnay, coho fry "portrait"  
Honorable Mention: Gerry Buxton, herring seiner

## Best Slide

First Prize: PETER BROWN, fish jumping at sunrise  
Second Prize: Byril Kurtz, Fishery Officer stream walking  
Honorable Mention: Keith Elliott, Northern B. C. stream, winter

## Best Sequence (Prints or Slides)

First Prize: DAVE McNEIL, tagging sequence  
Second Prize: Ken Jones, egg take  
Honorable Mention: Dave Schutz, juvenile salmon and plankton sampling.

## Best Black and White

First Prize: JOHN BEYER, man surveying in tunnel  
Second Prize: Fish Inspection Lab. Prince Rupert  
Honorable Mention: Joe Kambeitz, Squamish River fisherman.

## Humorous

First Prize: KEN JONES, egg take  
Second Prize:) Norm Lemmen, Fishery Officer incognito  
Second Prize:) Konrad Johansen, motor troubles.

## Best Overall

First Prize: PETER BROWN, fish jumping in sunrise  
Second Prize: Jerry Lowe, fishing net on dock  
Honorable Mention: Byril Kurtz, F.O. stream walking.

## COW EATS SALMON - and other adventures

**ALF HILLAND  
KAMPLOOPS**

In reading Mr. Macdonald's (How are you, John?) item on wolves as predators, taking a nip out of the back of the head of salmon, it brought to mind a certain cow that Ralph Edwards of Lonesome Lake owned - a long horned Ayreshire. This cow used to take a bite out of the back of the head of salmon (brain food?).

Admittedly, Ralph or I never saw this cow attempting to catch fish, but Ralph will tell you how he saw this cow chase a grizzly bear off a fish, and take it from the grizzly. (Predator preying on predator). So the grizzly would have to catch himself another fish, wouldn't he?

Does that explode the theory that the grizzly is supreme boss in the north woods? I always found the grizzly to be extremely shy - so shy that they couldn't get away fast enough - knocking down everything in their haste - even small trees. (Could it be B.O?)

Ralph's Ayreshire bull - now that was a different animal. He put at least one F/O up a tree, and we gave him a wide berth.

Well, in Kamloops we have lots of bulls. More bulls than salmon sometimes. Herefords, Shorthorns, Angus - but no Ayreshires. Big bulls - as much as one ton of steaks on the hoof.

So I am walking the creek, intent on trying to spy the wily coho in its dark waters, when I round some bushes and meet two big bulls, eye to big brown eye. I reach for a tree to climb, but these little willows aren't much for climbing, so I am backing up carefully and wondering if I can outrun them (and wishing to H--- I had kept in better condition). Its easy to see that they are grossly overweight, so I might have an advantage there. They look peaceable enough, so I take a chance and sidle around, carefully, and get by. Only there's more in the next field.

Luckily they are Ferdinand types. Kamloops bulls like flowers and clover.

Predators? Not Kamloops bulls. Polluters - yes. But predators - no.

See you at the bull sale, anyone?

## A Helping Hand

DURING A HIKE IN THE WOODS a troop of boy scouts came across an abandoned section of railroad track. Each, in turn, tried walking the rails but eventually lost his balance and tumbled off.

Suddenly two of the boys, after considerable whispering, offered to bet that they could both walk the entire length of track without falling off.

Challenged to make good their boast, the two boys jumped up on opposite rails, extended a hand to balance each other, and walked the entire section of track with no difficulty whatever.

There, in a nutshell, is the principle of modern business and community living. The day of the hermit and the lone wolf are gone forever. We do things better, we produce more, and we live better by helping each other. The fellow who lends a helping hand benefits himself at the same time as he helps the other fellow.

The reverse is also true. When we don't help each other, when we don't co-operate, the whole system starts to rattle and shake. The difference between a good company and an inefficient one, is often reflected in the co-operation, or lack of it, among the people who work there. When people help each other, freely and voluntarily, there's a spirit of teamwork that makes a department or company really go - a pleasure to be associated with. When there's no co-operation - no spirit of the helping hand freely given - what might have been pleasant jobs become grudging chores.

Do you recall when Edmund Hillary and his native guide, Tenzing, made their historic climb of Mt. Everest? Coming down from the peak Hillary suddenly lost his footing. Tenzing held the line taut and kept them both from falling by digging his axe into the ice. Later Tenzing refused any special credit for saving Hillary's life; he considered it a routine part of the job. As he put it: "Mountain climbers always help each other."

Should the rest of us be any different?

## Remember this

**ELBERT HUBBARD**  
Late Author, Lecturer

IF YOU WORK FOR A MAN, in Heaven's name, WORK for him. \*\* If he pays you wages which supply you bread and butter, work for him; speak well of him; stand by him and stand by the institution he represents. \*\* If put to a pinch, an ounce of loyalty is worth a pound of cleverness. \*\* If you must vilify, condemn and eternally disparage - resign your position, and when you are outside, damn to your heart's content, but as long as you are part of the institution do not condemn it. \*\* If you do that, you are loosening the tendrils that are holding you to the institution, and at the first high wind that comes along, you will be uprooted and blown away, and probably will never know the reason why.

LEARN FROM THE MISTAKES OF OTHERS.  
YOU CAN'T LIVE LONG ENOUGH TO MAKE  
THEM ALL YOURSELF.

# THE Sounder

## MANAGER'S REPORT NORTH R. MACLEOD

In many ways for me this has been a poor month. After getting back from our meetings in Prince Rupert with various segments of the industry, I was laid up for over a week with a bad bout of flu. Hopefully, I'm totally recovered. I notice a number of absentees from the office for the same reason.

Our meetings at Prince Rupert went very well. Following the Skeena River Management Committee meeting, northern staff met with the Co-op, processors, & U. F. A. W. U. For some reason the Vessel Owners begged off until late April. The Skeena proposals were well received, as might be anticipated, with the Committee forecasting the largest return of sockeye - 2.6 million - since 1940. I can only hope that everyone is smiling as much next December. Heaven help us if they're not.

Discussions with industry groups dealt with a wide range of subjects. In particular, we explored ways and means of curbing poaching on the Queen Charlotte Islands. 1974, the on-year for pinks, is historically, the on-year for poaching. There is acceptance of our use of stake-out teams by all segments of industry. I believe, however, that if and when we catch poachers we must be extremely severe in our handling of these cases. Seizure, if the courts will concur, forfeiture of vessels and nets, and/or cancellation of boat licences and personal licences of captain and crew are needed. Some captains of fishing vessels are even prepared to act as guardians for the purpose of curbing poaching. We expect to launch an extensive publicity campaign in the Prince Rupert - Queen Charlotte area in early summer. I think we have managed to convey to those in a position to do most about controlling it, our very serious concern about poaching. It remains to be seen if we will indeed get their full co-operation, as promised.

The herring fishery is yet to get off the ground, except for a few Co-op gillnets working in the lower Strait of Georgia. As you probably know, there is a great deal of concern being expressed by seiners, gillnetters and processors about the conduct of the fishery in 1974. Seiners and gillnetters are worried as

to whether they will get their "share", about congestion on the grounds, about their investments. (It has been estimated that new investment in gillnet outfits alone exceed \$4 million.)

In the anticipation of a smaller margin between landed and wholesale value in 1974 than in 1973, processors are very concerned about the quality of roe herring landed. If their average

yield comes out at less than 8% many of them are going to be in trouble financially.

Also, I think that all of us in the Service are wondering how things will go in 1974. There may be as many as 280 seines and 1,300 gillnets on the grounds. 150 of the seiners and 1,100 of the gillnetters have never fished herring before. There is a raging "gold fever," with everyone out to duplicate last year's bonanza. Given these conditions, the situation on the grounds could be chaotic. From the conservation point of view, however, there are safe margins between catch per sub-district and available stock. Think of it this way, that 1974 will be the worst year, the year in which a ceiling is set on participation, and the year that will weed out the ineffectual. After 1974, it has to get better. Play it cool in '74.

## GOV'T ISN'T THEIR VALENTINE

PROVINCE, FEBRUARY 8, 1974

OTTAWA - Federal secretaries supported by stenographers and typists will meet on Parliament Hill St. Valentine's Day carrying placards instead of the day's traditional gifts of flowers and candy.

The placards will call attention to their major grievance - a ranking system that equates their positions with office desks and filing cabinets.

The protest next Thursday will call for promotion through merit rather than through the present system which ties the secretaries to the pay level of their immediate bosses.

The system is called rug-ranking, based on the belief that a senior official's position is related to the quality of the carpet on the office floor.

Tied in with the carpet and the office furnishings is the secretary's salary and position, without any consideration, the secretaries say, for workload and responsibility.

Supporting the St. Valentine's Day protest is the Public Service Alliance of Canada (PSAC) which represents about 12,000 of the 16,000 federal secretaries, stenographers and typists.

Support is also coming from the numerically small Public Service Secretaries Association (PSSA), a group formed last year which presented a brief to the Treasury Board spelling out its opposition to the rug-ranking system.

The 21-point brief complained that the merit system in force for other public service categories did not apply to the federal secretaries. It called on the public service to pay more attention to the secretaries' ability rather than linking positions with the rank of the boss.

A PSAC source said that despite the brief, a recently issued Treasury Board job classification showed that rug-ranking is being retained.

## ALLAN CHAN -LUTHIER

The first surprise was hearing music in the office at 8:15 a.m. The second was discovering it was live. But the third surprise - !

Allan Chan, Southern Operations Branch Draftsman, makes guitars. From scratch. He may not actually grow the wood himself, but he selects each piece very carefully and then doesn't touch it for at least one year while it seasons. The wood must be well-seasoned, or after the guitar is made, it might shrink, crack or warp as it dries out.

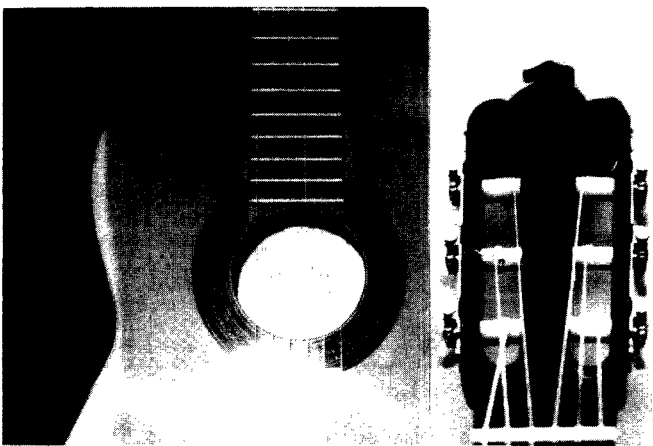
While he was waiting for the wood to season, ("I have a lumber yard in the basement," grins Al), he had plenty of other things to do.

He talked to instrument repairers around the city, and did a lot of research and reading. Al has never had any instruction in guitar making.

First, he had to choose a design.

There are many types of guitars, including the folk, jazz, and Hawaiian guitars. Al eventually settled on his own design, a variation of the Spanish, or classical, guitar.

The guitar pictured here is Al's third. He estimates that it took him about 200 hours to make.

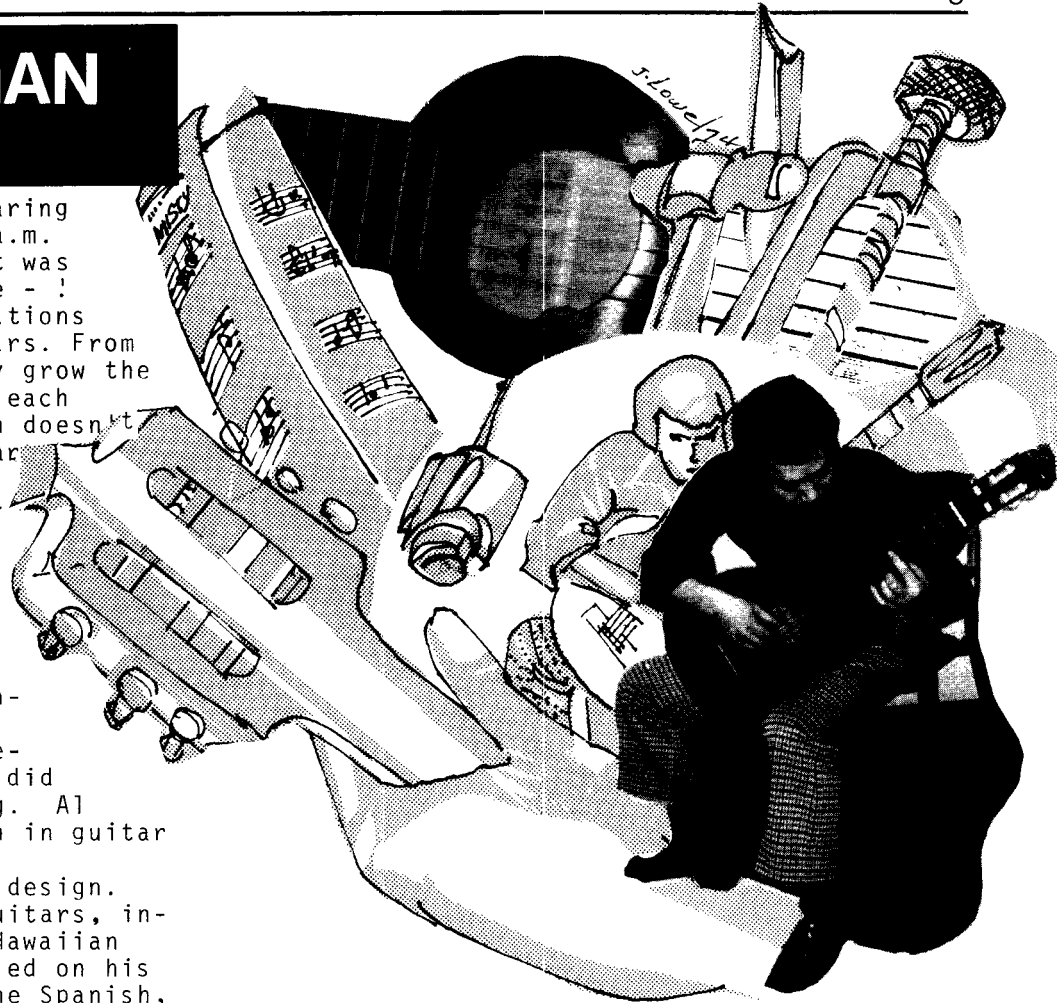


Considering the many types of wood he used, his guitar is truly international. The top of the guitar body is made of a softwood (to allow it to vibrate). Al chose an edge grain piece of western red cedar. The beautiful grain on the sides of the guitar is curly maple.

The neck is Honduras mahogany, and the fingerboard is ebony from Africa. Ebony is very expensive, costing \$6.00 just for the fingerboard. The faceplate for the machine head is rosewood from Brazil.

The inlay around the sound hole is an Islamic design made in Japan, and the strings are from France.

The machine head (at the end of the neck), is where an artisan can really display his craft. The design on a machine head is a luthier's trademark. Al used a scroll saw to cut his design, then sanded it. The machine head has a 1/8" thick rosewood faceplate laminated with maple and mahogany.



The fret wires in the fingerboard are installed by cutting small slits in the ebony. The position of each fret wire must be computed mathematically according to the musical scale.

Al made the form for the body of his guitar from laminated wood 4" thick. He cut the shape with a band saw, and used a drum sander for sanding.

To curve the maple sides to fit the form, he first had to boil each side in water for 2 hours until pliable, then clamped the wood into the form with C clamps for about one week.

He glued everything together using ordinary white glue (like Lepages). It's a synthetic resin glue which stays together permanently.

The sound hole of a guitar is like the speaker of a hi-fi set. It can't be too large or too small.

The bracing on the inside plays a very important part in the sound of a guitar. Again, Al modified a traditional bracing pattern, and came up with what he considers to be good bass, but only satisfactory treble. For his next guitar, he is thinking of changing the bracing.

Al achieved the beautiful shine on his guitar with 6 coats of clear lacquer and lots of elbow grease. He handrubbed each coat with a very fine sandpaper, and the last coat got additional treatment with a fine rubbing compound.

What is Al going to do now that he has three guitars? Why make another one of course. But this time Al, how about a few noon concerts while your wood is seasoning?

THE sounder

# Letters to the Editor

My Darling Maxine,

Well, back in the U. S.\* from Mexico. Mexico, Mañana Land. Just the same as my old office in Tofino. There, I could only pull my cap over my eyes and snooze over the typewriter. Here with my sombrero well down, I snooze in the sun with a crock of tequila handy. To Hell with the mixer. Sober, I never was except when the old lad - the wife, hid the crock.

Mexico is a funny place. Where I was is a fishing port. Well - sorta. They have a Fishery Officer who takes a peso or so from the fishermen for looking the other way. Same again as Tofino. Well, I sort of introduced myself to this hombre. Not speaking a word of Mexican (Spanish!) except 'Mas cerveza, por favor' ((which means - er Has to) 'more beer please')) I say, "Well, how are you? I was once a Fishery Officer in Canada."

Well, he turns an' says something like, "Beunas tardes, señor como estar usted?"

Now, this sounds to me somewhat like dirty words, so I say - "Now, there is no need to be nasty, for I will clobber you on the snoot."

He smiles and says - I think - "Pienso su es loco." Now, I know that loco means an engine that pulls trains and it sometimes pushes 'em and "pienso" sounds to me like pony, so I figger he has called me a horses a-- I mean, posterior. Now, this I won't take, as Bob McIndoe has often called me this and I couldn't strike back. But this time is different.

"So," I says "I am a horses a-- bottom, am I?" and plant him one on the snozz.

This appears to upset him, and not a little, for he takes out a whistle & blows it as well as he can for his snozz is bleeding some. Well, I tell you. In no time flat, a pair of federales (fuzz to you) whips up and the next thing I know I am looking through bars. I sit on the dirt floor and realize that I forgot my mickey of mescal and my cigarettes. (McIndoe will say 'serves him right - he shouldn't smoke!') Well, about three ack emma, along comes this Mex. General (must have been - brass buttons, medal ribbons, etc.) and says in passable English - "Well señor," he says, spitting on the floor, "well, eet is reported to me that you heet an officianado del pescados en his nariz." Well, what all this jabba is about, God knows and neither would Jack Davis.

So I say, "Same to you, mack," which don't fizz a bit.

"We will," he says, "keep you een thees jugado until you rot."

Now I sabe this and fear that all is ended. "But," he says, "eef you have dos cientos or more pesos, you can go."

Now, what these "dos cientos" mean, I don't know, but I say, "Well General, I will give you a five American if I can get out," and that has an immediate effect. The General snaps his fingers, and a character looking like Pancho Jilla appears and opens the door.

"Seymour," I think to myself, "this is it, so say farewell cruel world."

"Now General," I say, "can I have my last smoke before Pancho Vanilla here makes my wife a widow?"

"Señor," he says, "where ees thee five Americano?"

"Well, I pulls it out of a sock where I have hidden it from the prying eyes of the old lad - the wife - and he grabs it.

"Grass - i - ass," he says. "You may go Señor! But," he says, "eet will costa you ten next time."

Well, I can tell you, I simply fly through the door shouting "grassy ass" a dozen times at each step. After a session at the local cantina, I go home. The old - wife meets me and says, "So, where has the lady killer been all day?" She ups with me trouser leg and looks in me sock. "Aha! That \$5.00 you stole out of me purse is gone!"

Well, I am still trying to assure her that it didn't go to the "local house of ill repute." Can you help me? Please? Pretty please? You know how much we meant to each other!!

XXXXXXXXXXXXX  
Nick, (the Much  
Elder!)

\*c/o Ray Allec,  
Box 68,  
Rt. 3,  
Yuma, Arizona.

Editor's (Love) Note:

*I trust you and believe your story. I know you will always be true to me and your wife. I'm sure you wouldn't stoop so low (or climb so high?) as to go to a house of ill-repute. And as for that bill that Madam Dalores has sent me for "services rendered," I forwarded it to Accounts with your old cost code.*

*Hasta luego, mi corason!*

Editor:

Reorganization has benefitted all staff to varying degrees but there are some apparent weaknesses in the new system that are causing Fishery Officer Field Staff serious problems in their daily work routines.

I am referring specifically to operational programmes and policy that are not under the direct control of

branch managers or divisional chiefs. The apparent lack of communication and co-ordination between headquarters and field staff in the units seems to be the direct cause. The officer in the field becomes very frustrated and angry when programmes and policies that affect the people he serves and his own relationship with them are implemented and then ammended daily causing conflict and discredit to his local establishment. These are areas in which consultation and input from field staff have been eliminated. Many of the problems could be avoided if headquarters would accept the fact that the field staff can and would make meaningful, intelligent contributions to new and existing programmes.

I am going to name the units or areas where the greatest problems exist, not to be malicious because I think there is already considerable hard feelings between some individuals; but in the hopes that some understanding and improvement in this situation may materialize.

1. Licencing Section
2. Regulations Unit
3. Personnel
4. Information Unit (Does it still exist?)
5. Special Programmes

Lyle Freeman,  
Fishery Officer,  
Prince Rupert.

Dear Ms Editor,

Always one to analyze objectives, I simply cannot imagine what the Sounder had in mind when it published "In The Hands of Experience."

Did it mean to fill an empty space, titillate readers (no pun intended!) or was it the initial step towards the formation of The "Georgia Strait" Sounder?

I had assumed, perhaps incorrectly, that the Sounder was meant to inform Fisheries people of related events of pertinent interest. However, if there is a need to include outside topics, let's have ones with redeeming features! The average tax payer would quite rightly wonder if his tax dollar was being put to the best possible use upon reading such an article. One couldn't blame him a bit if he yelled loudly and long.

In spite of my personal opinion of the poem, (crude, vulgar and definitely sexist) I am sure that it must have a place somewhere (the trash can or the city dump?)

In short, if we're going to get it on for all to see, let's have it related baby and with a little class!

Awaiting the next  
issue Maxine,

Linda Jamison.

*Sorry if anyone was offended. We thought it was a nice (and innocent) change from the usual fish stories. But you're right Linda, it filled a space!*

Editor - "The Sounder"

Where has all the dough done gone?

For many years there was a Staff Association active in this department. Meetings were held on a fairly regular basis and assessments were collected on a less than regular basis, but nevertheless were made.

As I recall, immediately before we moved from Robson St., the Association treasury was in an excellent financial position with over a thousand dollars in the "Kitty". Now, despite the departure of numerous of the previous members of the Association and with employment of many new members in the department, there still remain a few who would be interested to learn what happened to the Association funds supported by a full and proper accounting.

Bob Morgan.

Reply:

The Staff Association is still in  
existence.

So far as bereavement, wedding, and retirement gifts are concerned.

Dues ceased to be collected June 1, 1971. And since then the "Kitty" has been reduced to \$160.00. When these funds are gone, a final accounting will be made and posted. Bitterly I would like to point out that it is very obvious why the staff association took this path. In the last two attempts to have a meeting there were not enough members present to form a quorum. Should an interest in the staff association by enough members of the Fisheries Service develop, I personally would be more than happy to start over again, perhaps with a new constitution and new blood which we seem to have plenty of around these days.

J. S. Arseneault,  
Caretaker president,  
Fisheries Staff  
Association.

Dear Miss Haugen,

A recent sport catch at Pender Harbour weighed in at 37 1/2 lbs, length of 41 inches. It was caught by John Schleimer from Vancouver on live herring. I'm sure this is a record in this area and I wonder just what is a record for Winter springs, coast-wise. Perhaps Sandy Argue with his magic sliderule can come up with an answer - if anyone in the less productive areas like Campbell River or Rivers Inlet can beat this weight - please submit (with picture) and witnesses. For the unfortunate people living in "other places" in Canada, this fish was caught on 21 January in ice free waters - excluding the ice in the highballs normally kept on the boats to ward off chills.

Ray Kraft,  
Madeira Park.



Dear Maxine,

Obert Sweitzer and I have a request (of rather a peculiar nature) for inclusion in the March issue of the Sounder - if it's not too late, and providing you can accomodate us.

We require negatives (or slides) of the following pictures:

Sockeye salmon in spawning colours  
Chinook salmon in spawning colours  
Coho salmon in spawning colours  
Chum salmon in spawning colours  
Mature arctic greyling  
Mature arctic char

What we are attempting is a draft of a publication illustrating sport fish species indigenous to the Yukon Territory. Each species is thus to be represented by a good photograph followed by a brief description of the life history, habitat and food preferences etc. of that species.

Technically acceptable photos seem hard to come by; everyone appears to have various shots of people catching fish, people holding fish or people eating fish. Few people however will have what we require: a picture with the subject taken against a neutral, single tone background (such as snow, the blue colour of a lake, etc.); identification criteria clearly and visually in evidence - i.e. the fins should not appear collapsed; there should be no visual net marks or hook marks on the subject.

Although we have a technique for taking the type of photos we require, we cannot afford to wait until our Yukon salmon return to pose.

So any good pictures we receive will be returned promptly after viewing and perhaps copying.

Thanks for the space, Maxine.

James Stephen,  
Whitehorse.

*Editor's Note: Rally round, folks!*

#### PHOTOS FOR THE SOUNDER

Editor:

Enclosed are a few photos of Anchovies. I thought they may be interesting to readers in the field. My purpose was to illustrate the distinctive mouth - once you have seen this, you'll never mistake an anchovy again. These are interesting little fish - I wonder how much is known about them.

J. A. Macdonald and I tried to press a few scales. The scales are so thin, that we found double the foot-pounds pressure (40 ft. lb.) as compared to 20 ft. lb. for salmon scales) was required to even give a readable impression.

Even at that, impressions were poor. I won't mention our results - we'll wait and see what the scale lab in Vancouver comes up with.



-Photos by Hugh McNairnay

At any rate - I wonder how many schools of these have been mistaken for small herring? I think there is a way to tell them apart in water by reflections off their silvery bodies (i.e. herring vs. anchovy). Possibly some of the old F/O's could elaborate. It may also be worthwhile for a person to make a small "bait rake" to get positive I.D. if his curiosity should get the better of him.

Hugh McNairnay,  
Kitimat.

#### Custom Color Pickup

Does someone have a strange collection of new slides? Paul Vroom (6177) borrowed prized slides of others for duplication. Invoice #s 23317, 21541, 21538.



Fishing flags, the type used on commercial fishing boats to identify the company. I hope to acquire a complete set of new, and older, no longer used flags for a display at the Quinsam River Hatchery at Campbell River. If you have such flags, particularly the older ones, and would care to donate them, I sure could use them. If they are rare or a sentimental keepsake, I would appreciate just a colour sketch of them so at least I'll know they exist and perhaps have one made.

As yet, I haven't flags for: B.C. Packers (old with a clover leaf), J.H. Todd (all three designs), A.B.C., Tulloch Western, Co-Op, Queen Charlotte (two designs), Canoe Pass Co-Op, Colonial, Beaver, Stump, Cassiar, and some I haven't even heard of yet.

Joe Kambeitz  
6th Floor  
Vancouver Office

## Spurious Emissions

The photo contest is closed, judged, and hopefully awarded for this year. All in all I think it was a real success. The entrants proved that there are some photographers in our midst (Mind you, many non-entrants claim to have better photos in their collection but somehow they didn't get around to producing them.) It would appear that there really is enough interest in this type of contest to warrant holding another one next year. I'm sure the editor would appreciate some feedback on holding a contest next year; special rules, categories etc.; how to get prizes; and what-have-you.

\* \* \* \* \*

Anywhats, congratulations to the winners and thanks to all those who entered and thereby made it a contest. Special thanks are due to those who donated the awards. We all won in that access to a batch of good photos is now a reality.

\* \* \* \* \*

A follow-up on that anchovy story of a while ago is the report from Namu on February 12th of an "anchovy die-off" which attracted so many birds, seals and other beasties that aircraft couldn't land in the harbour.

\* \* \* \* \*

I don't know whether this is a success story or the reverse or just the "wicked-circle". The clam depuration project continues to have problems. First there is a problem keeping it running. Then when it is running there is a problem of getting polluted clams. Often, by the time polluted clams are found (or made) another breakdown occurs.

\* \* \* \* \*

Some personnel action to report:

Way back in October, Lew Miles, the maintenance engineering technician at Big Qualicum retired.

Frances Dickson, Queen Charlotte biologist, is in Ottawa on a 6 month term appointment. (with option to re-new??)

The Inspection Branch has hired Sing Liem, a new engineer to work out of headquarters on inspection type things.

The job mentioned in the November, 1973, Sounder under the title of, "It's a Bird, It's a plane, It's . . ." by Lillian Martin, Dave Stevens has been filled.

The winner of that Competition is Bill Field, formerly from the Atmospheric Environment Service,

International Airport Vancouver, who joined the Habitat Protection Unit (S.O.B.) Feb. 18th, 1974 as a (super) Technician.

Northern E. Q. (H. P.) has a new biologist, namely Tom Cleugh from Winnipeg.

\* \* \* \* \*

There are a number of studies and reports due to be finished within the next couple of months. These include estuary studies on the Oyster, Campbell and Nanaimo Rivers and Vancouver Airport and a couple of power studies by S. E. Q. (or S. H. P.) (Copies available when printed).

\* \* \* \* \*

Bill Sinclair and David Reid have finished a report on the "Conflicts Among Recreational Resource Users - The Case of Non-Canadian Participation in the Regional Sport Fisheries of B. C. and the Yukon." They will present the paper to the Western Regional Science Assoc. Conference at Long Beach, California at the end of February.

\* \* \* \* \*

Fishery Officer, Larry Gray was recently honored as "Halibut King of the Week" by the Prince Rupert Daily News. The honor has nothing to do with fishing though. It turns out Larry plays defence on a local hockey team, the Halibut Kings.

\* \* \* \* \*

There is a rumor that should incite women's libbers. Jack Broome, Fishery Officer at Dawson's Landing makes his wife change the oil in their power plant.

\* \* \* \* \*

The herring sampling lab has been set up at the Welch Street warehouse. For anybody who didn't get the information, that's where herring samples go.

\* \* \* \* \*

On other international matters, Sandy Argue discovered the value of verbal declarations to international negotiators.

\* \* \* \* \*

The Pink Salmon Workshop, an international gathering of biologists for informal discussions on pink (and chum) salmon met in Vancouver in mid-February. A number of our staff; George Wilson, Bryan Allen, Don Bailey, Mike Bailey, Jerry Paine, Bill Schouwenburg, Tom Bird, Fred Fraser and Phil Meyer, made presentations. An international incident was narrowly averted when Don Bailey intercepted an errant missile launched between staff members which could easily have done bodily harm to a visiting dignitary.

They say it was Phil's hot air which deflected Fred's dinner roll.

\* \* \* \* \*

Also on herring, the fishery to date has been limited to the P.T.A. and P.R. Co-op (U. F. A. W. U. strike). The fishing in the Strait of Georgia has been very sparse to date.

\* \* \* \* \*

You thought the "squeaky wheel gets the oil" and you thought you squeaked from budgetary constraints last year and the year before. What you thought was squeaking may seem like purring this year.

\* \* \* \* \*

Had an ache in your tooth(s) (or pocketbook resulting from toothaches) lately?? The word from the Regional Personnel Office is that a lot of staff have expressed interest in a Dental Insurance Plan. The word also is that you get it by putting the bite on your respective (respectable?) unions. So if you are interested, sharpen up the old fangs and draw some union blood and hopefully, activity.

\* \* \* \* \*

Three courses, a follow-up to Sonar-Sounder I, plus Pollution Technology I and Forest Technology I are planned for Terrace in April for some N.O.B. Officers, boat crews and technicians.

## Sourdough Biologist

**AL GIBSON  
NORTHERN B.C. YUKON DIV.**

On December 14, 1973, Ray Kendel was confirmed as the successful candidate for the new Bio 1 position based in Whitehorse. He had been with the Department in a casual capacity since 1971. The Whitehorse posting is a radical departure from our staffing policies of the past and is looked upon as a first step in effective integration of Division staff. Ray will act as an adviser to the District supervisor and will be directed by the senior biologist in carrying out biological programs.

Since 1971, and reorganisation, it became apparent that local residents of Northern British Columbia and the Yukon were not inclined to open up to visitors from "outside" in the way that resident fisheries staff were accepted. Government officials in Whitehorse considered it strange that we should not have a resident biologist on staff when so many fisheries decisions required professional advice.

The establishment of a resident biologist will mean that he will gain expertise within the area, plus the confidence of the local residents and staff, as well as realising economies in reduced travel and the use of local rather than imported materials for projects.

In the light of the comments on job roles voiced at the last North Coast Divisional Meeting, and reported in the January SOUNDER, we are starting to decentralise our headquarters staff. As new positions come available let's hope they go toward helping the field staff where the real action is!

## ARE LICENCING COMPLICATIONS NECESSARY?

HERB LANG PR. RUPERT F. O.

Could a program to generate revenue for the purpose of dogfish eradication not be implemented in a slightly less complicated manner?

This maze of forms for the herring licencing program started with the first deadline set for October 26, 1973 followed by a series of forms for catching and packing herring as well as for licencing vessels. Then a new deadline was set for January 15, with some exceptions like a good excuse or a status card. This deadline surely increased the number of vessels that would fish herring by forcing people to apply for this privilege. Certainly a lot of good suggestions for the program could have been picked up had the field men been contacted for their ideas.

At present this system is very complicated, especially for the fishermen, and also embarrassing for the fishery officers involved. We are expected to explain the proper procedures when we don't have any more information on the subject than the fishermen do.

This brings to light the worst problem in the program, and that is communication to the field office. In this office at least, we were never even sure of the basic requirements for applying until we had informed a number of people wrongly. The latest example of this is that no one knew the applicant had to provide proof of ownership of catcher vessel until 8 days after the licence deadline.

An example of another possible program would be a system of personal licences for operators, crew members, gillnetters and seiners alike with one basic fee and no deadline for application. This type of program would control itself with fees and competition. All vessels would have to bear proper C.F.V. licences and have their holds inspected. Certainly there would be a number of problems with this, but would they not be less than what we have now?

I hope that the people involved in this program take a long hard look at the coming year now and if the program cannot be simplified, at least notify the field men of policy and procedures before we get the forms for next year.

## Newborn

As of January 17, Lee Dutta, Engineer for the Strait of Georgia Division, and his wife Ruma are the proud parents of a third son. Born at 12:21 p.m. at Richmond General Hospital, Nreepen Dutta weighed in at 3,620 grams. (For those that are not quite "up with the times", that is 7.98 lbs.) The newborn is a brother for Jimmy and Bobby.

## Fish Fare

*Editor's Note: This marks the first of a series of monthly columns by our new consumer consultant, Mrs. Donna Aldous. In addition to naming a "seafood of the month" and presenting some recipes, she will be glad to answer your questions on the care and preparation of seafood.*

### GREETINGS FROM THE TEST KITCHEN:

February is over, and we are nearing the end of the cold, cold weather with brighter times ahead!

However, there will still be a few frosty days when you want to welcome family and friends with a steaming hot supper. Appetites may need little encouragement, so be prepared with an extra big tureen of hearty soup or stew, made from fish.

We are going to name a "Fish-of-the-Month", and March's minion cod. A reliable foul-weather friend, cod is available fresh even during winter months. It is also found in salted or smoked form on the grocers' shelves, and so cod can give taste-tempting variety to mid-winter meals.

Batten the hatches! Close 'er up! and come on below for Perky Cod Chowder. Serve it up with great chunks of crispy, crusty bread, toss a green salad, and pass mugs of cold frothy brew!

### PERKY COD CHOWDER



-Photo by Donna Aldous

1 pound salt cod, or fresh cod  
1/4 cup fat  
1/2 cup chopped onion  
1/2 cup diced celery  
3 1/2 cups water  
1 can (19 ounce) tomatoes  
1 can (19 ounce) tomato juice  
3/4 cup tomato catsup  
3/4 cup packaged precooked rice  
Spice bags with 2 tablespoons pickling spice and 2 cloves garlic, quartered  
1/2 teaspoon paprika  
2 to 4 drops Tabasco sauce  
1 teaspoon Worcestershire sauce

Freshen salt cod; or use fresh or frozen cod, precooked for 10 minutes in enough water to cover, and flake into small pieces. Melt fat in large saucepan and cook onion, celery, and green pepper until tender. Add water, tomatoes, tomato juice, catsup and rice. Tie spices and garlic in cheesecloth bag and add to soup. Simmer for 30 minutes. Add paprika, Tab-

sco sauce, Worcestershire sauce and flaked fish. Reheat and remove spice bag before serving.

Makes 12 to 15 servings.

### TO FRESHEN SALT COD:

Soak fish overnight in cold water to cover. Drain and add fresh cold water to cover. Bring to a simmering temperature over low heat. Drain. If fish seems too salty, add fresh cold water, and again bring to a simmering temperature. Drain.

Tired of those old casserole recipes you could cook in your sleep? To wake up your appetite, try this flavourful dish using smoked cod. Your aching budget will be glad you did.

### SMOKED COD KEDGEREE

2 cups cooked, smoked cod  
3 tablespoons butter or other fat  
3 tablespoons flour  
1 teaspoon salt  
Few grains cayenne  
1 1/2 cups milk  
2 cups cooked rice  
2 hard-cooked eggs, sliced  
1/4 cup diced green pepper  
1 tomato, chopped  
1 tablespoon butter or other fat

Flake fish. Make a white sauce. Place rice, fish, eggs, green pepper and tomato in layers in greased 1 1/2 quart casserole. Begin and end with a layer of rice and pour white sauce over all. Dot with 1 tablespoon fat. Bake in moderate oven (350°) for 20 to 30 minutes or until piping hot.

### WHITE SAUCE:

3 tablespoons butter or other fat  
3 tablespoons flour  
1 1/2 cups milk  
1 teaspoon salt  
Few grains cayenne

Melt fat over low heat or in top of double boiler. Mix in flour; cook, stirring until mixture is smooth and bubbly. Add milk gradually, stirring constantly until thickened. Add seasonings. Cook a few minutes longer for best flavour.

Makes 4 to 6 servings.

## Let's Bike it

ENERGY EFFICIENCY . . . Walking man, who consumes about .75 calorie per gram per kilometer, ranks quite high among animals and machines in energy efficiency. But he is less efficient than the horse, salmon or (of all things), the jet transport. However, with the aid of a bicycle, man's energy consumption for a given distance is reduced to about .15 calorie per gram per kilometer -- roughly a fifth of his unaided energy expenditure. Thus the union of man and bicycle creates a hybrid that outperforms all other animals or machines!

(Scientific American, March, 1973)

## Where Duke is King

**LARRY DUKE  
PR. RUPERT**

Before departing to more southerly latitudes for a bit of rest and rehabilitation I would like to offer a few interesting facts about the most northerly coastal sub-district in the Pacific Region.

- From base of operations (Prince Rupert) to the farthest commercial salmon net fishery in the sub-district, (Stewart - head of Portland Canal) requires a return patrol boat milage equal to the distance from Prince Rupert to Cape Caution (the southern boundary of N.O.B.) Two return trips would put you in Vancouver.

- The Nass sub-district has over 120 miles of the International Boundary between Canada and Alaska within it's coastal waters.

- The Nass River mainstem is 220 miles in length.

- In order to get to the closest interior boundary of the sub-district by vehicle, an officer must commute 250 return miles through two other sub-districts.

- A vehicle patrol from Prince Rupert to the furthest spawning ground accessible by road (Snowbank Creek - Bell-Irving watershed) involves 640 return miles. This does not include any side trips.

- Logging activity in the sub-district accounted for a 1973 production of 46,000,000 cubic feet, of which approximately 40,000,000 entered the Nass River log drive.

- Liaison with the B. C. Forest Service involves four separate Ranger Districts. (Prince Rupert, Terrace, Kitwanga, and Stewart).

- A salmon net fishery from May 6th to September 18 with production of 1.1 million pieces in 1973.

While I doubt that these facts will result in immediate offers of additional personnel and goods and services funds, it may at least help to make amends to you Maxine, for not making previous contributions to the Souder.

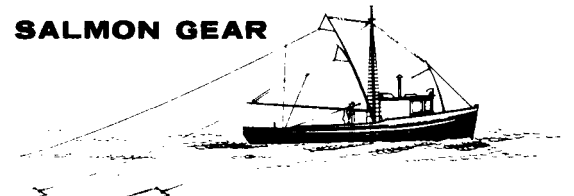
## Made in Canada

**PETER RYAN**

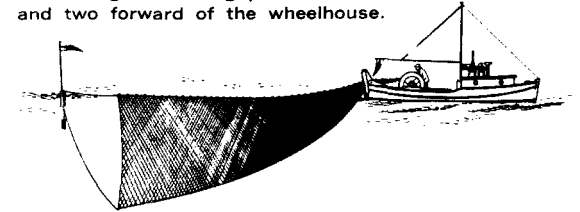
IMITATION - THE SINCEREST FORM OF FLATTERY

The State of Alaska, Dept. of Fish and Game, then the International Pacific Salmon Fisheries Commission have copied the scale projection equipment that was developed here and recognized as the best available. Most recently Peninsula College in Washington State also expressed their intention to copy our equipment if funds can be obtained.

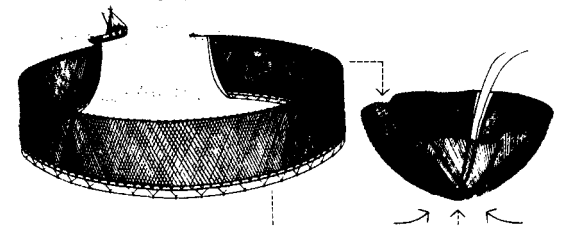
## SALMON GEAR



Trollers fish up to eight separate spools of stainless steel trolling wire, each with one or two sets of lures, led through four long poles, two mounted amidships and two forward of the wheelhouse.



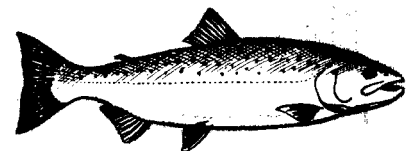
Gillnets are made of nylon twine, and measure up to 1500 feet long. Mesh sizes depend on which salmon is sought. Buoy with flag marks one end of net, which catches fish by gills, drowning it.



Speed is important in successful operation of salmon purse seine, also made of nylon. Skiff is attached to one end, and seiner spills net off stern as she makes circle. Net is then pursed at the bottom and closed at the ends, trapping the fish. A seine set takes about an hour to complete.

## THINKER'S THOUGHT . . . Bruce Barton

If you expect perfection from people, your whole life is a series of disappointments, grumblings and complaints. If, on the contrary, you pitch your expectations low, taking folks as the inefficient creatures which they are, you are frequently surprised by having them perform better than you had hoped.



## PINK

Living only two years, pinks are the smallest of the Pacific salmon, weighing up to five pounds. They have heavily spotted backs over silver bodies and characteristically have small scales. They are sold fresh, frozen and canned.

## THE Souder

**Maxine Haugen, Editor**  
**Graphic Art Jerry Lowe**  
**1090 W. Pender St.**  
**Vancouver 1, B.C.**

Opinions expressed herein do not necessarily reflect Fisheries Service policy.

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DEPT. OF THE ENVIRONMENT  
FISHERIES OPERATIONS

MAY 13 1974

FMT No. 1  
WEST VANCOUVER, B.C.

FISH FARE  
RECIPES

# Sounder

APRIL/MAY 1974 Vol. II No. 7 ★★★★★

Fisheries and Marine Service

THE **Sounder**

FREE PRATIQUE



John Beyer Photo

**SURVEYOR INSIDE TUNNEL**

**THE SOUNDER PHOTO CONTEST  
BEST BLACK AND WHITE  
FIRST PRIZE**

## THE YELLOW FLAG OF ARREST

HAROLD MONKS  
F.P.C. TANU

"Flying the yellow arrest flag of the Canadian Fisheries Service, ....":

This probably caused few if any queries from the general public, but I suspect a few eyebrows twitched from those in the Marine end of the Fisheries Service. In case there are any who are not aware --- the "yellow flag" is simply the quarantine flag and is a request by the ship who flies it for free pratique.\* It is lowered when the ship receives pratique from the quarantine officer of the port. This is generally a short formality and may, as was reported of the "Koyo Maru #2", be "hailed down before the last line was secure". Most foreign ships are granted pratique in this manner and thus fly the "yellow" or better known as "Q" flag.

So much for the most obvious of several inaccuracies reported in Victoria and Vancouver newspapers on the arrest of "Koyo Maru #2". The reporters were anxious for a story of violence --- knives, guns or perhaps some secret weapon to subdue the Japanese during the act of boarding! I had to disappoint them with the brief account that, apart from nasty weather beforehand, all went smooth; we were received aboard the "Koyo Maru" in a polite and obliging manner. Second engineer Robert Scott and seaman Roger Myerscough accompanied me.

Due to dirty weather and southeast gale outside, it was the "Tanu's" preference to escort the vessel down through the inside via Johnstone Strait. To the eighty-two man crew of the "Koyo Maru" who, (supposedly), had never seen the B. C. coast closer than twelve miles,

this was indeed a novelty, and the captain, after being assured there would be sufficient water under his keel, gave his consent. For ourselves, it was also a 'first' --- boarding and piloting a foreign vessel apprehended for violating the Coastal Fisheries Protection Act.

After a few formalities and introductions we were shown to cabins --- scrubbed out beforehand, bunks decked with fresh sheets but no towels nor soap, and the sink -- a single faucet cold water one. Two doors along was the hot water -- the proverbial Japanese bath with a sunken tub almost as deep as a back-yard swimming pool. We were pampered with the best of their menus, (this later confirmed by Bob and Roger's glances at the dishes on the tables behind). At our table, amongst the various tid-bits, were potatoes in lieu of rice, excellent soup and a few oriental vegetables which I have not tasted since sailing to Japan ten years ago. A somewhat musty, camphor-like odour, typical of the Orient, penetrated throughout. It all reminded me of those bygone days.

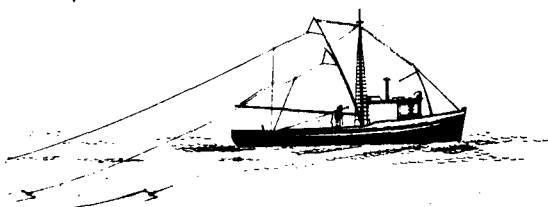
Unfortunately, I'm the tallest of this boarding party and for this suffered the consequences. Japanese are a short race and they accommodate not only their homes but also their ships to their stature. Deck-head beams, light fixtures and brass voice-pipes all made their mark. Roger and Bob, I envied; their posture remained erect and dignified but I soon stooped and developed a perpetual hunchbacked stance.

They had two obvious apprentices amongst the helmsmen and these new comers seemed to show up at the 'wheel' on approach to Haddington Island, Seymour Narrows and Active Pass. It wasn't long before we recognized them, and Roger aptly stepped in and did a fine job of steering a steady course in these confined areas. Bob, normally from the engine-room, had a chance at the mate's game when I took a snooze.

All in all, it was an event we rather enjoyed and, in spite of the erroneous 'yellow flag' and other reports, we would not object to another interlude in Japan after finding a few more 'Japanese' inside the line.

\* pratique - quarantine inspection.

## THE **Sounder**



## 2664.8 Grams

The source of all the cigar smoke on March 26th, was N. O. B. technician, Bryan Allen. He and his wife Carolle became proud parents on Tuesday of their first child, a daughter. Patricia Ruth, born at 0057 hrs., weighed in at 2664.8 grams. (5 lb. 14 oz.)

## Oldie

June 7th, 1949.

John W. Stokes,  
Dep't. of Fisheries,  
Vancouver, B. C.

Dear Sir:

Thank you for your enquiry re the river boat. At present I have a used 32 foot river boat on hand at \$75.00. I do have a new 28 foot river boat as well but have been saving it for a trapper. He will be out in a day or so and as I have heard that he may not go back this winter, he may not want the boat. It is also possible he will allow me to sell this boat and build him one later on. The price of the new boat is \$175.00. Motors of up to 16 H. P. are suitable - Johnson OK-15, or a similar model.

The boats are at my place at Summit Lake and the trucking charge to town is \$15.00.

The rental on the boat only is \$2.00 per day but I imagine you would be further ahead to buy. In any case give me your reaction to all this and also feel sure that I will have a suitable boat ready for your date.

Again thanking you for your enquiry, I am

Yours truly,

R. F. Corless Jr.

## Time Study

### FLEXIBLE HOURS GIVEN APPROVAL

OTTAWA - A study made of a flexible working hours test in the federal communications department has found that employees overwhelmingly support the plan. The report predicts that flexible hours may become a major collective bargaining tool, particularly among professional employees.

Flexible hours, the report concludes on the basis of an experiment involving 110 workers, has enriched the working environment and met transportation problems and employees' personal needs.

But the study says that flexible hours may not be suitable to all departmental work units. Under the flexible working hours plan adopted by some federal agencies, employees can report for work between 7 and 9 a.m. and leave between 3:30 and 6 p.m. They are required to be on duty between 9 a.m. and 3:30 p.m., excluding a break for lunch.

Consumer and corporate affairs, the post office, environment, solicitor-general and the penitentiary service are among departments that have experimented with flexible hours. External affairs adopted the system without a test. Other departments and agencies are likely to try the system as government officials have given general approval for other trials.

Feb. 23/74 Vancouver Sun.





As I write this report, March 22nd, the herring strike has been over for five days. Already half the quota of 53,000 tons (including the Strait of Georgia) has been taken. Our expectations are that it will be all over for the seines by the 27th and for gillnets soon thereafter. This fishery took over four weeks two years ago and three weeks last year, and it looks like two weeks this year. Even though industry is better prepared to handle the volume of herring they are getting this year, they are still in some trouble with plants jammed to capacity. A feature of the delayed start-up has been the exceptionally high yield of roe, estimated to range from 10% to 12%. Perhaps in another year we would do well to deliberately delay our openings and stagger our fisheries to get a better spread of harvesting over the available stock.

I am still debating in my mind the matter of an annual meeting. There are compelling reasons for calling a meeting - I think that we have a great deal of unfinished and new business to discuss; in particular, the subject of roles and communications. However, there are also good reasons for putting off a Branch meeting for a year - cost being the foremost factor.. In a year when we will probably be tighter financially than at any time in the past, an investment of ten thousand dollars in annual conference may be considered frivolous. If the decision is for no Branch meeting, then Divisions and Units will be expected to convene their own gatherings which can be done at probably half the cost of a Branch meeting.

Our first meeting with the U.B.C.I.C. - Native Brotherhood Food Fish Committee was convened last week. As you will recall this committee was established by the Minister to develop guidelines for administration for the Indian food fishery. The atmosphere of the meeting was good, and a lot of progress was made in developing subjects for discussion at future meetings. At present we are putting together some background information on aspects of the food fishery for the U.B.C.I.C. - Brotherhood Committee. We hope to convene our second meeting shortly. Following this second meeting which will deal largely with the modus operandi of our joint committee, among other things, we intend to circularize the subject matter to field staff. Our intention is to bring staff up to date on proceedings and to solicit advice and recommendations on policy matters being discussed or considered by the joint committee. Ian Todd, Al Lill, Jim Mackay, Vic Giraud and myself represent the Service.

I have appointed Vic Giraud as Coordinator of Indian food fish matters for N.O.B. Vic has agreed to a one-year special duty appointment, at his current level. Lyle Freeman is presently filling in behind Vic in acting capacity. It will be Vic's job to work with division chiefs, supervisors and sub-district fishery officers to develop local administrative procedures in harmony with regional food fish policies.

## Play It Again Sam -

### THE GENERAL JUSTIFICATION

To the simple-minded (fishermen and biologists), it is desirable to have more salmon to catch. The essence of their thinking is that if two is good, three is better. The more sophisticated (businessmen and economists), are quick to point out that, where demand is limited, there may be no merit in greater supply -- three are only better when worth more than two. And where demand is indeed unlimited, there is merit to increasing supply only where the revenues exceed the costs. Three are only better when the third costs less than it is worth. With the government paying the costs, the businessman may have enthusiasms where the cost/benefit ratio is marginal, while the economist, with wider-ranging perspectives, is usually inclined to consider what he calls the whole social investment strategy. But, regardless of cost/benefit ratios, whether favorable or not, an even more sophisticated analysis (by politicians and sociologists) may suggest reasons for action regardless of biological or economic technology. It is accordingly necessary to justify expenditures on salmon enhancement in what may seem a reverse order, first evaluating the social context, then the economic costs and benefits, and finally considering the biological nuts and bolts.

excerpt from "Play it again, Sam - An Essay on Pacific Salmon Enhancement" by P. A. Larkin, 1973

## Newlyweds

Electronics technician Charlie Warburton shocked the office one Monday when he arrived at work sporting a wedding band. At 10 a.m. on Feb. 23rd in St. Peter's Church in New Westminster, he married Kristin Ogmundsen. Kristin is the daughter of the First Officer on the "Laurier", Barney Ogmundsen.

Charlie was feted at a surprise noon-hour shower the following Tuesday. The glowing groom, dressed in shades of green, setting off his lovely red hair, was escorted to a local restaurant. There, he was presented with a pink corsage with accents of burnt out transistors, wires, life savers, paper clips, and fish tags. In a moving speech, Charlie graciously thanked those present for giving him a grocery box of label-less cans.

# Who Are They



Left to right, top to bottom:

Left to right, top to bottom: Jerry Lowe, John Beyer, Dave McNeil, Ken Jones, Peter Brown.

## Who Are They?

The winners of the photo contest and what they are:

Peter Brown is a fish culturist at Capilano Hatchery.

Jerry Lowe is, among other things, the man that does the Sounder layout so effectively.

Hugh McNainay is a fishery officer in Kitimat.

Byril Kurtz is a fishery officer in Bella Bella.

Dave McNeil is a technician for the Central Coastal Division.

John Beyer is a technician for the Technical Support Unit.

Ken Jones is a technician for the West Coast Vancouver Island Division.

Norm Lemmen is a fishery officer in Powell River.

Konrad Johansen is a technician with the North Habitat Protection Unit.

Gerry Buxton is a technician for the North Coast Division.

Keith Elliott is a fishery officer in Steveston.

Dave Schutz is a biologist with the Central Coast Division.

Joe Kambeitz is a technician for the Fraser River - Johnstone Strait - Juan de Fuca Division.

Fish Inspection is in Prince Rupert.

The prizes and honorable mentions were split in half by North and South. (What a diplomatic coincidence!)

Seven of nineteen honors were taken by "field" staff.



M. Haugen Photo

# Espionage Suspected

## KEVIN DELANEY BELLA BELLA

### Problem #1

Boat speed indicator places the "Surge" at 24 knots. (Beat that "Babine"!)

### Problem #2

Furuno Sounder and Ad-Scope show four sea beds at one time and no fish

### Problem #3

Test set with herring gillnet made in Boddy Pass. Net was set overnight on a "Hot Spot", and we are pleased to announce that the haul produced, one only, elusive Pacific *Clupea pallasii* (Herring). The sex of the creature remains a complete mystery because some thieving, ruddy duck stole the gonads out of the thing from its stern end, while it fought for survival. (Commercially, we must be about \$5000 in the hole)

### Problem #4

Rough weather in Kildit Sound and the refrigerator door catch pops off. Door opens discharging contents onto galley deck. A week's supply of nourishment has been marinated in a combination of milk, orange juice, tomato juice, apple juice, V8 juice and vinegar. Cook, Roy Copperpaint (Moses) is found trapped beneath a ten pound roast of "Dead Pig" frantically crying out for somebody to pass him the apple sauce.

### Problem #5

While enjoying a relaxing evening viewing the old "Tube" at Fishery Officer Lyle Evinrude's trailer in Bella Bella, (while Lyle was at the "other side of town" at the Hospital.) (not as a patient I might add), the following happens: Enter Biologist Rick Boyd who proudly announces that he has achieved the ultimate. He has bunged up the aft "Dumper" (Head) aboard the good ship "Surge Rock".

Work commences, and is finally completed late that night, to remove the unmentionable object which is obstructing the ocean from becoming polluted and Captain Goose from his normal bodily functions.

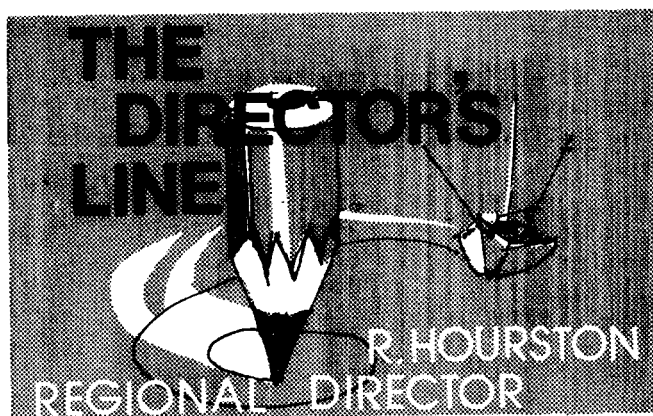
**Problem #6**

Oh No!!..... After consuming monumental amounts of food the previous night, Fishery Officer Lyle Evinrude (ENDERUD) walks into the wheelhouse and babbles something in a language I took to be Saskatchewanese. Roughly translated, it came out, "I'm going to be a Biologist, I've just bunged up the aft "Dumper" again!"

Now we, the crew, have been wondering if Problems #5 and #6 are indicative of something! The Captain has now given the Cook strict orders to slip a few cubes of Ex-Lax in the coffee pot.

Me? I'm the lucky Engineer. (Sanitary, me thinks). It's a wonder that I've found time to write this, as most of my time is spent in the aft "Head". I'm not in there to think, stink, or write on the walls. I'm too damn busy with the pipe wrenches these days.

Just think! Only one Herring, with no guts in it. Boy! I sure wish that was catching!!



There have been a number of interesting happenings since my last report.

In mid-January, Mr. Lucas, Senior Assistant Deputy Minister, convened a meeting of all Fisheries and Marine Service Regional Directors in Toronto to review and finalize the Program Forecast for 1975/76 - Everybody needs more money.

\*\*\*\*\*

Later in the month (January 29 and 30) Mr. Lucas was Chairman of a Seminar on Resource Enhancement held at the Bayshore Inn. It involved participants from Government, Industry and Universities across the country. General conclusion - we have demonstrated the technology to enhance salmon stocks so let's get on with the job. Some question as to whether a large-scale program could be administered by Government staff alone.

\*\*\*\*\*

On January 31st Mr. Lucas, along with Dr. Johnson and myself and two headquarters' staff, attended a Federal-Provincial B. C. Fisheries Committee meeting in Victoria. The Provincial Government delegation was headed by Mr. Lloyd Brooks, the Deputy Minister and included staff members from the Commercial Fisheries Branch and the Fish and Game Branch.

On January 28 I went with the Minister to the annual convention of the U.F.A.W.U. It was a full morning session for Mr. Davis with about two hours of questions, most of which he handled himself, and included many questions on the Canada - U. S. A. salmon problems. I made my presentation to the same convention on January 30.

\*\*\*\*\*

The Skeena Salmon Management Committee meeting in Prince Rupert on February 6 was quite a pleasant one this year, due no doubt to the favourable sockeye predictions for the Skeena and Nass runs.

\*\*\*\*\*

February 10 - 15 was spent in Seattle at the Canada - U. S. A. meeting on Salmon Problems of Mutual Concern. The Canadian delegation was headed by our Director-General, Cliff Levelton. This was the fourth meeting of the current series and was just as difficult as the other three. As the press release said, some progress was made. The U. S. have agreed that the proposal submitted by Canada at this meeting would form the basis for an agreement. A number of meetings of the two working committees associated with the talks will be held between now and the next meeting proposed for next October.

\*\*\*\*\*

Like the rest of the staff I was pleased to see agreement reached on herring. This fishery is really going to test our management capability over the next two - three weeks, particularly in the Central Area.

\*\*\*\*\*

Many of us were saddened by the news of the passing of Reg. Edwards. Reg. served a full career in the Department and at the time of retirement in July, 1962 he was the District Supervisor in Prince Rupert.

## New Baby

"Sourdough" biologist Ray Kendel is becoming a regular news item in the Sounder. The occasion this time is to mark the birth of his second son, Christopher Ray, on February 18th. Informed sources tell us that Ray and wife Colleen spent quite some time choosing names for the baby. (The informed source preferred "Jeremy" himself.) Christopher, who weighed 6 lbs 7 oz at birth, will be a brother for Shawn. now 4.



THE **sounder****Letters to  
the Editor**

Dear Maxine:

I found the Feb SOUNDER most interesting and feel compelled to express my appreciation and congrats for the variety and excellence of the contents and photography and graphic art. Also, the wide range of coverage of activities extending from the Yukon to the 49th Parallel. It is good to know the why, what and where of movements of personnel, vessels etc. Capt. Reg McLellan's summation of the first 5 years of "Tanu" interested this semi-land lubber, as did the Student's Egg Plant, Advice to a Son and of course, the precision and articulation of Ashlee's Law.

I recently encountered an "office dictionary" compiled by the SOLID STATE HUMANE SOCIETY which might be used by personnel when applying "Ashlee's Law" in their work-a-day affairs around the office. Incidentally, if any office in the Pacific Region doesn't think it needs this dictionary - Well, it's obviously the one that needs it most.

DICTIONARY

A PROGRAM - any assignment that can't be completed by one telephone call

NOTE & INITIAL - let's spread the responsibility for this

NO ONE AVAILABLE - We're too busy to promote it anyway

TO EXPEDITE - to confound confusion with commotion

COORDINATOR - the guy who has the desk between two expeditors.

UNDER CONSIDERATION - never heard of it

UNDER ACTIVE CONSIDERATION - we're looking for it in the files

CONSULTANT (or expert) - any ordinary guy more than fifty miles from home

RE-ORIENTATION - getting used to working again

A MEETING - mass mulling by the master-minds

A CONFERENCE - a place where talk is substituted for the dreariness of work and the loneliness of thought

TO GIVE SOMEONE THE PICTURE - a long confused and inaccurate statement to a newcomer

LET'S GET TOGETHER ON THIS - I'm assuming that you're as confused as I am

UNIMPEACHABLE SOURCE - the guy who started the rumour

RELIABLE SOURCE - the guy you last met

SEE ME, OR LET'S DISCUSS - come down to the office, I'm lonesome

GIVE US THE BENEFIT OF YOUR THINKING we'll listen to what you have to say if it doesn't conflict with what we have to do

Andy Skipper

Dear Maxine:

We, the undersigned, take objection to the article appearing on Page 3 of the last issue of the "Sounder". Whoever the chemist was that wrote the description of "the creature known as woman" he was certainly not using his scientific objectivity. We could go on at some length attacking the specific claims of the article but we do not choose to dignify it.

However, we find it hard to imagine why you published the item. It is not funny, or at least any humour is at the expense of women and not at the expense of Gordon Pew. It is not of historical interest; too many people still have that ideology today. What it is, is just bad taste.

The men among us look upon the women as competent work-mates. The women among us, doing good work and bringing home good salaries, object to being described as "highly ornamental" income reducing agents" and "highly explosive". Maxine, don't you find such terms objectionable yourself?

We realize you may be very hard up for material to put in the paper. However, better caliber humour is abundantly available.

Lillian Martin  
Liz McGown  
Jennifer Gass  
Paul Campbell  
Ronald Leary

John Davidson  
Rhonda Pummell  
Chris Nagy  
John Gordon

*Editor's Note:*

*We are sure that every reader has heard of Women's Liberation, and the great majority approve of at least the major tenets. (Those that do not usually have the common sense to keep their unpopular views to themselves.)*

*We were also certain that everyone, especially women that were seen as "competent work-mates, doing good work and bringing home good salaries," would be secure enough in their own sense of identity to be able to sit back and laugh at the article.*

*Women's Liberation is a serious issue in the world today, but must that prevent us from laughing at it, us, them, then, and now?*

*Of course, if anyone finds any term (e.g. "highly ornamental"), objectionable, and identifies with it, then change one's image! (I'd like to identify with the atomic weight, myself!)*

*We do not deny that we are sometimes "hard up" for material. While we welcome criticism, it's constructive criticism that really is effective. We note that you did not include any examples of your idea of "better caliber humor," nor is there any written evidence of the "good work" that you do. I'm sure Sounder readers would be most interested in reading of your other activities.*

Dear Maxine:

Hi again; just thought some of your readers might be interested in the "seedy" local situation.

Re: a public notice published in the "Parksville-Qualicum Beach Progress," our local weekly newspaper:

"The regular meeting of the Coomb's Farmer's Institute will be held in the Agricultural Hall at Coombs, January 17th., 1974, at 8 p.m. Please attend if you still need artificial insemination at present rates."

Speaking personally I must confess a spot of nostalgia for old methods and techniques which probably makes me an "animal" husband, if not a buff in "doleful" animal husbandry.

Regards and Cheers,

Andy Skipper,  
Parksville.

Dear Maxine:

During the recent airplane crash near Prince Rupert (a North Coast Air Services Grumman Mallard with 10 persons aboard) a couple of Fisheries Service members performed outstanding services.

I am referring to the cooks on the "Cutter Rock" and "Pillar Rock". Not only did these men provide hot meals for the vessel crews who were involved in the rescue of survivors, they also provided coffee and sandwiches for the five Fishery Officers, ten R.C.M.P. Officers and four Coast Guard personnel who were evacuating the injured and removing bodies from the crash site on the hillside near Butze Rapids. In addition, there was a hot meal awaiting the Fishery Officers when they returned to the "Pillar Rock." ("Thank you, Mike!")

To say the least, I was impressed with Adrian Brazil who in addition to the above found time to go into the crash scene and help carry out an injured passenger.

Yours truly,  
Lyle Freeman,  
Prince Rupert

Editor:

Enclosed is a somewhat unique letter of resignation submitted by the Lab Technician in the Prince Rupert Inspection Laboratory.

This young gentleman had been working for the Department the past 22 months. During this time he and his wife were completing a thirty-nine foot ferro cement sail boat. The boat is now complete and they are living on it. It is their intention to spend the next couple of years in "semi-retirement" just leisurely enjoying life along our coast.

With this in mind, and the possibility of making considerably more capital in a month of herring fishing than the next three months would yield in our

laboratory, this letter of resignation resulted.

I have Mr. Thornber's permission to have this published if you feel it is of interest. I do myself because it has "feeling" somehow.

Tom Perry,  
Prince Rupert.

January 21, 1974.

Mr. Tom Perry:

*"There is a tide in the affairs of men, which, taken at the flood, leads on to fortune, omitted, all the voyage of their life is bound in shallows and in miseries". At this point in my life I am feeling the pull of a biggie, and it is with much regret that I am forced to make you aware of my intention to break free from the test tube and the vial and all the variety of good things in the big room across the hall, and try to make my way in search of bigger fish, or, if you will, a lot of smaller ones. My intuition tells me that the tide will reach its peak around 1630 hours on the 31st of January 1974. "We must take the current when it serves, or lose our ventures".*

Yours truly,  
Robin Thornber.



Dear Maxine:

Attached is a photo I found in the files. Thought it might be of some interest to your readers. The photo is of a knife blade attached to the "Comox Post" and was used in killing Basking Sharks in the Barkley Sound area.

This program started in 1955 following an appeal from fishermen in the area who suffered net damage by these sharks.

In operation, the sharks, usually asleep, are rammed full speed - 10 knots, and are generally cut completely through. According to information on file, 65 sharks were destroyed in 1955, 105 in 1956 and until 1965, a 10 year period, 380 were destroyed.

According to Captain Joe Thompson of the "Comox Post" this operation has not been in effect for the past 6 years and very few complaints have been received from the Barkley Sound gillnet fleet.

Anyways, to "coin" recent Departmental terminology - it was a viable operation and the impact was heavily felt by its customers.

Don McCulloch,  
Port Alberni, B. C.

# Streakers

## STREAKING CONTEST

### NORTH - SOUTH CHALLENGE

To be held at 14:30 on the 15th of March (tomorrow) immediately in front of the 1090 W. Pender office.

Several people from N.O.B. & S.O.B. have consented to streak. This is an equal opportunity event open to both sexes, French or English speaking Fisheries employees. If you would like to compete for North or South, turn up in your one button suit in front of this building 2:30 Friday sharp.

Event will be from the front doors to the corner of Burrard & Pender and back.



Sounder Photo

Prizes will be awarded for both speed and popularity.

#### \*NOTE

This is not a sanctioned Fisheries event and all employees attend wholly at their own risk.

Where were you when the streakers struck? Acting on a hot tip from a usually reliable source, I took my camera to the back (side) of the building.

The posters throughout the building announced that the streakers would appear in the front (al) nude, but before the event, shame ruled. One streaker, speaking for the group, told me they didn't have the cheek to bare all on Pender Street.

Several appeared embarassed as I took pictures of their first tentative steps, but they soon got into the swing of things.

Passerby, noticing the pile of clothing on the sidewalk, congregated at the site, and waited for the streakers to expose themselves. As the first one rounded the corner, a great cheer sounded from the onlookers, a horn honked, a policeman arrived, and a bus drove up onto the sidewalk. Close behind the winner, came two other streakers, the lone female streaker winning by a breath.

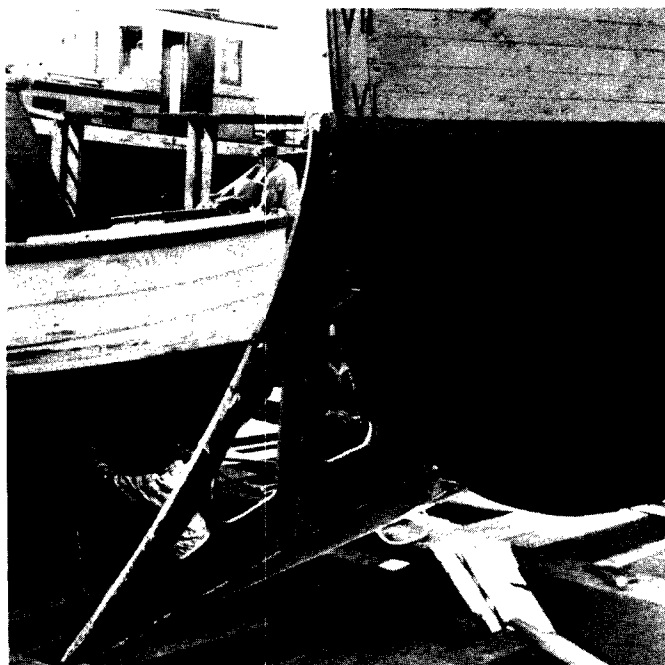
Speaking to the winner later, he told me nakedly, "You might think I did it for the exposure, but I actually did it for the money. (\$114 donated by the crowd). What a bunch of marks to pay for what they can see at home any time."

*Editor's Note: This event was not sponsored or sanctioned by the Sounder. The photo's certainly lend credibility to this fantasy don't they?*

## Ice Man Weds

Bill Schouwenburg's philosophies on the benefits of strong pair bonding must have rubbed off on Technician, Bob McIndoe Jr. As a result of his weakened condition and in a state of delirium, Bob made the fateful step.

Bob McIndoe wed Rosemary Anne Jacquest at three p.m., 23rd of March in Christ Church Cathedral. A reception followed at the University Club of Vancouver.



Shark Killer Page 7



## Spurious Emissions

We got some feedback on the first "Fish Fare" by Donna Aldous - all positive! Someone submitted the related idea that large "Fish of the Month" posters be prepared for each field office with poster inserts and suitable recipe handouts sent to each office monthly. If any field offices are interested in this type of display, etc. please contact the editor and we will see what we can do.

\* \* \* \* \*

With streaking being the craze that it is - Fisheries is joining in (is crazed?). A young lady from the headquarters building streaked the Ritz Beveridge room. (EPS claims she is on their staff; some have suggested she must work for private industry; Fisheries hopes, but our spy knows). Next incident was a staff streaking contest which was received with typical staff enthusiasm.

\* \* \* \* \*

Along the same vein there is a rumour that all officers and Marine Service crews will be streaking this coming season because of the rumored non funding of uniforms.

\* \* \* \* \*

John Cairns finally got that promotion he has been after. Robb Wilson transferred to Tofino from Pt. Hardy.

\* \* \* \* \*

Mary Ann Zelensky of licencing is leaving H.Q. at the end of March - to trip around Europe she says.

\* \* \* \* \*

Joe Van Dick - the S.H.P. unit engineering technician who came to the organization 4 months ago from Edmonton has gone back.

\* \* \* \* \*

Obert Sweitzer is transferred to Prince Rupert from Whitehorse.

\* \* \* \* \*

Bob McIndoe (junior), that pillar of bachelorhood, is about to file for married benefits. The comments on this, about ice men, and snakes and pits and comething, include all kinds of obscenities.

\* \* \* \* \*

Lawrence Woo is the new bacteriological technician in the Vancouver Inspection lab.

Wayne Holmes and family will return to Vancouver Inspection job from his one year F. A. O. assignment in Thailand. They say it's very difficult to get used to not having servants after you have had them.

\* \* \* \* \*

The final word on Johnstone St. - Fraser Division Chums for 1973 is 5,600,000 (3.8 catch; 1.8 escape.) This, easily the largest return on record, was achieved in spite of budgetary constraints - just think what could be done with if we were serious about it.

\* \* \* \* \*

Even with tight bucks the Head Recovery program is going to continue this year. With a bit of luck and a few bucks it may even expand to involve a bit bigger area.

\* \* \* \* \*

Once again the annual transfusion of B. C. I. T., Fish, Wildlife and Recreation students to the Big Qualicum project will take place this April and first half of May. Students in groups 2 to 4 will work at Qualicum for one week stints. This provides some very valuable student field exposure as well as providing some life blood to the Qualicum project. (No over exaggeration - Qualicum could not function fully without these students.)

\* \* \* \* \*

The clam depuration unit is all systems go now. Everything is working and "pure" clams are coming out of it.

\* \* \* \* \*

For all those people interested in Chinook egg take and incubation methods, Bob Armstrong has just finished a first class technical report (T-73-11) on the subject.

\* \* \* \* \*

Also concerning chinook eggs, I saw some photos of Harrison River White Chinook eggs - they were white eggs. They have an opaque white shell so they look almost like dead eggs but they hatched. The alevins resulting from these eggs had colored yolk sacs; may be a bit less than "normal" color.

\* \* \* \* \*

The Information Branch is pleased to announce that it has 6 copies of Dick Harvey's "Living River" film for loan. Dick Harvey's film "The Living River" is one of three films selected for competition at the North American Wildlife and Natural Resources Conference in Denver at the end of March. Good luck Dick!

\* \* \* \* \*

Ron Paziuk is the new skipper of the Pillar Rock.

\* \* \* \* \*



The Sounder editor was involved in a sidewalk encounter in front of the office the other day. Even those who observed the encounter still think that she assaulted the encounteree (or). It's an interesting story, ask her about it some time.



J. Kambeitz

Messieurs Goodman, Langer, Graham and Higgins attended a Conference on Estuaries in Corvallis, Oregon. Other than an over immersion in local politics the session was very profitable.

\* \* \* \* \*

That world traveler Ian Devlin is at it again; just back from a Fisheries Refrigeration Conference in Tokyo and ready to go to India for a week or two in April. The jaunt to India is interesting in that the Government of India is paying the shot. Inspection has been rejecting Indian shrimp so the Indian government is willing to pay to find out why.

\* \* \* \* \*

## More Winners



C.D. Kelland Photo

Cold Storage Survey

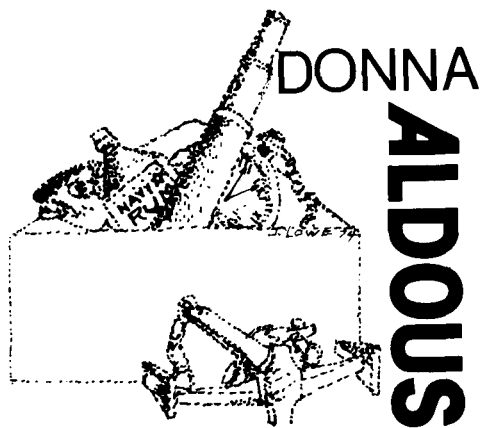
Second Prize, Best Black and White Photographer, Fish Inspection, Prince Rupert.

## Pick a Excuse

### 60 EXCUSES FOR A CLOSED MIND

1. We tried that before
2. Our place is different
3. It costs too much
4. That's beyond our responsibility
5. We're all too busy to do that
6. That's not my job
7. It's too radical a change
8. We don't have the time
9. Not enough help
10. That will make other equipment obsolete
11. Let's make a market research test of it first
12. Our plant is too small for it
13. Not practical for operating people
14. The men will never buy it
15. The union will scream
16. We've never done it before
17. It's against company policy
18. Runs up our overhead
19. We don't have the authority
20. That's too ivory tower
21. Let's get back to reality
22. That's not our problem
23. Why change it -- it's still working o.k.
24. I don't like the idea
25. You're right--but...
26. You're two years ahead of your time
27. We're not ready for that
28. We don't have the money, equipment, room, personnel
29. It isn't in the budget
30. Can't teach an old dog new tricks
31. Good though, but impractical
32. Let's hold it in abeyance
33. Let's give it more thought
34. Top Management would never go for it
35. Let's put it in writing
36. We'll be the laughing stock
37. Not that again
38. We'd lose money in the long run
39. Where'd you dig that one up?
40. We did all right without it
41. That's what we can expect from staff
42. It's never been tried before
43. Let's shelve it for the time being
44. Let's form a committee
45. Has anyone else ever tried it?
46. Customers won't like it
47. I don't see the connection
48. It won't work in our plant
49. What you are really saying is....
50. Maybe that will work in your department, but not in mine
51. The Executive Committee will never go for it
52. Don't you think we should look into it further before we act?
53. What do they do in our competitor's plant?
54. Let's all sleep on it
55. It can't be done
56. It's too much trouble to change
57. It won't pay for itself
58. I know a fellow who tried it
59. It's impossible
60. We've always done it this way

(Adapted from a list developed by the New York Charter of American Society of Training Directors).



## FISH FARE

Inspiration for the selection of oysters for April came following a visit made by us to Cooper's Cove Oyster Farm, near Sooke, on Vancouver Island.

Mr. John Rosedale of Victoria's Fish Inspection office, escorted me to the oyster farm, nestled beside a cold cove, where we saw the little lovelies bedded down in underwater lots. Later they are carefully harvested from their briny beds when they have reached optimum size. It takes between 2 and 3 years to reach market size, of four to six inches in length.

The oysters are then shucked immediately, rinsed carefully, sorted, packed and sent on their way in a matter of hours. This swift handling under sanitary conditions ensures a farm-fresh product when it reaches the store shelf.

I couldn't resist buying some, and rushed home with my flavourful "find", to experiment in the kitchen.

If you obtain oysters in the shell, be sure they are tightly closed. Gaping shells indicate the oyster is dead, and no longer edible. When purchasing shucked oysters, they should be plump and firm, with a clear liquid. If necessary, strain the liquid to remove small particles of shell, but do not rinse, as this removes some of the flavour.

To store, hold at temperatures below 40°F. (ordinary refrigerator temperatures), but 34°F. is the optimum.

If the cost of oysters seems high, consider that there is no waste, the flesh is easily digested raw or cooked, and that oysters are rich in protein, vitamins, and especially minerals. Considering their high quality of nutrition, oysters are economical. As a bonus, they are rich in flavour, but low in calories.

Once you have the oysters home, try to resist eating them all raw (a delicious appetizer served with a spicy cocktail sauce). Make piping hot oyster rolls for a change from hamburgers, and watch the happy expressions appear around the table.

### OYSTER ROLLS

1/2 pt. shucked Pacific oysters  
8 crusty dinner rolls  
3 tablespoons butter, melted  
1/4 pound (1/2 cup) butter  
1 tablespoon chopped celery  
1/8 teaspoon pepper  
2 drops Tabasco (optional)  
1/2 cup cream  
1/2 cup liquid (use oyster liquid, plus milk to make up volume).

Drain oysters, reserving liquid. Slice tops from rolls and pull out most of the soft bread, to make cases.

Brush inside of cases and lids with 3 tablespoons melted butter. Crumb the pulled bread.

Toast roll cases, lids and crumbs lightly in oven. In frying pan, melt 1/2 cup butter. Add oysters, celery and seasonings. Heat to simmering temperature. Simmer oysters until they plump up, and the thin edges ruffle, about 3 minutes.



Donna Aldous Photo

Stir in cream, 1 cup toasted crumbs, and 1/2 cup liquid. Heat to simmering temperature, stirring frequently. Fill roll cases with oyster mixture; cover with lids. Package rolls individually in foil.

Heat in a moderate oven, 350°, until piping hot, about 20 minutes.

Serve in foil. Makes 8 servings.

## It's Raining Fish

Vancouver Sun Feb 27/74

### FISH RAIN ON FARMS

DARWIN (Reuter) - Hundreds of small fish have rained from the sky on cattle farms 200 miles from the sea in Australia's Northern Territory during the last two weeks.

Meteorologist and scientists say the fish may have been sucked from the sea by tornadoes and blown inland.

# \$170,000 FOR OCEAN RESEARCH

J. ARNETT UBC INFORMATION SERVICES

The University of B. C.'s Institute of International Relations has been awarded a \$170,000 grant by the Donner Canadian Foundation to fund a large, long-term research project on "Canada and the International Management of the Oceans."

Twenty researchers from Law, Commerce, Political Science, Economics, Geography, Slavonic Studies, Applied Mathematics, and Resource Ecology will, under the auspices of the Institute, investigate problems ranging from the international regulation of ship-generated oil pollution, to the politics of ocean fisheries, to the regulation of the commercial and military uses of the seabed.

Institute director Dr. Mark Zacher said the project marks the first time in Canada that a group of researchers from a variety of disciplines have been brought together to study such a broad range of ocean-policy problems.

The Institute of International Relations is part of U.B.C.'s Faculty of Graduate Studies and was established in 1970. It is specifically charged with promoting multi-disciplinary research projects involving faculty and graduate students. While the Donner grant covers the next three years, the Institute's work in ocean research will probably cover at least six to ten years.

Dr. Zacher said there is no comparable research project on ocean policy in Canada. "In fact, there are few research centres in the world where such a broad range of issues are being examined," he said.

"Government officials with whom we have been in contact are very interested in our project and have indicated that they are willing to assist the researchers and are eager to review the results of the studies. In 1976, we are planning a major conference involving both government and non-government people to review findings of the studies."

Dr. Zacher said the research project has two central purposes:

1. Development of a major body of social-science research which will enhance the knowledge of Canadians and others regarding past, present and future issues in respect to the international management of the oceans; and
2. Production of a number of experts on the international management of the oceans who will be able to provide expert advice to government officials and private organizations in Canada and to act as public critics of government policies in this area.

Dr. Zacher said the growing importance of the oceans, in a world where there is increasing concern about the

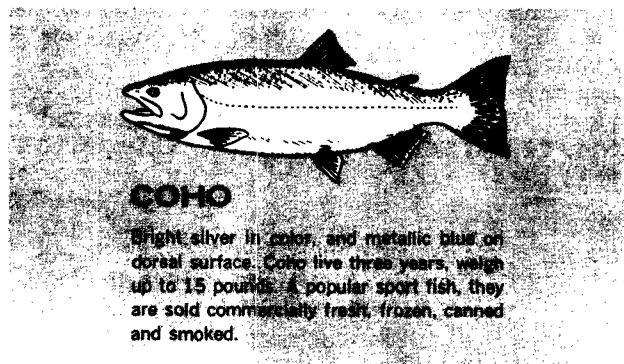
diminution of food and mineral resources and the quality of the marine environment, is illustrated by the intensive negotiations on the law of the sea which have taken place in the UN Seabed Committee since 1967, and plans for law of the sea conferences in Caracas in 1974 and Vienna in 1975.

Canada is vitally interested in these discussions because it has the longest coastline in the world, a continental margin which is half of its land territory, and some of the world's richest fishing grounds adjacent to its coast, added Dr. Zacher.

He said that while the conferences are likely to produce some general agreements covering the law of the sea, details of these agreements will take years to work out and will create many new problems in the process.

For example, the establishment of a 200-mile fishing zone would provide coastal countries such as Canada with the options of excluding the fishing boats of other countries, allowing them to fish without charge and/or within certain quota limits, charging them rent for fishing the area, or forcing them to buy ships in exchange for fishing rights.

Dr. Zacher said that the major reasons why the Institute decided to make Canada's role in international management of the oceans its central research focus are the large number of faculty members and students in graduate studies at U.B.C. involved in some aspect of ocean research and the increasing importance of marine resources and the marine environment to Canada and to B. C. in particular.



## THE **Sounder**

**Maxine Haugen, Editor**  
**Graphic Art Jerry Lowe**  
 1090 W. Pender St.  
 Vancouver 1, B.C.

Opinions expressed herein do not necessarily reflect Fisheries Service policy.

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# OTTAWA TAKES MACLEOD

For the benefit of NOB staff, just a few words to let you know of my present status and whereabouts.

I have been seconded to Ken Lucas' staff for the next three to five months. During this period I expect to be working mainly in Ottawa, with frequent visits to the Region.

The purpose of my secondment is to work on development of a fisheries resources enhancement program with the Province of British Columbia. As you are aware, Pacific Region put forward a 10-year \$258 million salmon enhancement program proposal for consideration by the federal government. The program as proposed would have quite an impact on Provincial resources - water, gravel, land, etc. Nevertheless, the Province has indicated they like the proposal, although they recognize that it will probably impose costs on the resources under their jurisdiction.

The Provincial Recreation & Conservation Branch went one step further. They want to develop a joint approach to enhancement. They say, "Why not develop the fisheries resources, not just salmon?" By this they mean, let's develop game fish, rehabilitate aquatic based recreational opportunities. In short, why not a fisheries resources enhancement program looking to improve consumptive and non-consumptive use of both fish and habitat. And, .... why not?

Initially, at least, I will be working with a number of people on a Working Party to look at the scope of the expanded enhancement proposal. Dixon MacKinnon, Howard Smith and myself will work along with Ed Vernon and Ron Thomas of the Province. Ed Vernon is Associate Deputy Minister, Recreation & Conservation Department, and Ron Thomas is Fisheries Co-ordinator, Fish & Wildlife Branch.

While I am away, Jim Connor is taking over the Salmon Vessel Licence Appeal Committee chairmanship; Ian Todd becomes the senior Regional representative on the Joint Food Fishing Committee (UBCIC-Native Brotherhood-Fisheries Operations; Don Wilson takes my place as joint chairman of the Operations Consultative Committee.

Rod Palmer has been appointed Acting Branch Head during my absence. I am sure that you will extend to him the same degree of cooperation and assistance you gave me.

If Maxine will permit an "outside" voice to be heard, I hope to continue to contribute to the Sounder.

Best of luck during the upcoming salmon season.

Ron MacLeod

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## KANGAS RETIRES

Mr. William John Kangas will be retiring for health reasons from the Fisheries and Marine Service about July 15, 1974.

Mr. Kangas was born in Whitewood, Sask. in 1913 and joined the service as an engineer on the FPL "Bonilla Rock" on September 8, 1952 at Namu, B.C. On November 18, 1952 he joined the staff of the Prince Rupert Marine Station as a fill-in job in the winter months. On June 12, 1954 he was Master of the FPL "Onerka", a position he held until June 6, 1955 when he became relief engineer. In between June, 1955 and May 1, 1957 he held Masters positions on vessels such as "Onerka" and "Agonus".

On May 1, 1957 he joined the staff of the Marine Station as an engine-fitter on a permanent basis and he remained as such until his retirement. Mr. Kangas had a broad mechanical knowledge but perhaps was best known for his knowledge of "Jimmy" Diesels. There is no doubt that Mr. Kangas' services will be greatly missed not only by the Marine Service but by Fishery Officers and others whom have to do with matters mechanical.

Bob Mallory,  
Head,  
Northern Marine Services



*EDITOR'S NOTE: WE RECENTLY CAME ACROSS AN OLD PHOTO OF A FAIRLY ORDINARY LOOKING CHINOOK SALMON. THE PICTURE AND THE SALMON, UPON FURTHER INVESTIGATION (i.e., LOOKING ON THE BACK OF THE PHOTO), REVEALED A MATTER OF SOME INTEREST.*

*THE PHOTO WAS TAKEN IN 1922 OF A 15 lb. MALE CHINOOK IN SPAWNING CONDITION. THE FISH WAS CAUGHT IN A HATCHERY NET, BAY OF QUNINTER, LAKE ONTARIO. IT AND SEVERAL OTHERS TAKEN, WERE THE PROGENY OF SALMON TRANSFERRED FROM B.C. TO THE BELLEVILLE HATCHERY, ONTARIO.*

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### From Our Drachma Critic

The pound sank again to an all-time low yesterday, reaching a new level of 13 1/2 ounces, though the foot rallied slightly, finishing at 11 1/4 inches. The English yard held its own at 35 1/2 inches, while Scotland Yard commented "We are still the same". In France there was heavy buying of litres, with a big run later. Although it was impossible to buy yens on the open market again today, dinars are now being served.

from Punch, Jan/74

## LOST---AND FOUND

"REWARD OFFERED FOR THE SAFE RETURN OF MY RUBBER DUCKY -- LAST SEEN FLOATING IN MY SUNSHINE YELLOW BATH-TUB. BELIEVED KIDNAPPED BY A NOTORIOUS SEA CAPTAIN."

CONTACT: OSSIFER EVINRUDE,  
"DUCK ROCK"  
(call sign - YELLOW BIRD)  
BUNGA BUNGA, B.C.



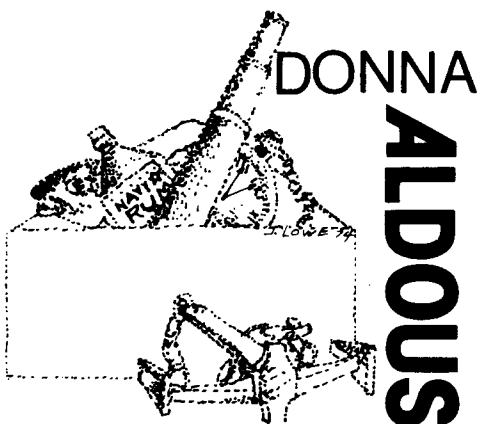
Case solved. photo by K. Delaney

Try to use fresh sole, but if you must rely on the frozen form, if the fish is in a block, pre-thaw it only until the fillets can be separated easily. It is preferable to thaw the fish slowly in the refrigerator in the un-opened package, as this results in less "drip" or loss of juices, which add flavour and succulence to the fish. To thaw, allow 20 hours for a pack of fillets.

If the fillets are frozen individually you need only double the cooking time recommended in the recipe, and it is preferable to cook them while still frozen.



## FISH FARE



Bless my sole! You will too, when you prepare this delectable little species. Sole is available fresh, usually from February through to November. Perhaps because it is so easy to find, we tend to overlook it in our search for something different for dinner.

There are four common species of sole, with an average length of 16". Since it is a small fish, it is usually filleted, and may be found in the frozen form all year round.

Sole has a distinctive, but mild flavour and is very white in colour. It lends itself well to fancy meals or gourmet dishes, and it is moderately priced, which makes it even more attractive.

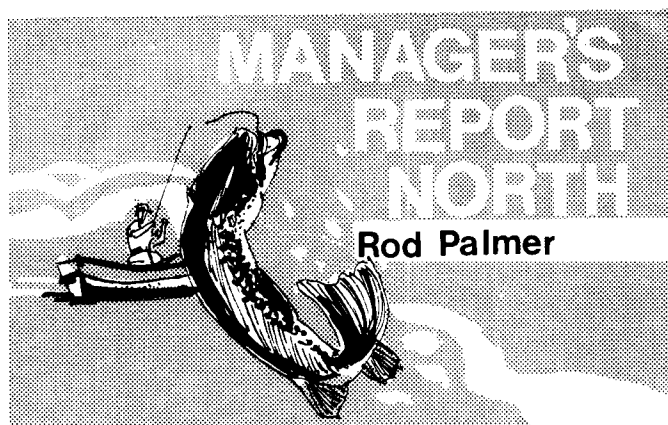
For a party recipe that is fast, easy, and impressive, try "Sole Amandine" the next time you entertain. This recipe is often a featured selection in restaurants which specialize in haute cuisine, with a price tag to match the mood!

### FRIED FILLETS AMANDINE

2 pounds sole fillets  
1/2 teaspoon salt  
1/8 teaspoon pepper  
1/2 cup milk  
1/2 cup flour  
3/4 cup fine dry bread crumbs  
1/4 to 1/2 cup fat  
2 tablespoons lemon juice  
1/2 cup almonds, blanced and slivered  
1/2 cup butter

Season fillets with salt and pepper. Dip fillets in milk, then in flour. (an easy way to flour fish is to place the flour in a plastic bag, then add the fish, shaking well two or three times, to coat the fish. Keep this bag on hand and use only for flouring fish). Dip the fish in the milk again and then in bread crumbs. Brown the fish in the hot fat, and pan fry, turning only once for approximately 5 or 6 minutes cooking time. (Plan on 10 minutes cooking time per inch thickness of fish). Drain fish; arrange on heated platter and sprinkle the fillets with lemon juice. Hold in a warm oven. Pan fry almonds in butter, until golden brown. Pour almond sauce over fish, and serve immediately. Makes 6 servings. For party flair, garnish with lemon twists, wheels, cups or curls.

Hint: When frying fish, use a combination of one-half butter, and one-half shortening or other oil, for better flavour and a higher "smoking point" temperature. Add about 1/4 inch of fat to the pan and heat until hot but not "smoking".



Ron MacLeod has been seconded to work in Ottawa for several months on assignment to Mr. K. C. Lucas, Senior Assistant Deputy Minister and I will be reporting to you in this section in his absence.

The herring season is now behind us and although money aspects of the operation were frustrating particularly to those in the "front lines", there was general success in achieving good balance between catch and escapement. The effort of the staff on the fishing grounds was a credit to the Service. Excellent performance was maintained despite the long hours and the pressures from industry and headquarters. In Capt. Jack Gosse's case his continued work while he should have been recuperating from a back injury earned him a trip to the hospital.

The meeting of N.O.B. herring management staff at Terrace proved to be an open and frank discussion of the problems and opportunities in the management of the herring fishery and resulted in many excellent proposals for the future. A summary of meeting results and proposals should have been distributed to all meeting participants by the time you receive this report.

Development of the concept for a multi-million dollar resource enhancement program has been a major interest of senior Regional staff in recent months and now Ron MacLeod has been taken from our midst to work full time on preparations. Closer to home, Dennis Deans and Ron Ginetz have nearly completed a detailed report on their observations, data research and discussions with field staff on prospects for salmon enhancement and it should be available for review in the near future.

A Fisheries Service - Union of B.C. Indian Chiefs - Native Brotherhood Food Fish Committee has been formed and several initial meetings have been held. The Fisheries Service participants have been Ron MacLeod, Vic Giraud, Jim Mackay, Ian Todd and Al Lill. At future meetings Ian Todd will replace Ron MacLeod as senior Fisheries representative. Based on results of the first meetings, our participants are confident that many problems will be resolved and a better policy for management of the food fishery will be developed.

## Live & Let Die

by Mike Bailey

I recall reading, not long ago, that if a person didn't smoke he would save himself \$40,000 in his lifetime. He would also live five years longer. I began thinking about this and came to the conclusion that it isn't economically feasible to quit smoking. Let's examine (simply) the benefit: cost ratio. The benefits are obvious, but what are the costs? By living five years longer in a period of your life when you are contributing nothing to society, you are probably costing that society in excess of \$10,000 a year in living (medical, food, etc.) expenses. You would also be taking up space and facilities that a younger, more productive person could be using. So, there is also a cost involved in constructing new facilities for a younger person to use. Consequently, by not smoking, you are costing society and yourself more than you are worth.

Our society is based on mass production and high turnover. GM can build more cars, hire more people, and "earn" greater profits if their autos wear out quickly. Let's be consistent and apply the same concept to people. We could process many more people on this earth, causing much more demand for products and creating larger profits, if we worked to shorten the average lifespan. The basic ingredients are already present: because of the presence of hormones in water supplies, girls are capable of bearing children at a younger age; people are being retired at earlier ages; and there are enough poisons present in our environment to shorten our lifespan.

Instead of discouraging people from smoking, we should encourage them. We can do our part. Rather than waste money on environmental matters that result in an increased lifespan, the DOE should be spending its budgets on projects which will shorten the lifespan. For example, we can cause oil spills ("We're just returning organic matter back into Nature's chain."), increase auto emissions, allow coal-burning steam cars ("Smog protects us from harmful Ultra-violet radiation."), allow carcinogenic food additives, encourage the construction of lead smelters in subdivisions ("live close to your work and save gas"), and instigate publicity campaigns ("Retire in South Africa at 40", "Insecticide sprays kill worms in fish", "Carbon monoxide is odour free, causes no unsightly clouds and leaves no stains.. so what's the problem.")

I think that detailed benefit: cost analyses of these procedures will be so favourable that our budgets will be drastically increased.

---

COMPUTERS ARE FANTASTIC! IN A FEW MOMENTS THEY CAN MAKE A MISTAKE SO GREAT THAT IT WOULD TAKE MANY MEN MANY MONTHS TO EQUAL IT. M. MEACHAM



# THE HERRING ROE FISHERY...

by Hugh McNairnay, Kitimat

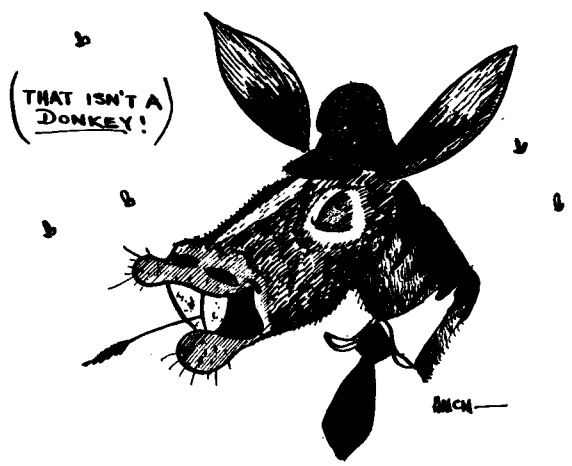
... AS SEEN IN THE FIELD AFTER AN AVERAGE 14-HOUR DAY



... AS SEEN BY VANGDOVER OFFICE



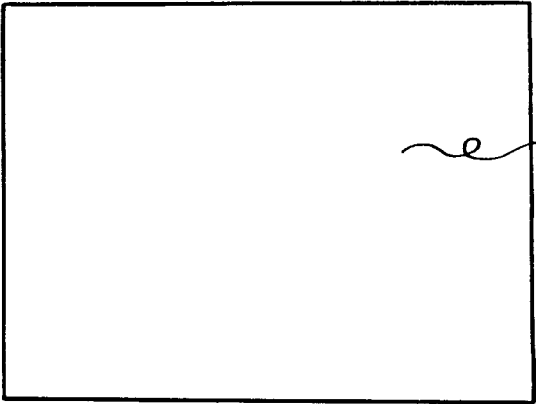
... AS SEEN BY THE FISHERMEN



... AS SEEN BY BOAT CREWS



... AS SEEN BY HIS WIFE & FAMILY



# Spurious Emissions

John Lamb is the new Watershed Analysis Technician working for Tom Chamberlin. John comes to us from the Water Surveys of Canada.

\* \* \* \* \*

Bob Robertson got his promotion to Engineer 4.

\* \* \* \* \*

Joey Rigg, of the Special Economics and Intelligence Branch retired on May 24th.

\* \* \* \* \*

Helen Hammond, the Director's Secretary, also retired on May 24th.

\* \* \* \* \*

Dorothy Haug (records) left us for more \$ and responsibility in a lawyer's office.

\* \* \* \* \*

Darlene Hynek (N. O. B. steno) left for \$, security and a change.

\* \* \* \* \*

Judy Lockhart (N. O. B. steno) left for new frontiers and more \$. At one point, she was hauled bodily (bawdily?) back to her desk, but she managed to escape again.

\* \* \* \* \*

Penny Sampson (S. O. B. steno) left for a broker's office.

\* \* \* \* \*

Lyle Freeman is the new District Supervisor in New Westminster.

\* \* \* \* \*

Vic Giraud is on special assignment on Indian food fish matters.

\* \* \* \* \*

Jim MacKay, District Supervisor for Rivers & Smith Inlet has resigned.

\* \* \* \* \*

Ed Lockbaum "switched hats" from a technician (S. O. B.) to a fishery officer specializing in logging problems. He is based in Port Alberni, but is to serve the whole West Coast of Vancouver Island region.

\* \* \* \* \*

Marlene Graham is the new steno for the West Coast Vancouver Island Division.

\* \* \* \* \*

Kathy Dunroe is the new steno for the Strait of Georgia Division.

\* \* \* \* \*

Brian Richman is now officially a GT 3 for the Quatsino sub-district, moving from Campbell River. He is based in Port Hardy.

\* \* \* \* \*

A load of gillnetted herring was tested at 22% roe content by Japanese technicians. (for real)

\* \* \* \* \*

Did you know that the "Crispy Critter" (Ken Pitre) showed up 20 minutes late for a sailboat race recently?

\* \* \* \* \*

Bill Southgate's daughter, Diana (10) was the only Canadian delegate in the "Save the Whales" children's crusade to Japan. In June, she presented Japanese government officials with letters and drawings from Canadian children.

The National Film Board is making a film of the excursion, and spent some time filming the Southgate family "at home".

\* \* \* \* \*

## DID YOU KNOW

Training, paid for by your employer is a taxable benefit? If you pay for a course and claim it on a F 157 (Dr. To) you will get a special T 4 for it. If, however, you requisition the course you don't get a T 4. Either way, cover yourself and save receipts no matter who pays for it.

\* \* \* \* \*

Also on the subject of courses; it may be to your future advantage to have courses you complete entered on your personal file.

\* \* \* \* \*

Rob Taylor (SHP) launched his boat "Moon Dog" which he built himself.

\* \* \* \* \*

That debonair jet setter Rick Boyd spent "May 24th" weekend in Hawaii for "a change".

\* \* \* \* \*

A joint effort by Vancouver staff and Don Outram of Nanaimo Biological Station has now made a scripted herring slide talk available to those who would like to borrow same. It includes 46 slides with commentary which gives a good general coverage of herring and herring fisheries. It can easily be tailored to meet your specific needs. (Call Maxine for info)

\* \* \* \* \*

## more spurious

One of the "fisheries" management team learned that if you want to use a women's washroom you should wear women's shoes so you won't be too conspicuous.

\* \* \* \* \*

Russ Hilland learned all about (or almost all about) perchloric acid after he pickled some samples in it and sent them to the West Van. lab. Lab staff there were somewhat a twitter when they received samples because Perchloric acid is more than somewhat explosive.

\* \* \* \* \*

Clyde Mitchell and partner won the "2 man" Similkameen raft race from Princeton to Hedley (23 miles). Impressive, but even more impressive is his wife's record - she followed Clyde by car (on the road) to supply them with beer which she threw from the moving vehicle. She didn't miss once with the beer.

Bud Graham, formerly a (NOB) EQ technician, is now a (NOB)EQ Biologist, (subject to appeal). He will replace retiring John Holland as forestry liaison officer.

\* \* \* \* \*

Logan Edwards engineer on the "Bonilla Rock" resigned after 10 years service in the Quathiashi area.

\* \* \* \* \*

Dennis Brock from Alert Bay will be the new GT 3 in Whitehorse (subject to appeal).

\* \* \* \* \*

Also, subject to appeal, Tom Moojalsky from New Westminster will be the new GT 5 in Prince Rupert.

\* \* \* \* \*

A COMPANY IS KNOWN BY THE MEN IT KEEPS.

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## Hatches & Matches

T.S.U. Chief Al Wood and wife Linda became parents for the second time on April 15. Scott Adam, 8 lb. 4 oz., arrived at the (reasonably) civilized hour of 9:10 a.m. He will be a brother for Adrienne.

Prince Rupert F.I.P. man Laurie Gordon became a father for the first time on April 29. Wife Julie presented him with a healthy 8 lb. 1 3/4 oz. boy who will be called Christopher Patrick.

Masset Fishery Officer Trevor Morris and wife Cynthia became the proud parents of a second son. Brian Russell, born on April 30, weighed in at a sturdy 9 lb. 4 1/2 oz. He is a brother for Glenn.

Joe Kambeitz, who is currently in charge of the public exhibits at the Quinsam hatchery, and wife Julia are the proud parents of Reuben Nicholas, born May 15. The baby born at Surrey Memorial Hospital, weighed a hefty 7 lb. 11 oz. at birth. He is their second son, after Aaron.

Christian Dale Sweitzer arrived at 4:45 a.m. on June 5. He is the second son of Prince Rupert Fishery Officer Obert Sweitzer and wife Muriel. Christian will be a brother for Mark.

Computer scientist Sharon Dyck wed Les Henderson on May 25th at St. Stephen's United Church in Vancouver. They toured California, Mexico and Nevada for 3 weeks before returning home to work.

Sharon Walker, indispensable NOB Economics Unit secretary wed Cam Evans on Friday, June 28th at St. Stevens United Church in Vancouver. After the wedding they left for Winnipeg & Flin Flon, Manitoba.

## Letter to the Editor

On the back page of the past two editions of the SOUNDER I notice you have included information on the pink salmon and coho, apparently reprinted from our British Columbia Tidal Waters Sport Fishing Guide. I think this type of "filler" is fine --provided the information is correct. Unfortunately this is not the case for the two descriptions published to date. I refer to the statements that coho weigh up to 15 pounds and pinks up to five pounds. Carl, Clemens, and Lindsey, in their book, The Fresh-water Fishes of British Columbia, report weights up to 31 pounds for coho (I believe this fish was taken on sport fishing gear in Cowichan Bay), and up to 10 pounds for pink salmon. I'm sure that both these upper limits have been exceeded on numerous occasions by commercially-caught fish. I realize that the SOUNDER staff did not write the above-mentioned descriptions. However, I like to think that one of the SOUNDER's roles is to identify erroneous material and other weaknesses within the Fisheries Service, rather than passing them on as is.

I enjoy every issue and apologize for not being a better contributor.

Sincerely,

Dave Schutz

### Editor's Note:

Yes, we did print the fish facts partly to point out the type of information we are giving to the public. Frankly, we're embarrassed to hand out such out-of-date fact sheets. Perhaps you're right, we should do more than pass it on "as is." Look for an upcoming (guest?) editorial on the subject.

## FEWER PEOPLE, PAID MORE= EXCELLENCE

True Story: Once upon a time there was a small department in a large organization. It was a typical pyramid - a vice president, below him a manager, a secretary, five workers. To mesh with the rest of the company, their work had to be errorless and finished by 7 p.m. It wasn't.

Here's what was going on. The workers would take the work to the manager, who would make a few changes (otherwise what was he there for?). He'd send it to the vice president, who would make a few changes (otherwise what was he there for?). The troops had learned that whatever they did they'd have to do over, so they were giving it a lick and a promise. Upshot: work finished at 11 p.m. full of errors.

For once, the traditional solution of adding more bodies was avoided. Instead, the vice president, manager, and secretary were de-hired. The workers were called together and told how much was available for wages and salaries. "Consider yourselves a partnership," they were told. "Hire whomever you need, pay yourselves whatever the budget will stand - and get the work done without errors by seven o'clock."

For a while work suffered, but one day it all began to come together. It turned out the "partners" didn't need anybody else, so they were able to raise salaries 25 percent. They split up the responsibilities and discovered, to their amazement, that they could come in at ten o'clock and still get the work done without errors by four. They're all having a ball; the rest of the organization is jealous as hell.

The point: "Five people in a partnership work a lot better than eight in a pyramid." Put another way: "Fewer people paid more tends to produce excellence at no overall cost - except to the people who get fired."

- Robert Townsend, former chief executive of Avis and author of Up the Organization, in Horizon

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WHATEVER WOMEN DO THEY MUST DO TWICE  
AS GOOD. LUCKILY, IT'S NOT DIFFICULT.  
C. WHITTON

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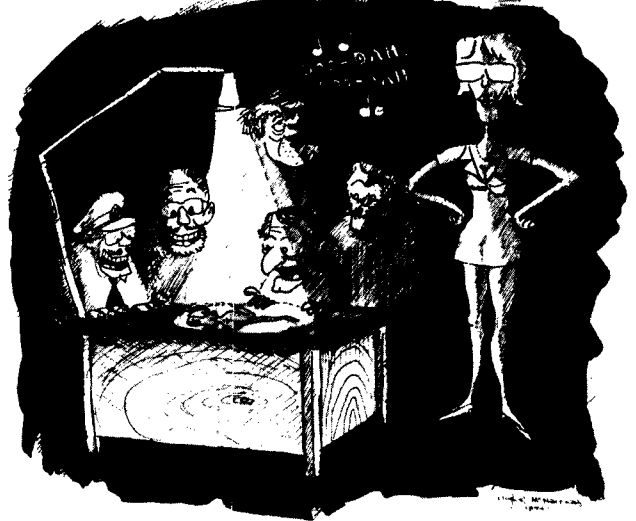
## THE Sounder

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1974 SCALE READING COURSE



## Golf Tourney

They did it to us again. In spite of entering five formidable teams the best Fisheries Service could do was a distant second to a hot foursome from Water Resources. One consolation was the eighth place finish of last year's winners from E.P.S.

The three prize winning teams were - First: Water Resources, with Woody Earlbach, Paul DuBeau, Chuck McBratney and Murry Wiggins.

Second: Fisheries Service, with Bruce Cox, Dick Crouter, Jerry Paine, and Ken Jones.

Third: E.P.S. "B Team" with Les Nemeth, John Villamere, Mac Ito and Satman Sidhu.

The Joe Arsenault Trophy, awarded to the most honest player, went to Roy Hamilton.

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## Turbot Troubles

A vexing problem in preservation and sales promotion of arrowtooth flounder arises because the proteolytic enzymes are very active (20 times as potent as in salmon, flounder, or sole), and are active at iced temperatures as well as being resistant to higher temperatures encountered in slow cooking. In spite of thorough assessments of analytical techniques, however, some controlling variable other than enzyme levels remains unidentified, because arrowtooth flounder tissue softens at rates that do not correlate with enzyme analyses. The value of an answer to this problem lies in the amount of fish available (7 million lb per year) and the desire to convert the end-use from animal feed to human consumption. Further field trials are planned, to assess the effects of harvest time and locale on the flesh softness problem.

It should be noted that random samples of "Turbot" sold at retail in Vancouver are just as likely to be mushy when cooked as are the local samples referred to above - regardless of whether they come from Japan or elsewhere. The consequences of such culinary chaos for the consuming public is obvious: the market may be ruined by the time the problem is solved.

- from the Fisheries and Marine Service Vancouver Lab. "Progress and Projections" report.

# Sounder

August/September, 1974 Vol. II No. 9

Fisheries and Marine Service

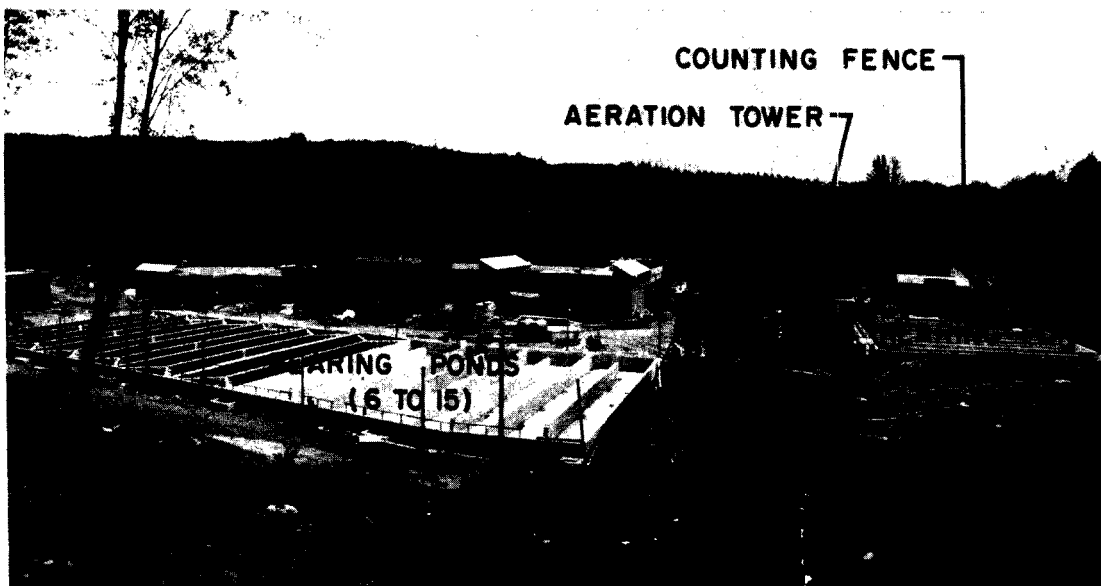


PHOTO BY G. NIELSON

## Quinsam Hatchery Nears Completion

By George Nielson Fraser River etc. Division

Construction of the Quinsam River Hatchery, near Campbell River, B.C., is progressing according to schedule and is approximately 75% completed. The facilities, barring any unforeseeable circumstances, should be virtually completed by September 30, 1974 and this will be in time to start incubating eggs in the hatchery this fall.

The hatchery is located near the confluence of Cold Creek and the Quinsam River, approximately three miles from Campbell River, B.C. The Quinsam River is a tributary of the Campbell River which is the major contributor of the chinook salmon sport fishery in the Campbell River area.

Approximately 150 acres of property was acquired by the Fisheries Service, at a relatively low cost of \$500.00/acre, for the construction of the facilities. Furthermore, a Crown reserve was placed on the entire drainage area of Cold Creek, which encompasses an area of approximately 1,000 acres, as this is the primary source of water

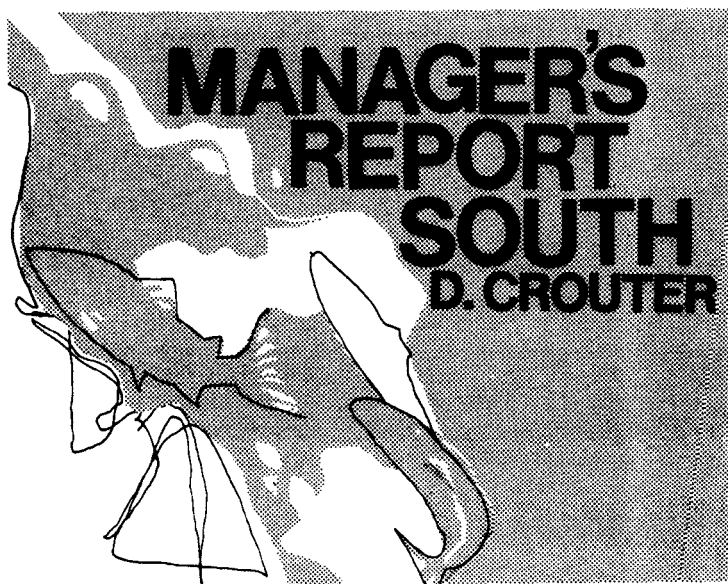
supply to the hatchery. The reserve will ensure that the high quality of this groundwater fed water supply will be maintained in future years.

The hatchery is designed to produce up to 110,000 pounds of young salmon and steelhead trout for release into the Quinsam River and adjacent waters annually and, based on recognized survival rates, will result in a contribution of approximately 200,000 adult fish to the commercial and sport fisheries of B.C.

The hatchery facilities consist of an intake structure on Cold Creek, approximately 3,000 feet of 30 inch diameter polyethylene pipe, an aeration tower, Quinsam River intake for an auxiliary water supply, a hatchery building approximately 16,000 square feet in area including an exotic public display area, 15 "Burrows" type rearing ponds (17 feet x 75 feet x 4 feet deep), three holding ponds (17 feet x 75 feet x 6 feet deep), ten-10 foot diameter fibreglass rearing tanks for rearing steelhead, a

bridge across Cold Creek, approximately 1/2 mile of access road, a fish diversion fence across the Quinsam River, a carport, two 70 foot diameter clarifiers for treating the hatchery effluent, a parking lot and landscaping, public displays, and two residences for hatchery personnel.

All of the above facilities, with the exception of the two residences, were included in the main contract that was awarded to Cana Construction Co. Ltd. in April, 1973. Tenders for the construction of the two residences (1,264 square feet each) were recently called and the lowest tender received was for an incredible sum of \$132,000 or approximately \$50.00 per square foot. For obvious reasons, the tender was not awarded and consideration is now being given to constructing the residences on a force account or construction management basis.



Let me start off this report by welcoming back Capt. Mitch Gay from an eleven month assignment to the Vessel Management Committee in Ottawa. Mitch was instrumental in guiding the national vessel replacement program for Fisheries Operations during his assignment and was also able to substantially advance the replacement program for Pacific Region. We can now look forward to having the COMOX, ATLIN and CHILCO replaced with SOOKE POST class vessels prior to the 1975 salmon season, and by that time we will also have added three 31' vessels to the patrol fleet. In welcoming Mitch back I must also express my personal appreciation and appreciation on behalf of the entire Region for the outstanding job that Capt. Reg. Watts conducted as Mitch Gay's replacement. Those of us at Headquarters enjoyed the close association with Reg. Watts over the past year and although I am sure he appreciated and enjoyed some segments of his duties as Acting Marine Officer, we all detected much more spring in his step and much broader smiles in the week or two preceding the termination of his special assignment. Good luck, Captain and thank you.

Over the past several weeks I have attended a number of meetings with Division staff and also participated in a meeting called to discuss present status of enforcement. As a result I now have a considerable list of actions that must be taken. These include a number of regulatory changes aimed at commercial and sport fishing; a coastwide review on the status of chinook and coho and a development of appropriate regulations; improvements in the provision of legal assistance; and an attempt to drastically alter the category and classification situation with regard to District and Sub-district staff. After many hours of discussion on the latter point and with the support of the Regional Director, we will be attempting to overhaul the present system.

One of the highlights of the present season has been the continuing high level of chinook and coho abundance in the Strait of Georgia.

What a relief to have 1973 behind us and perhaps now to have a record sport year! On top of this, however, has been the fantastic production of chinook and coho produced from the Capilano Hatchery and from Big Qualicum. As the reports on mark recovery come in from Sandy Argue and company, I cannot help but wonder whether in the end Sandy will show that we have harvested more adult salmon from those facilities than we produced as juveniles. The results of the head recovery program are described elsewhere in the Sounder and as you will see in that report, this program will provide us with a much keener insight into the production of both naturally and artificially produced chinook and coho on a coastwide basis.

Dollars and man-years --- or the lack of --- This is the topic that is most generally discussed at any meeting I have attended and while no immediate relief can be seen for many years, we can see some improvement in the dollar picture. We recently received a major improvement in the funding of guardian and patrol staff; we can anticipate a major upgrading in the operational funds for the Marine Service; and we are now assured that \$1.7 million will be returned to the Region from funds generated by salmon and herring licensing. The program submitted for that funding includes \$400,000 for herring management; funds for the present mark recovery program; and proposals to increase the capacity of Robertson Creek, to initiate the construction of a new channel at Big Qualicum, to add 9 additional incubation boxes at Blaney Creek, to upgrade steelhead facilities at the Capilano River and to initiate feasibility studies for the Stave, Birkenhead, Gold and Sarita Rivers.

During the next few months policy decisions must be developed in a number of key areas:

Licence Limitation - a review of the present status of licence limitation was recently conducted by Blake Campbell working under contract to the Regional Director and we now recognize that several major changes must be developed;

Herring - with one season of herring management behind us under licence limitation, I think we all recognize that a number of improvements must be made prior to 1975, not the least of which will be the development of policy for combined food and roe harvesting, a review of the practicality of the 50,000 ton roe quota, and the development of a sound regulatory program;

Enhancement - you are all aware that Ron MacLeod was seconded to Headquarters to spearhead the development of a federal-provincial approach to salmon enhancement. Ron has succeeded in not only making considerable progress in that regard but is now developing an approach which will involve Regional Operational staff in the development of criteria, administrative structure and choice of projects. The salmon enhancement program is perhaps the most exciting opportunity being developed in this Region and a very major effort must now be diverted for the preparation of a sound plan in anticipation of the major funding proposed for 1977-78. On an interim basis we are expecting to have approximately \$2 million allocated to feasibility studies and construction of minor projects for 1975-76 and 1976-77.

Dick Crouter,  
Manager,  
Southern Operations  
Branch.

## Guest Editorial:

### Clothes Make the Man

I think everyone will agree with me when I say that appearance is very important when dealing with the public. It is especially important when one of our roles is enforcement.

Enforcement, however, is only one aspect of our job. The fishery officer can be found doing anything from tinkering with an outboard, to walking a stream, to measuring herring spawn, to presenting a case in court. No single uniform or style of dress can conceivably cover such diversity.

The present uniform of the fishery officer is not adequate for even one of these roles except for the dress tunic which presents an acceptable appearance for such functions as requires it. This then covers a very small percentage of the fishery officer's time. The remaining time sees the officer dressed in a bush jacket with non-matching slacks, both of such a quality and style that they should never emerge from the depths of the bush. The bush jacket is made of "dry clean only" material which is ludicrous for the work-a-day jacket.

The in-town or office dress is made of a combination of field and tunic dress, usually the bush jacket and woolen slacks. So the large percentage of the time shows the officer wearing a make-shift uniform. No suitable uniform exists for this period of time when the public at large comes in contact with the fishery officer. It is small wonder that our staff members are identified as traffic cops or breadmen. The uniform of the majority of agencies seem to be carefully designed to blend into a sort of massive non-entity. It is impossible for the public to identify an officer outside of the office or off the patrol boat. It is difficult to take pride in this type of dress.

Let's be fishery officers and let's look like fishery officers.

Everything said about the uniform of the fishery officer can be said twice over for the Marine Service. The uniforms in use today by vessel masters and crews are a disgrace, with no fault attached to the wearers. To call a pair of fatigues or WW2 woolserge slacks and jackets a uniform is indeed using the term loosely. Wool serge may have been just the thing once but now there are dozens of good looking but serviceable materials available to do the job.

Some years ago a uniform was submitted to the Marine Service for approval but it was rejected on the grounds of poor design. It is difficult to understand why nothing was ever done to proceed with this since it is obvious that the need for a new uniform was recognized even then.

I suggest that a professional designer be commissioned to look at our duties and submit designs which could then be inspected and selected by those who will wear them. Possibly a new look would help to put some new life into an old organization.

Obert Sweitzer  
Prince Rupert.

IGNORANT: Anyone unacquainted with your knowledge, and possessing other knowledge you know nothing about.

A. Bierce



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# Nosetag Recovery Program Expands

Fishery sampling for the hatchery evaluation program now includes the entire B.C. coast. Crews in Prince Rupert, Namu, Victoria and Steveston sample commercially caught chinook and coho for fin clips that identify hatchery salmon. Coast wide sampling should greatly increase our knowledge of the distribution of hatchery fish and of the contribution of hatcheries to the various fisheries.

## Adipose and Multiple Clips

The sampling crews began in mid June to sort through salmon landings. Among them the sampling locations cover all major chinook and coho fisheries. The samplers are watching for adipose-only fin clips indicating the presence of coded wire tag in the nose; also for chinook with multiple fin clips. Adipose clipped chinook and coho originate mostly in hatcheries of southern B.C., Puget Sound and the west coast of Washington. The multiple clip chinook come from spring chinook hatcheries on the Upper Columbia. Tagged heads from all sampling locations are sent to the Pacific Biological Station at Nanaimo. There, lab workers extract and read the tags. The program's data center in Nanaimo then processes the tag and sampling information. Though analysis of the tag recoveries has hardly begun, one item of interest is the appearance of large numbers of Georgia Strait hatchery fish on the west coast of Vancouver Island.

## Widespread Cooperation

The expanded hatchery evaluation program depends on the cooperation of several sectors. Biologists from North and South Operations Branches and scientists of the Pacific Biological Station designed the sampling program and called on their technicians to get it going. Fish companies at the various sampling ports have liberally offered the use of their facilities. A number of trollers are voluntarily keeping logs

of their catches, and are obtaining detailed capture information on adipose-only fin clips.

## Georgia Strait Program Continues

The Georgia Strait Head Recovery Program, begun in 1973 as a pilot for this year's coastwide sampling, continues within its 1973 boundaries. It still offers a \$3.00 reward for each head containing a tag and two \$100.00 bonus draw prize per collection period. Unlike the rest of the program the Georgia Strait program invites any sport or commercial fisherman to turn in tagged salmon heads. The larger program has no reward system. Boundaries of the Georgia Strait Head Recovery Program are inside waters between Sheringham Point on the south coast of Vancouver Island and Hardwicke Island in Johnston Straits.

This year's excellent fishing in Georgia Strait is bringing in thousands of tagged heads to the program. Beginning in April-May with what was then considered a flurry of over 2,000 heads, the numbers have steadily increased. Some of the sport head collection depots in the northern end of Georgia Strait now average 100 heads per week, while over 500 commercially caught heads a week are coming in through Norpac Fisheries Ltd in Vancouver. This huge response has the Georgia Strait Head Recovery staff operating about a month behind schedule but with additional temporary staff we are beginning to hold our own.

Georgia Strait heads are dissected at Capilano and Big Qualicum hatcheries. The information is sent to the Vancouver office data center. There, the office staff analyses the data and sends out the rewards and monthly information bulletin.

Gerry Harris  
Georgia Strait Div.

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## Poems

When the North decided to enhance  
Dennis Deans got his big chance  
What he needs to know  
About chinook and coho  
He gets from his cohort Ginetz.

There is a young editor named Max  
For the "Sounder" she gathers the facts  
If your story is late  
Very sorry your fate  
For Max swings a pretty big axe.

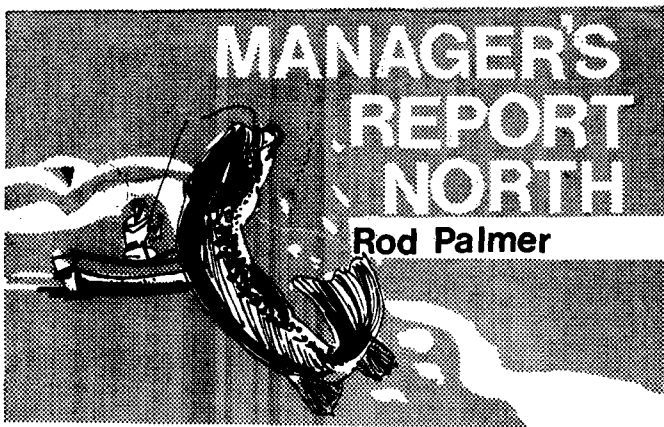
A young F/O from Kyuquot  
Got lost on his way to Cape Scott  
Instead of Quatsino  
He sailed to Tofino  
Past Maquinna, Estevan and Clayoquot.

D. Harding

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AGE: That period of life where we re-  
vile those vices we are no longer able  
to commit. A. Bierce

ACQUAINTANCE: One we know well enough  
to borrow from, but not well enough to  
lend to. A. Bierce



As I write this in late July, the salmon season is well under way and while some stocks look good others are indicating very poor returns. Sockeye returns to the Nass and Skeena and Smiths Inlet have been good but Rivers Inlet sockeye stocks are even weaker than the poor run predicted. Despite the closure of the fishery the Rivers Inlet sockeye escapement is expected to fall below requirements. Fairly good pink salmon production has been achieved in Area 8 and 9 but pink returns appear to be disastrously low in all areas north of Area 8.

A four-day trip to the Yukon was a highlight for me during July. As a result of modern air travel Alan Gibson and I were able to travel from Vancouver to our northernmost field camp on the Beaufort Sea in only five hours. We travelled by jet to Whitehorse, jet-prop to Inuvik and by helicopter across the Mackenzie delta to the Yukon sea coast. It seemed odd in mid-July to find that the main problem facing the crew engaged in the Beaufort Sea study was that except for a few open leads, the ice had not yet gone out.

After a short sleep (there was no night) at a Dew Line station we followed the beautiful Firth River inland and then cut across country to the village of Old Crow where we left our helicopter. At this village well inside the Arctic circle we watched the Indians cutting up a husky 30-pound Yukon chinook salmon. Salmon are important to the Indian people even that far north. One hour and a half in a DC3 brought us to historic Dawson for an overnight stop.

The next day under the guidance of Perry Savoie and Dennis Brock we travelled by jet boat 260 miles up the Yukon River to Carmacks and then continued on by car to Whitehorse. After travelling in this huge territory it is easy to understand why Alan Gibson insists that Whitehorse is the geographic centre of the Pacific Region.

Rod Palmer

## Enhancement Ron MacLeod

We are in the early stages of joining with the Province in a full partnership to develop our salmonid resources and their aquatic habitats. Our 10-year, \$260 million salmon enhancement proposal has been broadened in concept to provide also for enhancement of gamefish, restoration and improvement of waterways, public education and awareness, and for creating opportunities for non-fishing recreational activities based on use of aquatic habitats and bordering land areas. Salmon enhancement should continue to form the most substantial part of the proposed program, but the single product "fish factory" concept is fading into the background.

Benefits to Indian food fishermen, commercial fishermen, sport fishermen and fish processors are and will remain high on the priority list but the emphasis, nevertheless, is changing. Sport fishing based on game fish will receive more consideration, as will the non-fishing recreational activities and the satisfaction of aesthetic aspirations associated with use or enjoyment of our waterways.

Our developing arrangement with the Province could broaden jurisdiction, both for the Province and ourselves. I have the feeling that the owners of the resources, the Canadian public, don't really give two hoots about jurisdictional niceties; what they really look for are programs that are responsive to their wants. A broadened jurisdiction in a partnership arrangement could vastly improve our capability for responding effectively to these public wants.

We are now in the act of working out the terms of a formal Federal-Provincial Agreement on fisheries resources enhancement. This could take several months, or even a year, depending on a great number of imponderables. However, given a continuation of the present atmosphere of cooperation, a reasonable target date for a final draft of an Agreement could be the end of the fiscal year.

In the meantime, both parties want to get on with joint studies and projects for the budget year 1975-76 and the program review year 1976-77. The scale of enhancement in at least the first two or three years of the program will be modest. There is a lot of planning and preparatory work to be done before the program can be launched on a grand scale. Criteria for selection of projects and a list of projects to be considered for the initial stages will be developed by a joint task force and Fish & Game, Research & Development and Operations staff.

I will endeavour to keep you posted as the program proposal develops. Despite last issue's headline, I am still very much in Vancouver.

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# The Law of the Sea Conference

A month ago in Caracas, Venezuela, 5000 delegates from 141 countries kicked off the third United Nations Conference on the Law of the Sea. By the end of August they hope to be well on the road toward developing a new legal regime which amongst other matters will affect:

- Canada's sovereign rights over the resources of its continental margin, that is, the submerged land mass bordering its coastline;
- Canada's right to manage and receive a preferential share of the living resources found over its entire continental shelf;
- the right to coastal states to take measures to protect their marine environment as Canada did in adopting the Arctic Waters Pollution Prevention Act;
- the right of coastal states to control scientific research within their zones of maritime jurisdiction;
- the disposition of the riches of the seabed beyond the jurisdiction of states so that they can be of benefit to the whole of mankind.

Ever since the 17th century, the principle of the freedom of the seas reflecting the commercial, colonial and naval interests of the major maritime powers of that period, has prevailed. This was a satisfactory basis for world order so long as the ocean space was used mainly for navigation and fishing in ways which were intrinsically harmless to the marine environment, to the living resources of the sea or to other states. As of late, however, this principle has been challenged as the development of technology has made possible new, more intensive utilizations of the oceans.

Sophisticated fishing gear now enables fishing vessels to catch their prey with relative ease but it may also cause over-fishing of stocks to virtual extinction.

Modern technology will soon allow the commercial exploitation of the mineral resources (i.e. the manganese nodules) of the deep seabed beyond the limits of national jurisdiction. These resources are likely to benefit only the small number of countries that have the necessary advanced technology unless a new regime is devised which takes into account the needs of mankind as a whole and of developing countries in particular.

The proliferation of oil tankers, both large and small, is increasing the risks of damage to areas where navigation is intensive,

such as international straits and other sensitive areas close to the shores of coastal states where many communities are dependent on the resources of the sea.

While scientific research in the marine environment must be encouraged, it may, without appropriate control, open the door to abuses which might have undesirable consequences for the security and economic interests of coastal states.

To most of us who read the Sounder fisheries is the important part of the Conference. Canada has done a lot of homework over the past two years in establishing a position, discussing it with other countries and assessing the degree of agreement it can expect. Our approach is based on dividing the fishery resource into four species groups and developing a position for each as follows:

- (1) Coastal states should maintain their exclusive sovereign rights over sedentary species as they are now recognized under the 1958 Convention on the Continental Shelf: these would include organisms, like crabs, which, at the harvestable stage, either are immobile on or under the seabed, or are unable to move except in constant physical contact with the seabed or the subsoil.
- (2) Coastal states should have the exclusive right to manage and conserve coastal species, i.e. those species which are free-swimming and generally found over the continental shelf or in similar nutrient-rich areas, and should acquire preferential rights over their harvest, to the limit of their capacity.
- (3) Coastal states should have exclusive rights for the management and harvesting of anadromous species, such as salmon, throughout their migratory range, recognizing only the right of other states to fish for these species when such fish are found in their own waters (subject to agreement with the state of origin). This would of course imply a ban on high seas fishing for anadromous species and special bilateral arrangements when these species are harvested by states other than the state of origin.
- (4) As to wide-ranging species, such as tuna and whales, Canada favours the establishment of international arrangements, while recognizing that certain coastal states in the waters

of which these stocks spend part of their life, having special interests in their management and harvesting.

Whether Canada will achieve these aims is still a question. Fisheries is tied into other conference issues and will be settled as a total package or not at all. The major nations (U.S.A., Russia and Japan), who insist on freedom of international straits, may influence the vote of some of the smaller nations. Small landlocked nations with nothing to gain by supporting Canada's position make up about one-third of the votes -- enough to defeat any proposal.

Despite these constraints Canada expects a large measure of success on the fisheries issues. An economic zone of 200 miles, a probable minimum result, would encompass 90% of our Atlantic shelf and 100% of the Pacific. The big problem from our standpoint on the West Coast is how do we get control of the management and preferential use of our anadromous salmon which roam the open ocean beyond the Continental Shelf.

Dixon MacKinnon,  
Manager,  
Planning & Support  
Branch.

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## Enforcement Workshop in N.O.B.

A totally new approach in Fisheries to law and enforcement training was piloted recently (June 12-14) in Prince Rupert.

Taught by a team of seven instructors, five of whom were Fisheries people, the course was designed to provide more relevant, effective, and economical enforcement training to those field officers who had not yet attended the Police Academy. Twelve people attended, including a mix of enforcement officers - Fishery Officers, Vessel Masters and Mates, Guardians, and Patrolmen.

Designed for a dozen trainees at a time, the course is able to include a higher degree of participation in lecture-discussions and workshops. During the workshops, students participated in programmed role-plays taken from a spectrum of actual Fisheries cases, and were exposed to a variety of relevant knowledge and experience which the training team represented.

The instructors, and their respective subjects, were:

George McIndoe - (Moderating Instructor) - Fisheries Enforcement Policies; Taking Evidence; Fisheries Statutes; Indian Food Fish Enforcement; Enforcement Formula.

Jim Connor - Fisheries Enforcement Problems - Traditional, New, and Future.

Bud Bogart - Legal Glossary - A selective discussion; the Nature of Evidence.

Al Groat - Differences between Coastal and Interior Enforcement Problems and Practices.

Larry Duke - Preventive Enforcement.

Supt. Schramm, c/o Northern Division RCMP - History of Legal Processes.

Sgt. O'Rielly, c/c Northern Rural Detachment, RCMP - Rights of Individuals; Powers of Arrest; Dealing with Special Situations; When and How to enlist RCMP Assistance.

During the last day of the course, a mock incident was staged, culminating in an authentic model trial. The incident was taken from actual Fisheries experience, but the situation was changed so as to include in the role-play as many students as possible. Sgt. O'Rielly made an excellent Judge, being impartial to Fisheries, yet knowledgeable as to procedure.

Students played roles of Fishery Officer, Patrolman, Guardian, and two brothers of the accused, while the rest prepared for a critique.

Jim Connor was the principal accused, George McIndoe prosecuted, and George Barber acted for the defendants. Al Groat was a surprise witness for the defense.

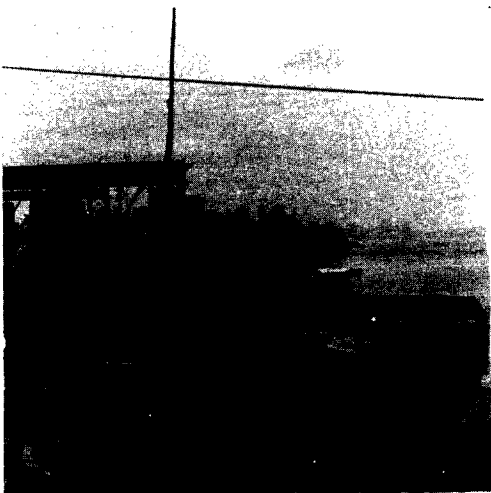
Of two charges, one was successfully defended, and an appeal was pending on the other charge.

Each participant in the role-play received co-ordinated, but different background information, so as to simulate real life as much as possible. The Judge, of course, had no background information at all, being absent during the alleged offense and apprehension.

One other feature of the course, borrowed from RCMP training, included practice in identifying strangers. At un-announced intervals, two suspicious-looking strangers were recruited at random off the street by George Barber, and brought into the classroom for one minute, during which students were asked to "take a good look". Upon the stranger's exit, students each wrote a description of the person, and submitted it to George McIndoe.

Such a format shows much promise for the future, and will no doubt improve in time from helpful suggestions which are always received from participants.

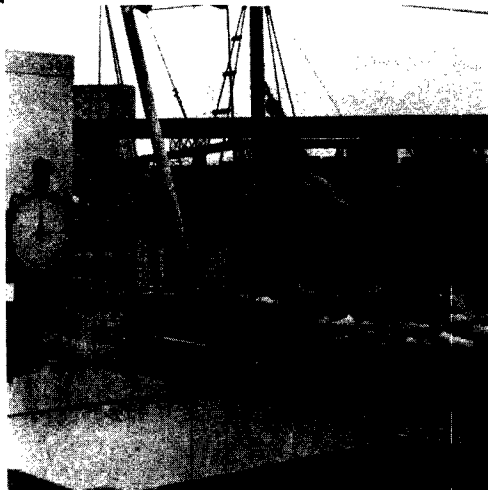
- George Barber  
Organization & Development  
Officer.



1. Salmon are unloaded from the hold of a packer on to the Norpac sorting table.



4. Adipose clipped chinook and coho are labeled for future identification.



2. Fish are sorted by species and weight. Fish with adipose fin clips are put aside.



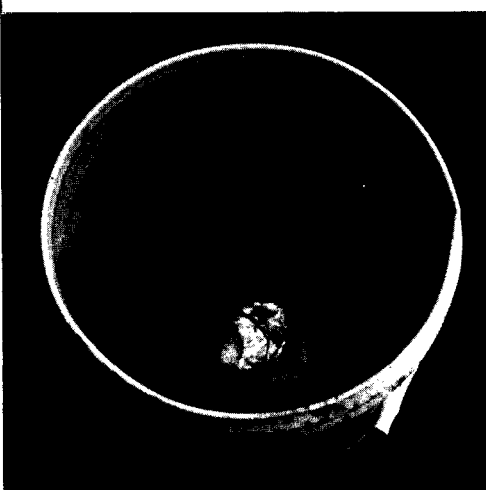
5. Ian Cairns checks the length of an adipose clipped salmon.



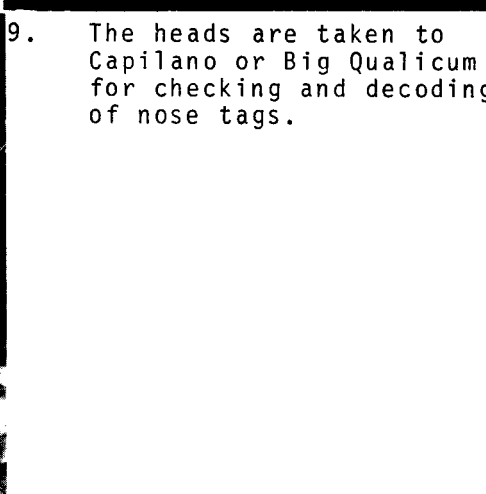
3. Gerry Harris left, and Ian Cairns right, tag and label adipose clipped fish for sampling.



8. The head is cut off, the body going back to the fish plant for processing.



6. A scale sample is taken.



9. The heads are taken to Capilano or Big Qualicum for checking and decoding of nose tags.

## *CANNERY SAMPLING*

PHOTOS BY  
MAXINE HAUGEN



7. Lee Christensen records length and other data.

## Spurious Emissions

Tuna fishery to begin - Americans noted high scores for the last - 3 weeks - gradually working north - to Cape Flattery now. Temperature regimes appear to be even more favorable this year than last.

\* \* \* \* \*

Tofino Fisheries - closed by inspection - reopened on shrimp fishing. Good shrimp fishery running in Namu.

1,000,000 pounds landed to date  
(1.3 long term average)

\* \* \* \* \*

### PERSONNEL MATTERS

Jim Van Tine has been appointed as the Quinsam Hatchery manager, and Ray Reinhardt is his Assistant Hatchery manager.

\* \* \* \* \*

Byril Kurtz has resigned his Bella Bella position to go to Saskatchewan.

\* \* \* \* \*

James Stephen has resigned his Whitehorse position to join the B.C. Fish and Wildlife Branch.

\* \* \* \* \*

Ernie Lalonde has quit his Victoria F.O. job.

\* \* \* \* \*

David Reid has accepted a position with B.C. Hydro so will be leaving NOB Economics Unit.

\* \* \* \* \*

Also leaving the NOB Economics Unit is John Boland - he's off to Europe for an indefinite period.

\* \* \* \* \*

Jerry Paine, Strait of Georgia Div. biologist, and wife Linda became parents for the first time on July 10th. Ray Michael was born at Richmond General Hospital at 10:17 p.m., weighing 8 lb. 4 oz.

\* \* \* \* \*

Some of the new senior positions in Fisheries and Marine Service have been announced. In case you missed them they are:

D.J. McEachran - Assistant Deputy Minister, Fisheries Management

A.E. Collin - Assistant Deputy Minister, Ocean & Aquatic Affairs

L.J. Cowley - Director General Fisheries, Newfoundland Region

R.D. Johnston - Director General Fisheries, Maritimes Region

J. Fréchet - Director General Fisheries, Quebec Region

R.W. Stewart - Director General O & AA, Pacific Region

W.L. Ford - Director General O & AA, Atlantic Region.

The Directors-General for Fisheries in Pacific and Central Region and for Ocean and Aquatic Affairs in Central Region have not yet been announced.

\* \* \* \* \*

Near record herring spawn in the Gulf of Georgia (lower east coast) last year - second highest on record. Lower west coast - one of the highest on record. From area 11 South - almost what it was last year.

\* \* \* \* \*

A total to date of 6000-7000 salmon heads have been recovered. Some recoveries (3) of Big Qualicum chinooks have been made in Alaska by American fishermen and 1 is a Campbell River chinook.

Fair number; more than expected, of Canadian coho showing up on the west coast.

\* \* \* \* \*

Exploratory shrimp trawling in 1972-73 is reviewed in a recent report by L. Webb and B. Lockner of SOB. Some copies are available.

\* \* \* \* \*

It's also gratifying to know that in the Area South that things are so busy that only one or two have time to submit articles to the Sounder. It will make it much easier to justify our arguments that accumulated overtime cannot be equalized.

\* \* \* \* \*

I heard or read that there is another move afoot to bring a portion of the Carribean Islands into Canada as the 11th Province. Applications are now being taken for positions in Area South, South.

\* \* \* \* \*

Did you know that water beds are cutting drastically into the incidence of adultery? Have you ever tried to hide under a waterbed?

\* \* \* \* \*

I would like to see the introductions of other sections or branches expanded. It was nice to hear from the accounts section, but surely they have names and faces. How about photos of each section at head office?

*(Editors's Note: good idea. We'll work on that.)*



## Openings and Closures Goes Automated

On Monday, June 24th information concerning openings, closures and boundary movements in the commercial salmon net fishery in the waters south of Cape Caution, i.e. Queen Charlotte, Johnstone, Juan de Fuca Straits, Fraser River and the west coast of Vancouver Island became available to the fishing industry and general public 24 hours a day, seven days a week on a recorded message in the Operations Room by telephoning 666-1101. A new tape is "cut" as soon as any changes to the current tape are made known to the Ops. Room.

Information concerning commercial fishing in other areas, or clarification of information concerning the southern areas on the tape, or sportfishing information is still available by dialing 666-1583 (Com-Sport Officer's new number) or 666-3169 (Operations Room) during regular office hours Monday to Friday. For areas north of Cape Caution similar commercial fishing information is available on tape during the weekends at Prince Rupert, 624-9130.

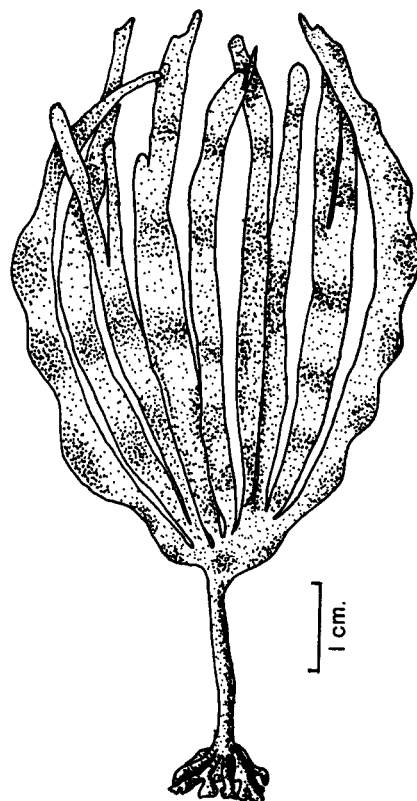
The automated method of disseminating this information has been in effect for more than a month now, and has been well received by fishermen and the industry in general.

The advantages are numerous. Not only does this expanded service provide round-the-clock information of the commercial salmon fishery conservation measures on an up-to-date basis to the residents of the greater Vancouver telephone exchange cost free and to all others outside that area for the minor cost of a DDD long-distance telephone call, but it also reduces the time involved by many Departmental Personnel, at Region, as well as District and Sub-District offices, in answering the same questions repeatedly. (Last summer the Com-Sport Office alone answered over 350 incoming calls in one day requesting fishing time information particularly for the southern areas.) It should be noted that none of the above numbers are toll-free.

A summary of sportfishing information for Georgia and Juan de Fuca Straits is also available by recorded message, but only on the weekend, from the Victoria Day to Labour Day holidays by dialing 666-3169.

We would appreciate any feedback, favourable or otherwise, that field or office personnel receive concerning this service.

Jim Kent  
Com-Sport Officer.



*Laminaria Setchellii* Silva

## Kelp Resource Studied

Under contract with a professional team from the Department of Botany, U.B.C., a survey of the west coast of Vancouver Island for species of *Laminaria* suitable for use as Konbu has been instigated. Seventeen sites have been selected which are representative of the areas encountered on the west coast and an airlift into these locations was envisaged to expedite the survey. The inclement weather on the west coast over the past months has prevented the use of aircraft, and an alternative approach by land and boat to most of the selected sites is in progress. Specimens collected are being dried, identified, their respective populations recorded for each of the sites surveyed, and a comprehensive report will be prepared following the completion of the survey.

Further selected sampling, and development of economical drying techniques to produce presentable material for test by Japanese experts is planned for next autumn when the *Laminaria* stocks will again be in good condition. It is worth noting that Russia supplied Japan with 1100 tons (dry weight) of food-grade *Laminaria* this year, worth about \$3,000 per ton wholesale (\$7,000/ ton retail).

- from the Fisheries and Marine Service Vancouver Lab. "Progress and Projections" report.

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PEOPLE ARE LIKE KERNELS OF POP-CORN. GIVEN THE OPPORTUNITY AND PROPER ENVIRONMENT, THEY EXPLODE IN SIZE AND USEFULNESS.

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# The Bare Facts or Big Game Hunting in Rivers Inlet



photo by Jack Broome

On cautiously venturing down to check him out, to my amazement, both shots were right between the eyes.

Hearing the gunfire and shots had brought Patrolman Eric Bachen to the scene with his 30-06. His only comment on seeing what had transpired was "That is one hell of a way to treat a guest."

The general consensus is that the poor guy was only trying to buy a fishing licence ..... (that'll teach 'em to come to the office after hours!) and this particular customer will be hanging around Dawson's for a long time ..... on the wall.

Jack Broome  
Dawson's Landing.

Rivers Inlet opened the season this year with a "Bang" ... "Bang" ... "Bang". I was having a well deserved after dinner rest on the couch when I heard someone at the office door. (For those not fortunate enough to be familiar with the Fisheries Residence at Dawson's Landing, the office is on the ground level, and the residence on the second floor.) I opened the living room window to give my usual "Hi, be right with you", but to my surprise the visitor was wearing neither sou'wester nor gum-boots, but rather a thick fur coat! He was quite persistent about wanting service in the office, and was on his hind legs clawing at the window.

The call of "Bear" rang through the house, and within seconds he had an audience of excited onlookers shouting down at him.

Realizing the oddity and danger of such a guest at the door, I ran downstairs for my government issue 303. I raced back up, loading the gun on the way, bravely opened the front door and brandished the gun at him. His answer to this was to amble over to the wheelbarrow for a drink of water!

Guided by my family's shouts of "He's headed for the back yard Dad", I went to the back door and fired a shot into the air, hoping to scare him off. As I was reloading, I happened to glance down just as he came around the corner of the house and started up the stairs toward me.

I automatically fired, and he slumped forward, his head resting on the second step. I gave him another shot, remembering from some long ago "Field and Stream" that you're supposed to make sure they're dead. Then I could only mutter (EXPLETIVE REMOVED) and try to recover my normal heart rate.

*Jack: Of course you must now fill out form FL83186297 in triplicate and return to the Animal Assaults Section. Sample of form below.*

## BEAR ENCOUNTER FORM

Workmans Name:

Address

Bears Name

Address (or next of kin)

In your honest opinion, who started the argument?

Particulars of Workman: Height:

Weight: Colour:

Particulars of Bear: Height:

Weight: Colour:

(Note: if workman outweighed bear do not fill in the following)

Details of incident

1. How big did you think the bear was?
2. Did you run?
3. If the answer to (2) is yes, why?
4. Did the bear inflict an injury?
5. Do you believe it was (a) in fun (b) accidental (c) on purpose? (underline one).

6. If you underlined 5(a) above, was the bear enticed in any way?
7. If you underlined 5(b) explain in a three paragraph essay on the reverse side.
8. If you underlined 5(c) did you (a) do nothing or (b) bite back?
9. If you underlined 8(a) describe your degree of masochism on the reverse.
10. If you underlined 8(b) have bear fill out a copy of this form and return within 24 hours.

Signature:

Date:

The average girl needs more beauty than brains because the average man can see better than he can think.

\*\*\*\*\*

Give some people an inch and they think they're rulers.

\*\*\*\*\*

Keep on going and the chances are you will stumble on something, perhaps when you are least expecting it. I have never heard of anyone stumbling on something sitting down.

CHARLES F. KETTERING

\*\*\*\*\*

## N.O.B. Training Programmes

By George Barber

Training activities during the past thirteen months have included:

1. Focus Phase One - Volumes A, B and C: programmed training manuals oriented each to Coastal Patrolmen, Coastal Guardians and Interior Guardians.

2. Focus Phase Two - Guidance manual for vessel masters, including a digest of relevant statutes, and technical data on the new Babine and Sooke classes.

3. Management Discussion Skills Workshops (3 sessions in Vancouver, and Prince Rupert).

4. Small Vessel Navigation and Mechanics: taught by Jack Gosse, Bill Wiley, and Jim Coates, this course was oriented to any Fisheries' person operating and maintaining small vessels, and their machinery.

5. Sounders and Sonar I: taught by the team of Peter Ryan, Rick Boyd, Gordy Hunter and Alf Wiebe, this was a comprehensive course for vessel masters in sonar and sounder principles and operation, plus a new standardized method for sounding, with practicum.

6. Herring Technology II: taught by Rick Boyd, Al Hourston and Bob Humphries, the course was oriented to district supervisors, and included advanced techniques for using the improved data forthcoming from the fleet.

7. Herring Program Feedback Session: Feedback workshop involving all participants in Northern herring management operations, so as to improve the conduct of succeeding herring fisheries.

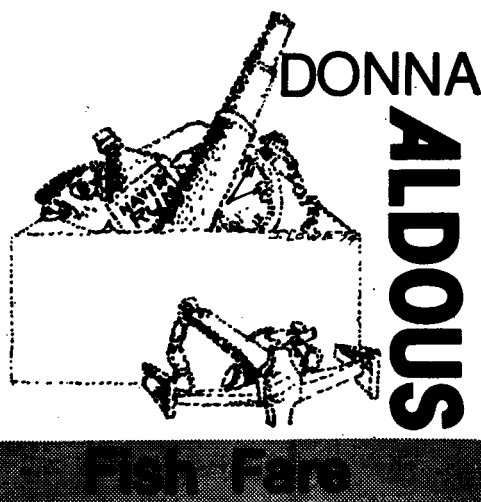
8. Fisheries-Forestry Symposium-Workshop: Involving Fisheries, B.C. Forest Service and private industry, the purpose was twofold:

(a) to broaden the knowledge of Fisheries field staff in aspects of log-fish relationships and their role therein;

(b) to promote improved inter-organization understanding, thus increasing the chances for precision in fisheries management.

9. Law and Fisheries Enforcement I.

*Editor's Note: George Barber is coordinator of training programs for the Northern Operations Branch.*



Salmon season! What a happy sound! The summer months are the best time of the year for gloriously fresh B.C. Salmon. If you are having guests from out of the province, treat them by barbecuing a piece of succulent spring salmon and see what happens to your reputation as a cook.

It is difficult to judge the amount of fish you will need for these recipes because regardless of the quantity cooked, there will never be "leftovers". When fish is fresh from the water and eviscerated, allow one pound per serving. In steak form, allow one to serve 2

to 3 persons, and in fillet form, one pound will serve 3 persons. These amounts are a "general" rule, but do not take into account outdoor appetites, or the irresistible flavour of fresh salmon.

Line the barbecue with heavy duty foil, to ease the cleaning up. Then spread sand or fine gravel over the bottom, to insulate, and top with a small mound of briquets. Ignite the fire approximately one-half hour before you plan to begin cooking. For cooking times, remember the 10-minute rule. Measure your fish at the thickest part, and allow 10 minutes cooking time per inch thickness. Barbecue cooking is difficult to time, because of the effects of wind, air temperature, heat of the fire and the distance of the food from the coals.

Be sure to brush the grill well with oil, to prevent sticking. If you use a fish basket for grilling, brush it, and the fish with the oil also.

The following recipe is taken from the chefs at the newest Vancouver hotel, and I can guarantee that the flavour will more than reward you for the little extra care required:

#### DILLY SALMON BARBECUE

6 salmon steaks, 1½ inch thick  
2 oz. rock salt  
½ oz. crushed black peppercorns  
½ oz. mustard seeds  
1 oz. sugar

Fresh dill, enough to cover (picked before it blooms)

Mix all ingredients except the dill, and rub on each side of the steaks. Place in a flat-bottom earthenware dish which is lined with half the dill. Place the other half of the dill on top. Cover and chill for 24 hours, turning the steaks at least once.



When barbecuing, brush the fish with a little oil and baste the salmon with the juices from the marinating dish. Do not overcook. If fish separates easily into flakes when tested with a fork, it should be removed from the fire.

Yield: 6 servings.

Serving suggestions: Accompany with whipped horseradish cream and baked potatoes.

Note: This recipe works equally well with fresh halibut. Why not have your own Sea Festival, and cook both kinds of fish at one meal?

For lazy day meals, or when camping out, try this recipe for a change from hamburgers, but be ready with "seconds".

#### "BUNWICH"

1 can B.C. Salmon, 7 3/4 ounces  
(or use 1 cup left-over cooked salmon)  
¼ teaspoon salt  
1/8 teaspoon pepper  
1/8 teaspoon tarragon  
1/8 teaspoon basil  
3 medium eggs, beaten  
¼ cup French dressing  
2 teaspoons chopped onions  
½ cup grated Swiss cheese (or cheddar)  
6 hamburger buns

Drain salmon, reserving liquid.

1. Mix contents of canned salmon with chopped onions and salad dressing. Crush bones of salmon in the mixture.
2. Mix salmon liquid with eggs.
3. Melt butter in frying pan, and scramble the eggs.
4. Combine salmon mixture, scrambled eggs and seasonings.
5. Toast hamburger buns lightly.
6. Spread salmon filling over buns and top with grated cheese. Place tops on buns, and wrap in foil.
7. Place on grill and heat thoroughly approximately 15 minutes.

Yield: 6 servings.

Note: Photo Courtesy of Jack Ferry and Associates, for B.C. Fisheries Association.

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We've long suspected "learning the lingo" is a part of every cub reporter's training. So many of them seem to have trade definitions of terms. For instance:

Reliable Source: The guy you just met.

Informed Source: The guy who told the guy you just met.

Unimpeachable Source: The guy who started the rumor originally.

Charles F. Kettering

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# LETTERS TO THE EDITOR

My Darling Maxine,

Oh, heart-throb of mine, does your ticker still miss a beat when you think of me?? Do you still blame it on the onions that you had for supper? Do you still grab for a crock of "Old Bush-mills" as solace knowing that there is one that stands between our passion? Or do you say My cher, I mean, good heavens, another letter from that old bas-chap? Well, whatever, I feel that, like it or not, the "Sounder" should have another letter from the old man. Not THE old Man on the Tenth, but the old Man from Tofino.

Well, I tell you, Sweetie, things is tough. I came back from Mexico in April. A little the worse from wear. God. That Mex. booze. Spots before me eyes, nose like the tail light of a Buick (even a Cadillac if you will). Spent. That's what I was. In every way, let me tell you. Well, this chap Wingen at Tofino Fisheries sees me in Tofino and says "Hell, the Old Man of The Sea," he tells me. "Want a job?"

I asks him if this entails WORK as I have been a Snivel Servant for years and work is strictly for the peons. "Yes," he tells me, "work is involved." Well, this staggers me some and not a little. I always thought that Manual Labour was some kind of Spanish Grandee. You know. Señor Don Manual Labour, or something.

Well," I tells him, "does this mean I get dirt under me nails?" He gives me a very pronounced nod of his head, so I start for the door, muy pronto. However, nearly there, I figger that I can dodge the column just as easily as I did in the Service. Apart from this, I am in a state of penury, whatever that means. Broke, I mean. So we dicker a while, and in the end I give way, feeling that, as it is one hell of a big fish-plant, there must be some secluded corner where I can snooze at times. Well, this ain't the case as I'm watched pretty close, and not a little. In fact, dearest girl, I am worked to death. My 38" waist has gone down to 37 1/2" despite the beer I pour on the flames. Then this character Wingen, the BOSS, says he wants me to be in charge of QUALITY CONTROL. Me, who could never control even me thirst. Well, thinking this will give me some snooze time, I say, "Yes, sport." This is me downfall. I run up against the Department of Fisheries. Some outfit in Vancouver or someplace. Ivory Tower or summat.

Well, we produce shrimps as well as fish here. You know, some character with a boat catches 'em and we boil the poor little bas-things. Can 'em and all. Well one day I see a character snooping about with some little bottles. Furtive looking bloke. So I ups and says to him, "Well mate, and what are you doing?"

"Fisheries," he says.

Well, hell, I know we are fisheries so I says, "Is this yer monniker or are you so stupid as to think we are canning blueberries?" I asks him.

He gives me a frosty one (summat like Bob McIndoe but not nearly as bad, I tell you). "Department of Fisheries Inspection Service," he says, with a tug at his hard hat. Well, what he is packing his bottles around for, I don't know as we have a full set of toilets upstairs so I figger he has a weak bladder or summat. However, after a bit of probing, I find he wants water samples.

"Now," I tell him, "we have a staff of over 65 so two bottles ain't nearly enough." Well, it seems he ain't interested in the health of the staff but wants samples of water we cook the shrimp in. This grabs me a little and then some as I have been siphoning some of it off to make moonshine. You know, through the coils to make the brew. So I tries to put him off a time to get some fresh water through but he ain't to be put off.

"Now, mate, have a cuppa coffee and we will get with it later," I tell him with a wink at the machine operator to turn off the still-water. But this character ain't having any and he tells me he wants the water now. I am stumped. Well, after fiddling about for a time and getting under the feet of the girls on the shrimp chain, he has his samples.

"Don't look too good," he tells me. Well, I could have told him THAT as the moonshine coils leak and we maybe have about 30% alcohol in the water.

"Fecal," he tells me.

Now, I have never heard of this brew but, to sound good I say "Yeah, with a touch of Seagrams as well." He gives me a long stare and I feel he has discovered our secret. Well knowing that in years gone by, the old cap-badge was to be replaced by a sponge in memory of those that had passed on from liver complaints caused by liquids other than milk etc. I figger that he can be let into the game, even if the character is Inspection instead of C & P.

"Fecal?" I ask him. "Is this a subsidiary of Hiram Walker?" Well, this does it. I get a long lecture about fecal and I understand that these are bugs that attack the stummick. Well, this gets to me as the last batch of brew puts two girls on the shrimp line in bed for a day and the machine operator is on cloud nine so much so that he is trying to put turbot and dogfish through the shrimp-peeler. Having been trained in the C & P, I only get gas. Gee whiz. Old Guy Ilstadt at Quatsino used to make worse brew. Well, next day he shows me the filters or something. Green. Green as Paddy M'Gintys neck-tie.

"Fecal," he tell me. "Loads and loads of 'em, all a-crawling all over

the place." Well, I must tell you, darling, that we have cleaned out the moonshine coils and the girls on the line can now take a water-glass full without falling over, so you see, he has done SOME good, ain't he? The forewoman on the night shift tells me that although she chokes a little at the first smash, she can still see the shrimp after the second. God bless the Inspection Branch.

My love to you all and if you want a bash of shrimp in alcohol, just come and see me if you can find me. Usually, I am horizontal under the still. But please come and bring Don Wilson with you. This chap deserves the best.

My fondest love,

Nick the Greek.

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The clipping appeared in the "Up Island Gazette" earlier this month and may be of interest.

People around the Seafood Products cannery are wondering about a sign that appeared on a bulletin board recently. A girl is looking for a cook's job on a fishboat. She said she grew up on her father's boat, is in very good health and strong after the tree planting season, knows the knots and is used to getting along in tight quarters. What really got to the men was the final line: "Will drop everything to go."

Vessel masters would be pleased to hire willing crew members as described above - it's hard to get good help these days.

Kip Slater & Neil Armstrong  
Tahsis, B.C.

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Maxine Haugen,  
Editor of the Sounder.

Thanks for the reminder. As the plowman said when he hit his mule on the head with a shovel, "he listens O.K., but first you have to get his attention".

First on order, I guess, is a welcome to Lyle Freeman, new District Supervisor at New Westminster. -I guess the only changes he has noticed is Friday afternoons and the weather.

Tom Moojalsky bid us farewell on July 10th as he proceeds to Prince Rupert to assume his new duties as District Supervisor. I guess the only changes will be Friday afternoons and the weather.

Joe Kambeitz is doing a bang-up job on the beaches in the Whiterock area. As a result of his efforts, people are gaining a respect for what we are trying to accomplish in regards to crab fishing. The only question is, How to you pronounce those names, pronounce them hell, how do you spell them?

I was disappointed that more boats didn't show for the "regatta". My wife, son and I, however, enjoyed the weekend and the new friends we met. Next year I hope that there will be a good turnout. I hope Bill, that this small recommendation will help to increase the participation in the future.

It's a shame that useful information that was published and/or available from some departments is now available so late as to be nothing more than interesting reading. I don't think it would be fair to mention the specifics as they probably know already but are unable to rectify the situation.

I would like to remind these people however, that some of this information is useful and is used but only if it is timely.

The following I took from a very good publication from the U.S. Coast Guard with the unlikely name of, "(ALMOST) Everything you wanted to know about boating but were ashamed to ask".

#### Boat Loading Commandments.

"Wisest is he that keepeth the whole load in his boat as low as possible. Thy first command to thy people in the boat shall be "SIDDOWN!"

#### Fueling Commandments.

"Bringeth down with all thy might, thy wrath upon they that would participate of the weed during fueling ..... that thy days be many and thy beard be not singed".

"Gas tank checking should be done by matchless boatmen".

As usual Maxine, the rest of the happenings around here are rather routine and it is difficult to pick out items of interest to others. I will try again next month.

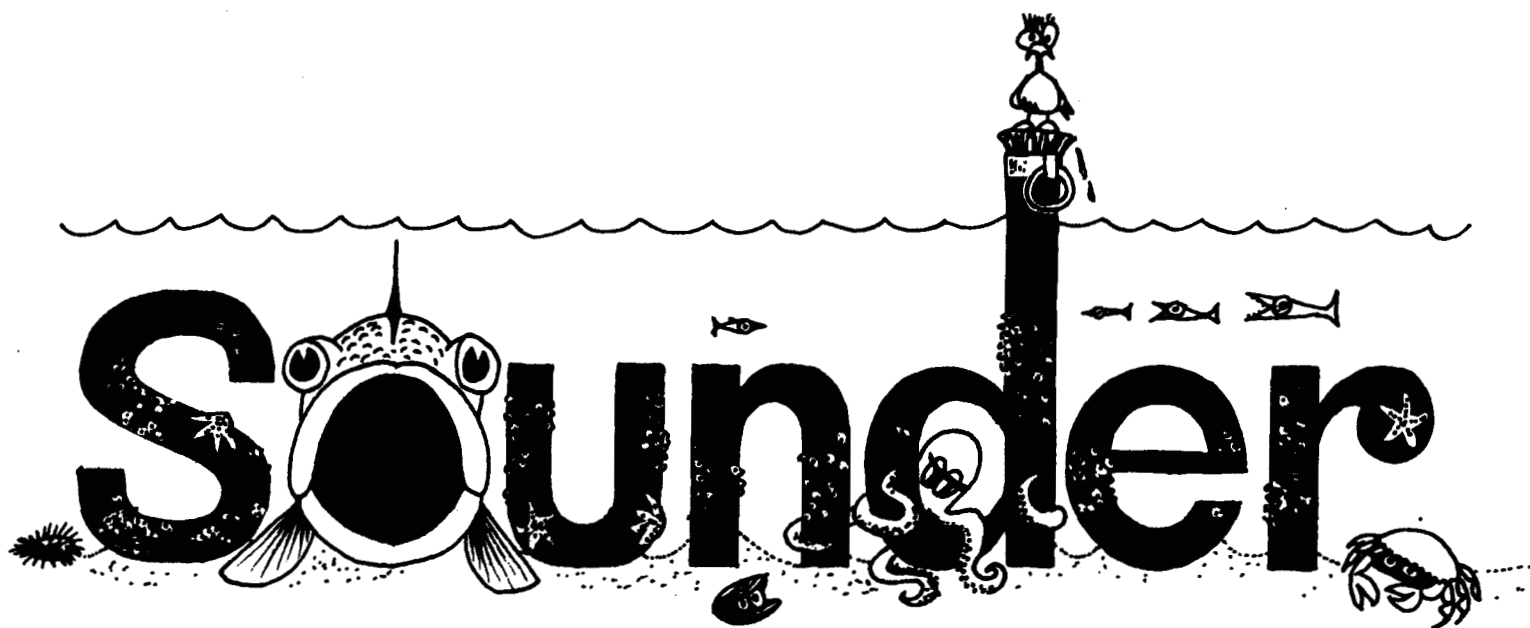
Wayne Lowdon  
New Westminster.

## THE Sounder

Maxine Haugen, Editor  
Layout Design, Allan Chan  
1090 W. Pender St.  
Vancouver 11, B.C.

Opinions expressed herein do not necessarily reflect Fisheries Service policy.

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Fisheries and Marine Service

## THE Sounder PHOTO CONTEST

Again it is that time of year to start checking the season's photos for your entries to the annual Sounder Photo Contest. There is even some time left to take your camera out to try for another prize winning shot.

Last year 40 people entered a total of 200 photos in our first contest. These photos were a major contribution to a library which provided photos to a number of careers day presentations, group talks, a Law of the Sea publication, and enhancement program and herring scripted slide talks.

The primary benefits derived from the contest relate to the well stocked photo library available to all Pacific Regional Fisheries staff. The more personal benefit to contest winners are prizes - good booze of your choice.

To be eligible for prizes submit your best photos (slides or prints, color or black and white) to the Sounder, Fisheries and Marine Service, 1090 West Pender Street, Vancouver, B.C. V6E 2P1 by 1600 hrs., February 4, 1975. Please include your name, return address, a comment on the subject(s) of photo(s) and the categories you wish to enter.



The categories established to date, are:

- single theme scripted slide talk
- Fisheries on the job
- Fishing Industry on the job (gear, people, communities)
- Fish resource interactions with other resources (plus or minus)
- Humour
- Fish related recreation
- Best color photo
- Best black & white photo

Again this year prizes will be donated. The more prizes pledged, the more photo categories and prizes possible.

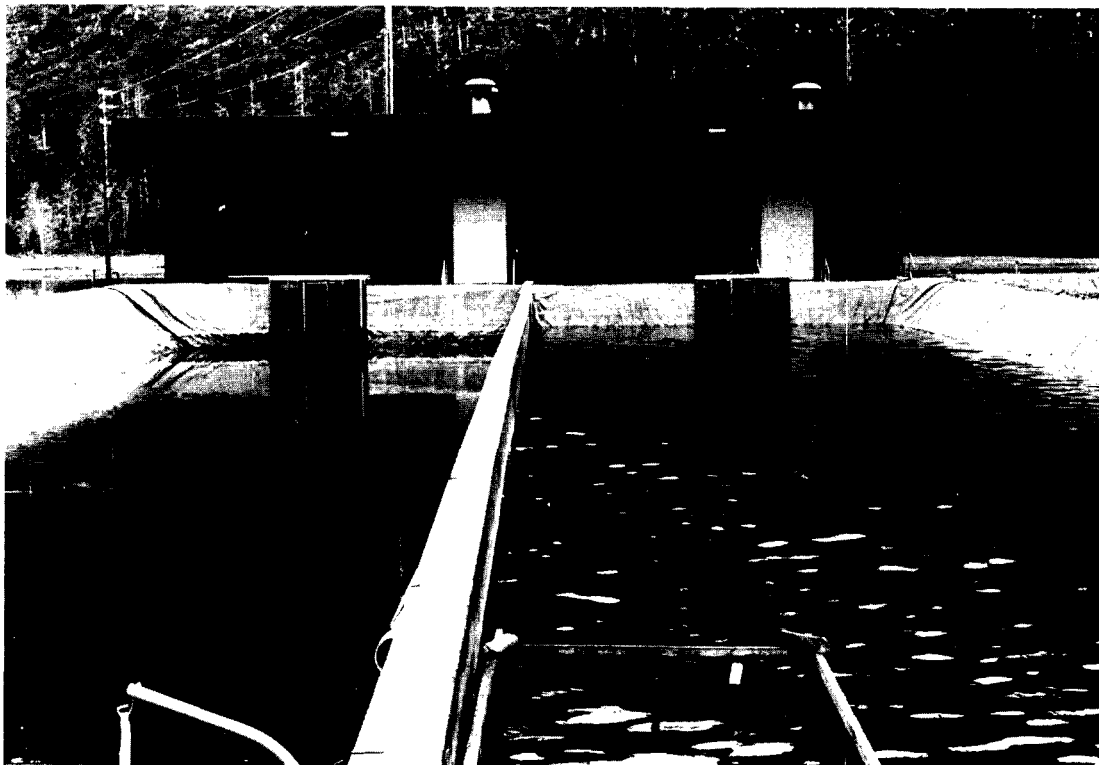
Think about it and then pledge a prize in some subject area in which you are interested, or responsible for.



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# *Where its at with Alaska Fisheries*

D. L. DEANS



Crystal Lake Hatchery

Earth Rearing Ponds

Photos: D. Deans

On August 2, Ron Ginetz and I stepped off the plane in Juneau, Alaska. Our trip resulted from the request by the Department of Fish and Game to take 250,000 chinook eggs from the Nakina River, a tributary to the Taku River. Mr. Rupert Andrews, Director of Sport Fish Division suggested: "If you come, then let us show you what we are doing in enhancement." Our itinerary included:

## 1. Mendenhall Ponds

A multi-agency project in the Tongass National Forest at the base of the Mendenhall Glacier consists of a series of small lakes, natural and artificial, which are being connected to a common collection pond with an outlet to the Mendenhall River and thus saltwater. The Federal Forest Service has plans to develop this area for recreational purposes in association with the major attraction of the glacier. The Forest Service is establishing picnic sites and beach areas on selected lakes for public use. The Sport Fish Division saw this as an opportunity to develop brood stock for a recreational fishery for fresh and saltwater fishes. The need to develop this sport fishery arose from severe fishing pressure on the Taku and Chilkoot runs. How could a city of 20,000 people cause pressure on major runs of fish? It seems that there are about 5,000 boat registrations in Juneau, one per family and each is used for fishing. Of the eight small lakes, two are proposed for resident rainbow trout and the balance for rearing chinook and coho feeder fry to smolts.

The eggs from the Nakina River were flown to the Crystal Lake Hatchery in Petersburg, where they are incubated, reared to feeding fry and trucked back to Juneau for rearing in the Mendenhall Ponds.

## 2. Auke Bay Incubation Facility

This Federal Research Institute, using the incubation box principle, has developed a fiberglass box, 4' x 4' x 4', with a perforated plastic plate raised off the bottom by a series of small legs for spreading the water over the cross-section and keeping the gravel, eggs and fry off the bottom of the box. The box weighs approximately 150 pounds and cost \$400 in 1971. The output of the boxes was sampled by a fry splitter similar to Blaney Creek sampler. Eggs were planted in the eyed stage and treated immediately after planting with malicite green introduced into the main header under pressure.

Experiments to simplify the operation of boxes are being conducted using astro turf as an artificial media. The eggs in this experiment were placed on top of the upper layer. Upon hatching, the alevins burrowed down and ultimately distributed evenly in the media. The dead eggs and shells were then easily removed from the box. A second experiment used eggs on a screen with one layer of astro turf under it. When the eggs hatched, the fry dropped through and hid in the media until swim-up.

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## Nakina River

Across the Nakina River, 50 miles inside the B.C. border, a temporary fence had been placed to assist in the collection of samples from spawned out chinook salmon. The 1,800 spawners on the grounds represented half of what is considered to be an adequate escapement, so the planned egg take was cancelled.

### 3. Sitka Saltwater Rearing

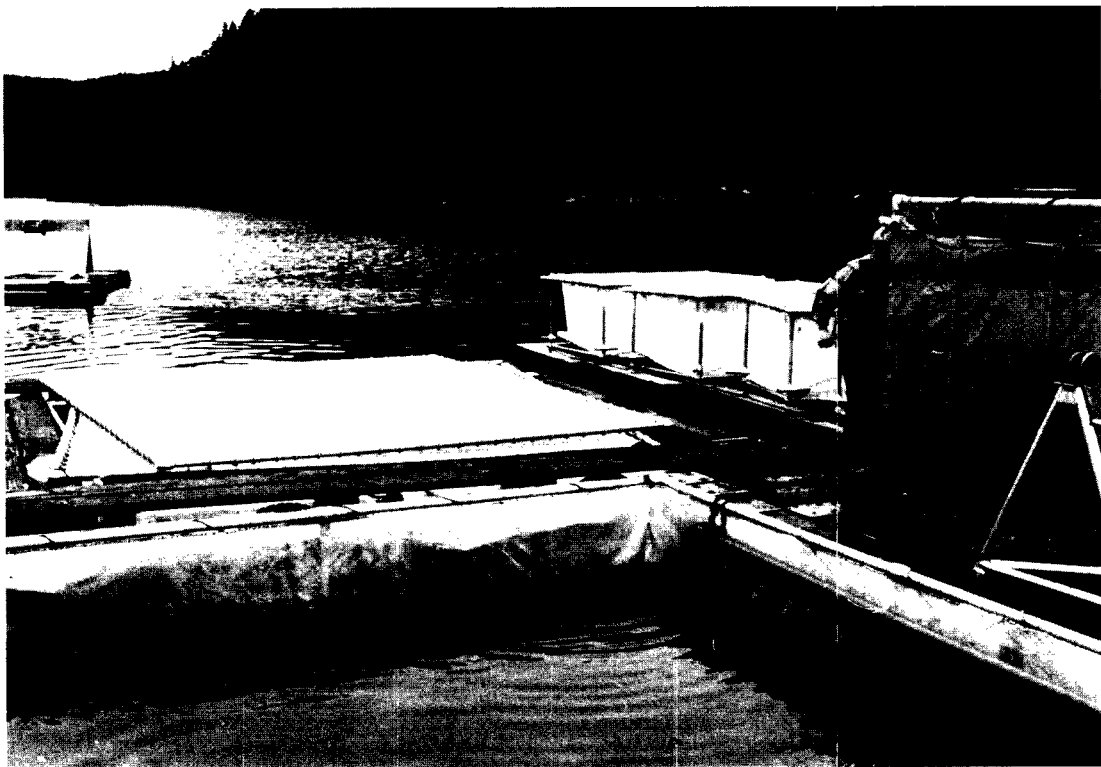
Sitka, situated on Baranof Island, is the site of the Fish Rehabilitation and Enhancement Division's water rearing experiment. It is in a quiet bay at the outlet of a stream which naturally supported small pink and chum salmon populations. Water is taken from the stream and pumped to the saltwater rearing station. Saltwater is pumped from a depth of around 40 feet, and the two are mixed to achieve the desired salinity. The pens measure 12' x 12' x 12' with the top 6 feet sealed from the outside waters by a vinyl membrane. This membrane ensures the top portion has water at a salinity between zero ppm. to full strength seawater as desired. The pens are primarily for chinook and coho smolt rearing. The feeder fry are brought from the Crystal Lake Hatchery by tank truck via the ferry system and introduced to fresh water pens. They are acclimatized to the new location and grown to about 100 to 150 per pound before the salinity is slowly increased until such time that they can be held in seawater. It is hoped that full salinity will be reached before winter arrives to

eliminate operational problems arising with the fresh water supply. It appears that the size of the fish is critical to the timing for increasing the salinity of the water. The State pathologist is helping to set up experiments for disease control, timing of It is hoped that full salinity will be reached before winter arrives to eliminate operational problems arising with the fresh water salination, ability of fry to withstand fluctuations in salinity and density of planting. The perfection of this experiment will hopefully lead to production oriented installations.

### 4. Little Port Walker (Lower Baranof Island)

The first work, in 1948, was done on pink salmon but their work has since expanded to include gravel incubations, saltwater pen rearing to smolt size, and coho - cutthroat interactions in freshwater rearing stages. Pink salmon imprinting experiments using a chemical introduced to the incubation waters and fry transplanted to independent freshwater streams and saltwater estuaries, are underway.

Inaccessible lakes in the area are "rehabilitated" (poisoned) and stocked with coho fry for natural rearing to smolts. The purpose for all the coho and chinook transplant to lakes, pens, and ponds is to step up the turnover time for rearing. Normally, coho winter two years in freshwater before smolting. Their experiments show that this can be shortened to one winter.



Aquaculture

Sitka Saltwater Rearing Ponds

## 5. Crystal Lake Hatchery

The central hatching and starting facility for southeast Alaska with a capacity of 3,000,000 is a low profile operation. It is suffering from a lack of funds needed to complete the project. The burrow's ponds originally scheduled have been temporarily deferred and synthetically lined earth ponds are being used. Incubation is done in heath trays and the emergent fry are started in troughs. Once on feed, they are placed in small silo rearing tanks (45 gallon drums) and held for trans-shipping to their destinations. The hatchery was designed to produce 7,000,000 fry on continuous utilization of incubation facilities.

The water is supplied from a hydro plant tailrace with an emergency supply from a nearby creek in the event the hydro plant is shut down. The water use is designed for a 90 percent re-use or any variation thereof.

## 6. Steelhead Study

At Petersburg Creek, a study of the relationships between steelhead and cutthroat trout has revealed that the 26 age classes of steelhead exist. Also, indications are that steelhead do not necessarily spawn in a home stream.

We were unable to get a great deal of information on the relationships between the various divisions of the Department of Fish and Game as our visit was hosted by the Sport Fish Division. There is a definite desire by all we spoke to though, to exchange technical information with Canada. We were impressed at their approach to solving problems. (The management (executive) allow their staff to pursue some idea of their own on a limited basis as long as it fits the organizational objectives, and they get their normal assigned duties completed.) They were unanimous in their feeling that we in B.C. were far ahead in the use of techniques and methods for salmon development and management. I think reciprocal visits with these people of Alaska would be beneficial for all concerned.

NOTE: Photos are available for viewing on request.

## *The Operator*

In the business world, an executive knows something about everything, a technician knows everything about something, and the switchboard operator knows everything.

## *Poems*

DAVE HARDING

There's Irene, and there's Mary and Pat  
They always know where it's at  
With invoices and bills  
Piled as high as the hills  
They stick to the rules and that's that.

Dave & Alec & Les  
Deal with the D. of S. S.  
With Margaret and Lee  
And friendly Freddy  
Our materials & supplies they purchase.

A con-man is grey-haired Jim Scott  
All he wants is the money you've got  
If you make him a bet  
You'd better get set  
To lose the whole works in one shot.

Fred Fraser, a sailor of note  
Often dreams in his orange floater coat  
To be hardening a sheet  
At the front of a fleet  
On his return past the committee boat.

The South has a manager, Dick Crouter  
Joyce Chubb, he can't do without her  
He paces up and down  
Brow furrowed in frown  
And when he argues with Argue he's a  
shouter.

At Robertson Creek the great Dane  
Karl Peterson, does well to stay sane  
With biologist Ken  
Dave Lightly now and then  
Trying to hatch some salmon eggs in  
the rain.

## CO<sub>2</sub> in Your Ice Water ?

N. TOMLINSON

Vancouver Lab.

Use of Carbon Dioxide in Refrigerated Sea Water is Questioned - The possibility of using refrigerated sea water saturated with carbon dioxide (RSW-CO<sub>2</sub>) as an improved alternative to refrigerated sea water (RSW)<sup>2</sup> or ice as a medium for the chill storage of fish has been investigated. RSW-CO<sub>2</sub> inhibited bacterial multiplication and trimethylamine formation and consequently provided a few days extension in apparent keeping time if the fish were assessed in the "fresh" condition, in comparison with the other media. However, when fish were canned (salmon) or frozen (salmon lingcod) after chill storage, those previously held in RSW-CO<sub>2</sub> showed defects (bulged cans, deteriorated flesh color, rancidity, and voids in the flesh of steaks) that either did not occur or were much less marked in fish from the other media. In addition, the use of CO<sub>2</sub> caused corrosion of normal RSW equipment that necessitated expensive modification.

## HISTORICAL PROFILE

### *He was a Prince*

by George Barber

During October 1892, "...one of the most scholarly and scientific fishermen in the world..."<sup>1</sup> was appointed Canadian Commissioner of Fisheries. At age thirty-four, and already distinguished, Edward Ernest Prince took over the reins of the Fisheries Branch, leading it through a remarkably productive and creative era.

The Dominion Archives, Ottawa, has preserved fascinating biographical material related to Professor Prince:

He was born in Leeds on May 23, 1858. Oriented toward zoological study, young Edward studied at St. Andrews, Edinburgh, and Cambridge, later taking specialized scientific training under the celebrated Professor McIntosh.

In 1886, he returned to Edinburgh as assistant teacher and demonstrator in zoology, taking over as naturalist the following year at St. Andrews Marine Laboratory.

Between 1888 and 1890, Edward Prince served as Secretary to Her Majesty's Commission on Fishery Bait Supply in Scotland, producing over 25 zoological papers.

"Under the Scottish Fishery Board and co-jointly with Prof. McIntosh, FRS, he carried on elaborate investigations upon the life history of marine food fishes, and the results are embodied in a narrative published by the Royal Society of Edinburgh. He is the author of nearly thirty papers on Marine Zoology in various scientific journals, and has read many papers at the meetings of the British Associations.

He carried on an investigation into the development of fishes under the auspices of the U.S. Science Fund, being the first British zoologist up to that time granted aid by that important trust. He was an Armistead Lecturer, Dundee, Scotland, in 1891, and delivered popular lectures upon Zoology in various English and Scottish tours, being, in fact, a university extension lecturer upon that subject ... with the University of St. Andrews. He was appointed naturalist on a government investigation of fishing grounds off the west coast of Ireland. In 1890 he was elected to the Chair of Natural Biology in the College of the Royal Infirmary, Glasgow, and Examiner in biology, College of Physicians and Surgeons, Glasgow and Edinburgh

... and was President of the Anderson's College Naturalist Society, and a vice president of the Glasgow Natural History Society." (from the Parliamentary Companion, 1892)

Of Edward Ernest Prince's appointment as Commissioner of Fisheries, the Canadian Courier would comment in 1892 " ... Just the man for his present post!". During Professor Prince's term as Commissioner, the number of fish hatcheries in Canada increased from fourteen in 1892 to fifty-eight by the end of 1912; and, in 1900, the first biological station in Canada was established at St. Andrews, New Brunswick.

Planning of the Nanaimo Biological Station in collaboration with Rev. G. W. Taylor in 1907, was one of his last activities before being appointed to the Biological Board of 1912.

The Courier's comment was well justified.

<sup>1</sup> The Canadian Courier, October, 1892  
Dominion Archives, Ottawa

Seen on a window glass delivery truck:

"God Bless Little Boys with Sling Shots".

## *Q. C. I.*

Where the skys are always raining and  
the fishermen complaining,  
Of an opening or closure on the Coast,  
Where the "Sooke" and "Arrow" wander  
to the East and West Coasts yonder,  
Is the town of Q. C. City that we  
boast.

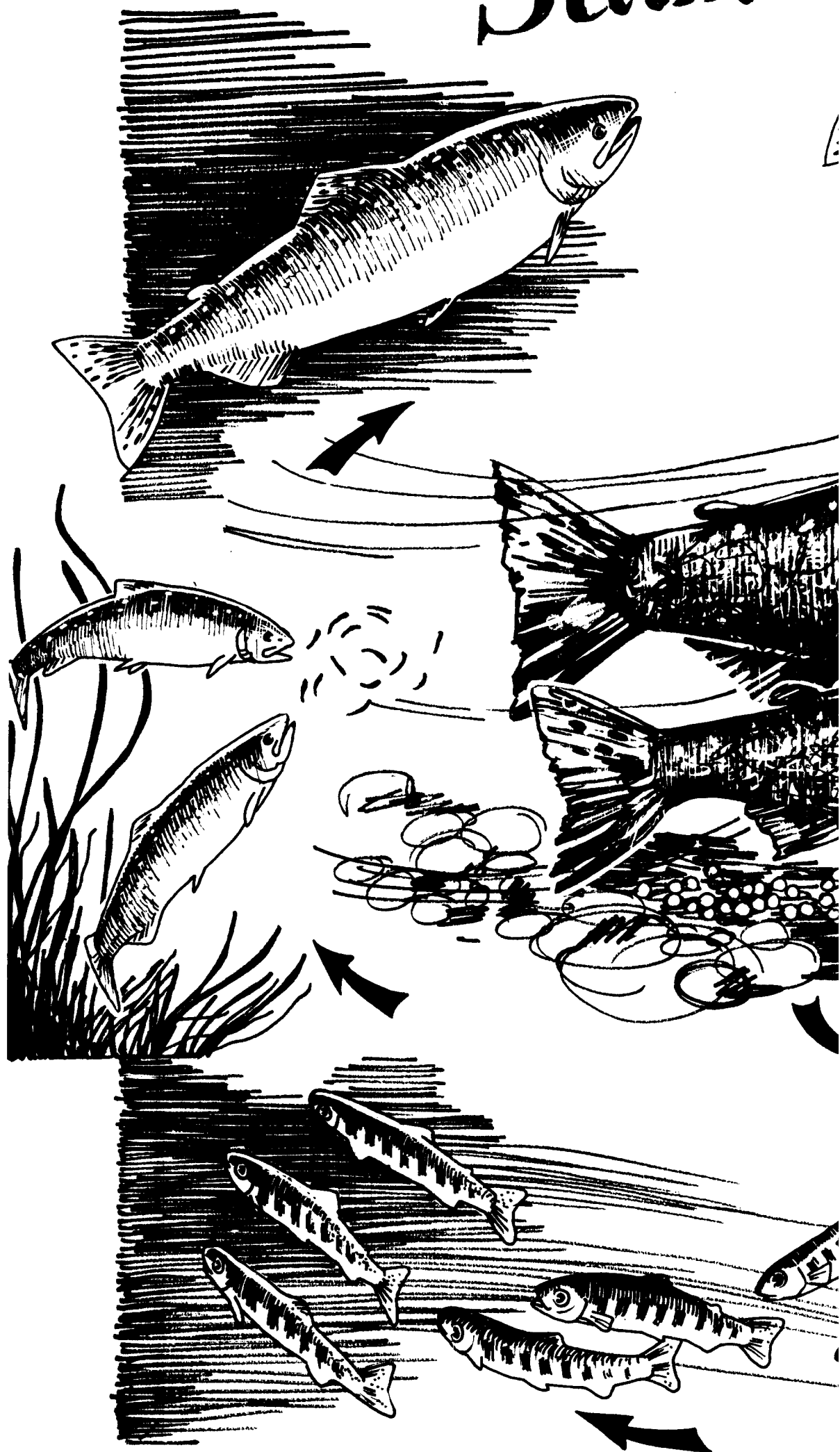
Oh there's not too much to see here,  
But I must admit to be here,  
Beats Vancouver and those other main-  
land places,  
And the sports fish which are plenty,  
Do attract the southern gentry,  
So I guess we must have several saving  
graces.

We have characters galore,  
Always coming to our door,  
And we greet them with our native  
wit and charm,  
We advise them with good grace,  
Of the nicest camping place,  
(and so far no ones come to any harm).

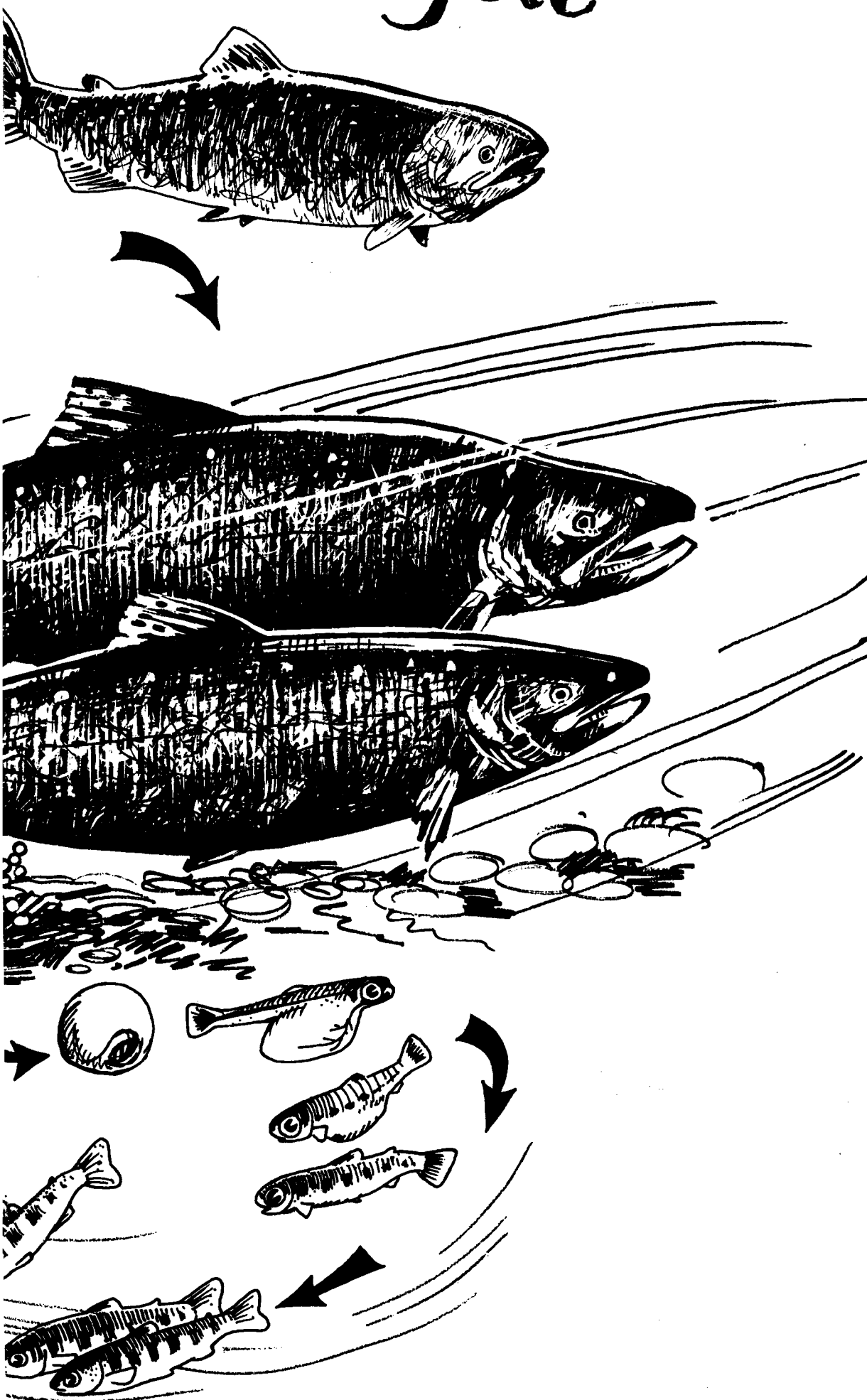
Where the bear and deer abound,  
Up around old Rennell Sound,  
Well its got to be a little bit of  
heaven,  
So when calling on "44",  
Just remember we'd abhor,  
To change places with the crew of "77".

Eileen White

# The Salmon



# n Life Cycle



## Letters to the Editor

Dear Maxine -

We sit in melancholy silence now, our thoughts returning to other times and other days in a picturesque little harbour with the sun glinting on the waves and a smelly old fish plant in the background. Our hearts are heavy as we realize that he has left us without a word of farewell, our beloved "Nick the Greek". Can you find him for us, can you tell us where his wandering feet have taken him or where his wandering mind has wandered off to? Can you act as a go-between, a middle man (person), a friend in need, a mark, to find our lost one so that we can say "So long, you old sot!"

As we remember back again to our now retired F.O. from Tofino we think of the day long ago we encountered a bad scare with our old buddy. He was complaining of a bad sore throat and describing to us the symptoms and how it was so painful to get down dill pickles in between 'boiler makers'. Our then illustrious boat inspection co-ordinator cum 'M. Dee' quickly diagnosed the problem as the well known common, every day table variety mumps. The change was horrifying, the stupefied shock on his face heart-wrenching. His face went pale, his knees weak, his legs started shaking and gingerly holding his unmentionables he staggered into the Indian Affairs Medical Office next door screaming "Nurse, Am I gonna be STERILE!"

One's heart can only go out to such a man, such a cornerstone in the foundation of mankind. We missed him terribly when he retired to his cottage by the sea in Mexico and realized what it must be doing to such a powerful man as Nick the Greek to be lying in the sun each day sipping on boiler makers, harvey wallbangers, bilge cleaners and good old Tofino sockrot. How his heart must have yearned for the West Coast Rain Forest, for the 18th century way of living and most of all for the heavenly aroma of fresh caught 8 day old herring. We can feel with him the pull back to the old ways and our surprise was unrestrained when he returned to his native Tofino (please do not misinterpret as natives at Tofino) to enter the employ of the most powerful fish processor in that booming metropolis. Our mouths opened in awe as he quickly climbed through the rank and file to become master fish processor, speaker of great axioms, power unlimited, Quality Control supervisor. We tried to speak to him with the respect as befits a man of such maturity and place in society. We tried not to overwhelm him with our golden rule-

books: nor waste his time with the idiosyncracies of our credo. But alas, unbeknownst to us and him, tragedy was to strike. His working hours became longer and his sleeping (?) hours shorter. Each time we entered his place of work we saw the haggard look on his face, the wornout mind pressing tightly against eyes the colour of fire engines. But like the powerful wail which announces the fire truck we heard the foghorn voice which so well characterizes the man who calls himself Nick the Greek. "When the hell are you g.... d.... Fisheries Inspectors gonna take your g... d... hardhats and get out of my LIFE!" Tears welled to our eyes as the tender greeting caressed our eardrums and we realized just how badly we were needed during our short absences.

But we knew, he knew what caused his loss of sleep, his inability to press onward and upward and in good time he dragged the plant single-handedly out of its choking stranglehold. And what was the cause of his misery, the tragedy, fecals, you know Maxine, bugs, bacteria, the little guys that follow us wherever we go. But he knew it, he knew what it was and it was not what he knew it to be, 'A subsidiary of Hiram Walker'.

He was a man unlike other men, a man who breeds a need in others for him and now you can see why we need so basly to see him again. He has a hold on us, an endearment stretching beyond the confines of the human soul, and mostly he promised us each a boiler maker.

Our low to you and yours Maxine, the bash of shrimp and alcohol which he promised you is still waiting ...somewhere. And if you hear anything from our wandering buddy - the finest tale-teller since those old masters, Bob Wingen, Don Wilson, and of course, the incomparable Ian Devlin, please tell us toute de suite, post haste or quickly. We think of you all often here from behind the Tweed Curtain.

The G.D. Fisheries Inspectors  
Crew  
Victoria.

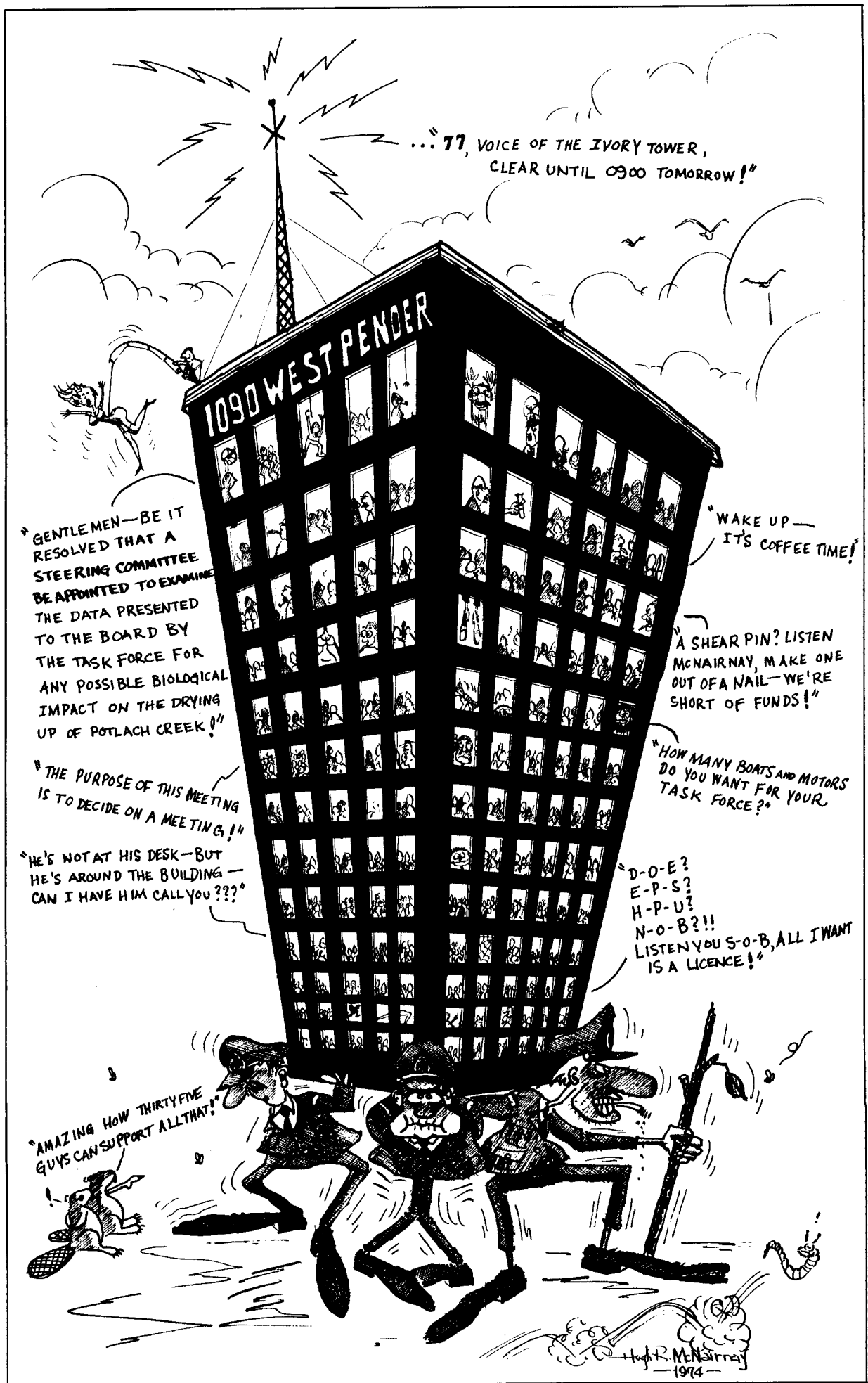
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## Pissed Off

From August Patrolman's report:

"Watched one chum salmon ease up Quartcha above tidal water to first gravel bar. Idled around the bar for twenty minutes or so and must have got the message for he turned around looking pretty pissed off and headed down stream. Followed him. He jumped once in the river mouth before heading to the deep....."





# Spurious Emissions

## Personnel Actions

The call of the North (far north that is) and sentiments "a la Service" (Robert that is) have resulted in that infamous editor of the SOUNDER, Maxine Haugen, trading her editors position for a "house mother" position in a residential school in Yellowknife, N.W.T. Before she left, Maxine promised to write some "House Mother of the North Sagas" - cum letters to the editor. (I'm sure Maxine will find real children easier to deal with.)

\* \* \* \* \*

Dave Harding has gone to Ottawa for a year to fill the position which Frances Dickson just returned from.

\* \* \* \* \*

Gerrard Mos has announced that he will leave the Southern Economics Unit to work for the Bank of B.C.

\* \* \* \* \*

Tony Domes has left his South Admin. job to become the Supervisor for Rivers-Smith Inlet Area.

\* \* \* \* \*

Wendy Brotherhood is leaving her 10th floor position to go tripping to France and Germany etc.

\* \* \* \* \*

Shirley Richardson has left Fisheries for a position with the Provincial government.

\* \* \* \* \*

John Pynn of Inspection, has moved from Prince Rupert to fill a position in Victoria vacated by Dick Carson who has moved to Vancouver as Vessel Inspection Coordinator.

\* \* \* \* \*

Hugh McNairney has transferred from Kitimat to Bella Bella. Also transferred to Bella Bella was a new second officer, Bert Ionson.

\* \* \* \* \*

Lyle Enderud has left Bella Bella for a Bella Coola position.

\* \* \* \* \*

Bill Robinson has been taken on staff in Kitimat.

\* \* \* \* \*

Wayne Homles won the competition for Inspection Supervisor on Vancouver Island.

\* \* \* \* \*

Ed Christiansen has been off work after having his ruptured appendix out.

\* \* \* \* \*

Fred Basson has been appointed Senior Staffing Officer thereby replacing Ted Dunik who left for greener pastures.

\* \* \* \* \*

Jerry Paine is leaving biologic at Qualicum for the same in Ontario.

\* \* \* \* \*

for a while there, the Capilano hatchery daily coho return was exceeding the combined total run of the past 2 years. That kind of escapement after a "good to great" sport fishery is impressive.

Over 80,000 pounds of coho, surplus to the hatchery's needs, were sold for about \$60,000.

\* \* \* \* \*

Yukon and N.B.C. Division conducted a highly successful staff exchange. Doreen Patterson of Whitehorse office changed jobs and cities with Ann Goldie of Vancouver office. The intent of the exchange was staff education. The resultant increase in motivation was a valuable side benefit. All parties involved feel the exchange was a complete success and have suggested similar exchanges be tried by other Divisions.

\* \* \* \* \*

The renovations to the 4th floor of the Vancouver Inspection Lab are well under way. When completed it will be "a new lab", deserving a visit. If you are in town and can spare a half an hour or so - go over and get a tour, it's well worth your time.

\* \* \* \* \*

The crew on the HOWAY have received some tuna tag return data which will certainly challenge the usual salmon tagging program. On August 18, 1972 the crew of the HOWAY tagged a tuna 60 miles SW of Cape Flattery. It weighed 18 pounds and was 29 inches long. On June 19, 1974 a Japanese surface long line recaptured the tagged tuna 300 miles NE of Midway Island. It weighed 33 pounds and was 34 inches long.

In 1972 the HOWAY and TANU tagged 133 tuna of which 3 have been recovered. The tuna tagging program was discontinued due to some kind of international problem.

\* \* \* \* \*

Fishery Officer Norm Lemmen now has written proof of the state of his mental health. He received a letter from Personnel addressed to Mr. Normal Lemmen.

\* \* \* \* \*

The Quinsam Hatchery is starting into operation: with Jim VanTyne as manager; Ray Rienhard as assistant manager; Bill McLean who lateralled in from E.P.S. as a technician; Terry Kyte, from Calgary hatchery as a fish culturist; the hatchery will be ready to receive eggs by the end of October. (Official opening isn't until next spring.)

The salmon enhancement biologist for Quinsam and the Division will be Don Sinclair, the biologist in charge of hatchery planning and development in Ontario.

\* \* \* \* \*

Larry Duke has transferred from Pr. Rupert to Sooke.

\* \* \* \* \*

Treavor Fields is the new officer in Campbell River.

\* \* \* \* \*

Bill Winsby is recuperating from a broken bone in his foot. He broke the bone while in the bush - hunting for deer.

\* \* \* \* \*

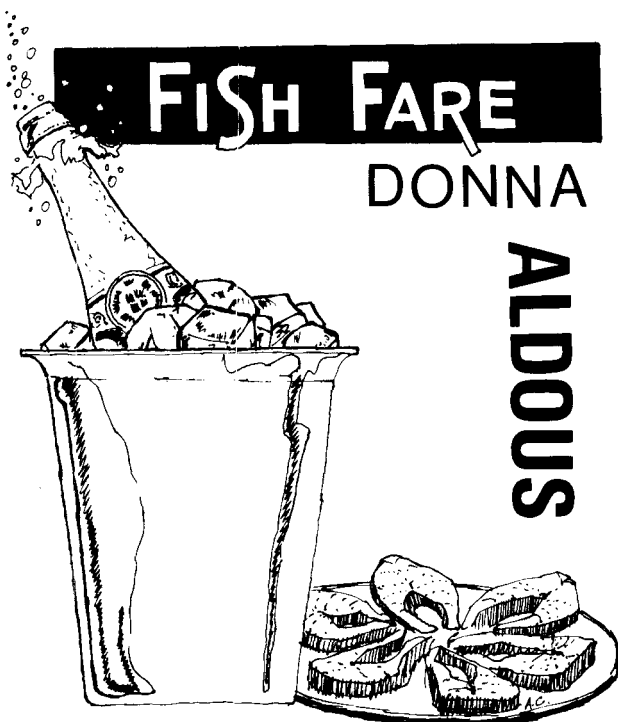
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SAINT: A dead sinner revised and edited.  
A. Bierce

SUCCESS: The only unpardonable sin.  
A. Bierce

TRICHINOSIS: The pig's answer to pork chops.  
A. Bierce

---



Here's a final farewell to fresh salmon, which we have enjoyed so much over the summer months. As the seasoned veterans of the Fisheries Department will know, every four years, in conjunction with the spawning cycle of the Sockeye, a special programme is held by the Department of the Environment and the B.C. Fisheries Association at Adam's River. This programme is a popular International event, with visitors from across Canada and from all parts of the world, who come to see the beautiful Red Sockeye migrate to their spawning beds. The programme will run from October 11th to 27th, and is open to the public. There will be educational displays, films, and a cooking show on the weekends. So come if you can, and join in the fun.



Department of Fisheries photo

Here is a sneak preview (shhh....) of some of the recipes for fresh and canned salmon, which will be demonstrated during the "Salute to Salmon". Many of the recipes are designed to suit the needs of campers or boaters, where cooking equipment is limited, and ease of preparation is important.

#### SALMON STEAKS ORIENTAL

Use spring, coho or sockeye, for a fitting meal that is a special tribute to the noble Salmon. Marinating the steaks improves the moistness of the flesh, which might otherwise suffer when cooked over an open fire.

#### Recipe:

6 fresh salmon steaks or fillets,  
1½ inches thick  
6 ounces Japanese Soy Sauce  
½ cup brown sugar  
12 ounces aperitif wine (such as  
Dubonnet, St. Raphael, etc.)

Blend the ingredients in a large flat dish. Place salmon steaks in the marinade, for at least one hour, turning occasionally. Broil the salmon in a greased basket grill, approximately 4 inches from the embers. Turn 2 or 3 times, brushing with marinade. Yield: 6 servings.

When campers try their hand at fishing, all too often they are disappointed, so it is a good plan to pack along three or four cans of salmon as "emergency rations".  
HINT: Leftover cooked salmon can be used in recipes calling for canned salmon. 1 pound of fresh salmon yields 2 cups of cooked salmon. One can (7 ¾ ounces) of salmon yields one cup of fish.

Whether on the road or in your own backyard, the next recipe will give you lots of menu mileage. Use it as a full luncheon meal, or as an appetizer when you entertain on a larger scale. Fresh vegetables are still available; don't hesitate to experiment with some varieties which you have overlooked in the past. This dish is very easy to fix, as there is no cooking needed. If you are camping, the vegetables can be carried all together in a plastic bag, and held in the cooler along with the sour cream. While chilling the salmon-sour cream mixture ahead of time will enhance the blending of flavours, it is not absolutely necessary.

#### SAUCY SALMON DIP

1 can B.C. Salmon, 7 ¾ ounces  
1½ cups sour cream  
½ cup chili sauce  
¼ cup chopped pickle or relish  
1 package French dressing mix  
1 teaspoon horseradish  
1 tablespoon lemon juice  
1 tablespoon chopped chives  
2 drops red pepper seasoning  
¼ teaspoon salt

Blend all ingredients well. Refrigerate 2 to 4 hours. Serve with raw vegetables, such as cauliflower, carrot sticks, green onions, zucchini strips, celery, cherry tomatoes, and radishes for dippers. Yield: 4 cups.

That's all you are going to see for now. If you want more goodies, come to the big tent at Adam's River!

(P.S. I'm told it's wise to bring your woolies, and don't forget the snake-bite serum. I'm also told that the best serum is about 90 proof!)

## Basic Rules for Writing

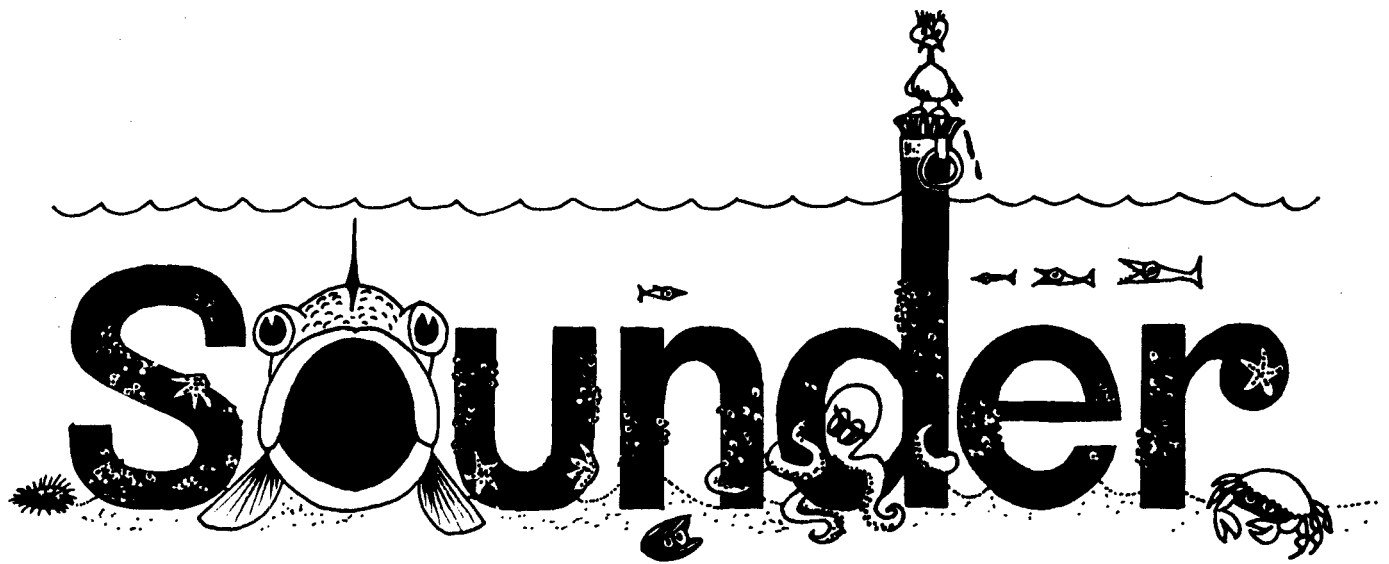
1. Don't use no double negative.
2. Make each pronoun agree with their antecedent.
3. Join clauses good, like a conjunction should.
4. About them sentence fragments.
5. When dangling, watch your participle.
6. Verbs has to agree with their subjects.
7. Just between you and I, case is important too.
8. Don't write run-on sentences they are hard to read.
9. Don't use commas, which aren't necessary.
10. Try to not ever split infinitives.
11. its important to use your apostrophe's correctly.
12. Proofread your writing to see if you any words out.
13. Correct speling is esenshul.
14. Never use a preposition to end a sentence with.
15. Make sure you accent the proper syl la'ble.

## THE Sounder

The Editor  
1090 W. Pender St.  
Vancouver 1, B. C.

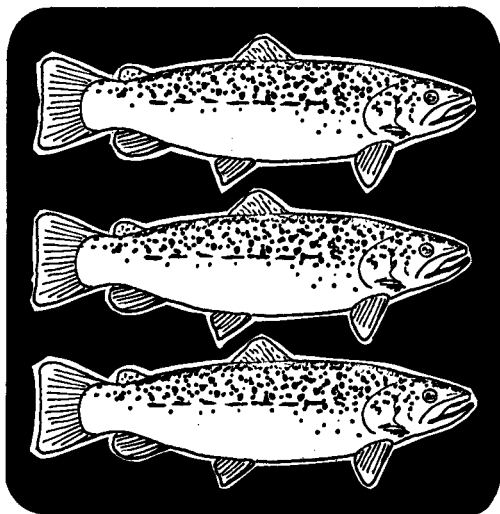
Opinions expressed herein do not necessarily reflect Fisheries Service policy.

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NOV - DEC 1974 Vol. II No. II

Fisheries and Marine Service



## 1974 Rainbow and Coho Plant

Perry Savoie

A decision to plant rainbow trout for fish farming purposes was again made this year. This was done to determine if fish farming in the Yukon has a future, and also to see if a viable product could be established in a large enough quantity to supply a demand locally and outside of the Yukon.

The project has been set up slightly different than in past years in that Fisheries Service personnel involvement has been kept to a minimum. More technical advice and data is being supplied to the people who supply the labour for this venture. Several different individuals are now involved.

Several minor problems occurred this spring but were quickly overcome by Vancouver and Yukon staff. One of the problems, probably the most important, was the fact that the usual supplier of trout fingerlings could not supply this year. This meant going further afield for a supply of fish. After some inquiries by Mr. C.E. Walker and staff, a supply of 50,000 fingerlings was ordered from Winnipeg, Manitoba. The cost of these fish was \$55.00/1,000 plus shipping charges. These fish were flown from Winnipeg to Vancouver via C.P. Air to Whitehorse. Another supply of approximately 50,000 came from Seattle, Washington. All of the cartons were opened upon arrival here and re-oxygenated, then taken into the field and planted. A surprisingly low mortality of .5% occurred.

The growth rate of the fish in the various different lakes utilized this summer has varied considerably. There may be one of many reasons for this variance which at this time is difficult to determine. One lake has produced nine-inch fish which were planted in early June as two-and-a-half inch fingerlings while other lakes have only shown one or two inches of growth for the same period of time.

The lakes that were utilized for planting range from thirty-five acres to seven acres in size and from eighteen to forty-five feet deep, and had no surface inlet or outlet. The prime food in these lakes is fresh-water shrimp with aquatic insects secondary, although it is felt the fish only begin to utilize the shrimp after they reach the four-to-five-inch size range.

Harvesting will take place in October to December and possibly throughout the winter if the fish have not reached a marketable size before then. Small mesh gillnets will be used, hopefully producing a 50-to-60% recovery.

Another pilot study is in progress this year in the north. A total of 30,000 coho were shipped up from Vancouver Island and planted in a lake near Whitehorse. These fish should provide summer and winter fishing within the next year.

The coho were planted in a lake with a good food supply consisting of aquatic insects and freshwater shrimp. These fish were hand-fed for the first day only and were then left to forage on their own. At present, the growth rate has increased from approximately one inch to three to four inches in three and one-half months. Observations show much surface feeding activity throughout the lake.

There has been a marked increase in the number of people interested in private farming ventures this year. We hope to have favourable data to pass on to them in time for some farming plants next spring. A mobile or permanent hatchery in the north would certainly assist the program in that fish could be raised and distributed locally with a definite decrease in cost/1,000 per unit. Fish farming "North of 60" could become a reality this year.

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## Babine Fence 1974

A. Stefanson

### Jack Harvest Photos by Alf Stefanson

For the third consecutive year, jack sockeye were anticipated to return in large numbers to the Babine system. In order to utilize a valuable protein source, which would otherwise be redundant on the spawning grounds, an attempt was made to commercially harvest these precocious males.

Tenders were let in mid-July. The contract stated that the harvest of up to 200,000 lbs. of fish would begin approximately July 20th, and would include 2 local natives of Fisheries choice who were to participate in the operation. Cassiar Cannery, Prince Rupert, was the high bidder of 56 cents/pound.

Due to protracted high water levels, the migration was approximately 10 days behind schedule, thus delaying the initial harvesting to August 10.

The actual capture of the jacks involved dipnetting them out of 2 types of traps. The first trap was a specially designed enclosure attached to the upstream side of the existing enumeration traps, which allowed the entry of jack sockeye only. This trap worked well when population numbers were such that sheer pressure forced the jacks to migrate through the converging throat opening. The second trap was the original adult enumeration holding pen which allows entry of the total Babine salmon stocks.

The fish were dipped periodically throughout the day and transported live to holding pens where they in turn were loaded onto

iced containers. When full, these containers were shipped to Prince Rupert Cannery and subsequently canned. All jacks were counted, weighed and inspected by Fisheries personnel before loading.

The successful capture of the jacks was directly related to effort expended. However, it appears that with the present catching facilities, no more than 30% of the total annual stock could be harvested. A total of 27,500 jacks which averaged 1.22 lbs. per fish were harvested over an 18 day period, at which time the run had diminished in quantity and quality.

This operation, being a first of its kind, was not successful financially but gave an insight as to what might be achieved in the future.



Natives dipping from enumeration traps

### Native Food Fisheries

The Babine Lake Band, for the second consecutive year, was given permission to capture adult sockeye at Babine Fence, thus permitting natives from Hagwilget to Burns Lake to dip fish directly from the enumeration traps in numbers related to personal need.

This fishery provides an important food staple for elderly and/or natives unable to secure salmon by normal legal means, and also provides Fisheries personnel with concise catch data. Previous to this operation, numbers of over-ripe fish taken in set-nets on Babine were discarded. Now, by selectively dipping from the traps, all salmon are utilized.

The fishery began August 22nd and terminated August 27 with a total of 6,300 large and 2,400 jack sockeye taken. Approximately 50 families participated under the supervision of the local Fishery Officer, Mr. Don Meyers.



Counting and weighing jack sockeye

# THE Sounder

## Letters to the Editor

The enclosed photograph shows an engineering first -- a sculpin ladder -- designed by that concrete and steel engineer, laterly fisheries manager, Mr. Al Lill. Not withstanding the numerous field camps, spawning channels, hydrological weirs and counting fences Mr. Lill has designed for installation across the Region, I thought your readers would be interested in his proudest edifice.

This 9-foot long, plywood sculpin ladder is located at the main hydrological weir in Carnation Creek on the west coast of Vancouver Island. As your readers probably know, the Carnation Creek watershed is the site of a long term, interdisciplinary, Federal-Provincial study designed to obtain information necessary to improve logging guidelines. After five years of pre-logging calibration, road building in the watershed starts this winter and logging next fall.

Adult sculpins of two species (*Cottus asper* and *C. aleuticus*) move downstream in the spring to spawn in or near the estuary. In early summer the adults move back upstream followed in late summer and fall by yearlings after the latter have used the estuary as a nursery area for nearly two summers. Since we are monitoring resident fish population dynamics through the duration of the study, it is vital not to impede upstream/downstream movements of any species. Sculpins are of interest in Carnation Creek because of their high biomass (up to 50% of the total depending on the stream section; sculpin biomass decreases progressively upstream).

The Lill sculpin-way is effective in passing sculpins (and juvenile salmonids). All of us who are associated with the Carnation study wish to commend our ex-colleague on his engineering skills.

Sincerely,

David W. Narver,  
Pacific Biological Station.

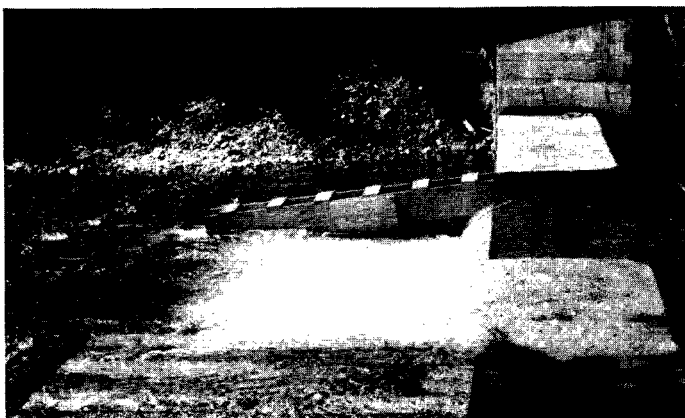


PHOTO BY NARVER

Attached is a portion of a news column from the Powell River News which I'm sure your readers will be interested in reading. Basically the background to the article is the desire of several oil companies to expand their present bulk storage tank farm at it's present site adjacent to the government dock at Westview and the Powell River city council would like to have it moved away. City council would like to have it moved for several reasons but one of the main reasons is the pollution potential to adjacent waters. This article shows what a small local government working with a very active pollution group can do to prevent oil pollution. But what about all the remote logging camps and communities that do not have the proper local control to correct these inadequate facilities? Now that all Fishery Officers and others within our department spend so much time on the oil pollution problem I think they all will agree that we need regulations as outlined in this article coast wide that we can enforce to prevent oil pollution instead of waiting for it to happen and then prosecuting under the Fisheries Act.

N. J. Lemmen

Two companies - Imperial Oil and Standard Oil of B.C. - propose to modify and add to their existing facilities. Their written proposals indicated a portion of their expenditures would be towards the protection of the environment, another portion to replacement of existing equipment and the remainder to the addition of tankage.

In his report, the mayor stated the additional tankage is required to overcome problems created by insufficient marine transportation, increased consumption of certain products plus a new storage need for unleaded gasoline required by some cars, beginning with the 1975 models for pollution abatement. These factors now, and in the future, will create shortages where products will not be available locally.

Here are the requirements of phase one as recommended in the mayor's report to council:

All oil companies now located in the municipality will be required by municipal law to install or complete these installations.

- Complete impermeable dyking for each company area involved, such dyking to have a capacity equal to the gallonage of their largest



tank plus 10 per cent of the capacity of the next largest tank.

- All dyked areas are to have an area seal of impermeable clay so no seepage will occur in the event of a spill.

- Each dyked area will be equipped with a catch basin system complete with sump, separator and slop tank to contain all spills for removal.

- Each storage tank will be equipped with external indicating gauges for monitoring of tank liquid level.

- Each storage tank will be equipped with a high level alarm giving both visual and audible alarm at a liquid level point when pumping must cease to prevent overflow and spillage.

In phase two, the report called on the municipality to agree to mutually cooperate on the future relocation of the present bulk oil tank farm. This agreement, it was stated, would be tied to a timetable and immediate discussions would involve a relocation start of 1980 and a relocation completion by 1985.

Though the oil companies stated they were prepared to negotiate prior to 1980 in regard to relocating to a new site with waterfront access, they also indicated concern about the suggested 1985 completion date.

In a letter from Imperial Oil, company officials stated that the majority of the proposed work at its oil tank farm in Westview is for additional environmental protection. Here is an explanation of the major environmental protection facilities:

- Seal tank farm area prevents any product from seeping through the soil and escaping under the dyke wall.

- External tank gauges allow the operator to monitor the remaining capacity of the storage tank while filling.

- High level alarm system gives visual and audible warning that the tanks are full. Alarms are preset to sound one minute before full tank capacity is reached, to enable the operator to stop pumps before any product is spilled.

- Concrete apron - catches any accidental spills from truck loading, truck unloading, and barrel filling areas. These spills are then directed into the separator.

- Yard catch basin, grading and paving - the total operating area of the yard drains into the catch basin and thus into the separator so that no petroleum products leave the plant site through runoff.

- Dyked area sump - allows all liquids trapped in the dyked area to be passed through the separator before discharge.

- Separator - separates petroleum products from water so that only clean water is discharged from the site.

- Slop tank - allows the holding of all waste petroleum products to be removed from the site in a manner approved by local authorities.

- Additional lighting improves working conditions in operating areas during darkness to avoid accidental spills or injury.

Other proposed facilities, not related directly to environmental protection, are: new loading rack and diesel pump; new facilities for lead-free gasoline; new tank for stove oil.

In a letter from Standard Oil of B.C., council was told of these planned projects:

- Install two new 40,000 gallon capacity tanks, one for diesel-heating fuel and one for grade 2 gasoline.

- Expand the tank farm concrete dyke area to accommodate the additional tanks.

- Seal the entire tank farm dyked area with clay so as to effectively contain a product spill.

- Replace the original product loading pumps with higher capacity units.

- Renew and enlarge the existing sales office.



We await every issue of "The Sounder" with keen anticipation and read it conscientiously for its fundamental instructional content. In the October, 1974 issue you have outdone yourself in professional excellence. I have taken to heart your "Basic Rules for Writing", and have made a commitment to fervently practice what you have pronounced to be praiseworthy in lucid prose.

But I am constrained to express one small note of criticism. This applies to Rule No. 10. I suspect that some irresponsible proof-reader has subverted your original intent. I have canvassed twenty-seven responsible public servants of irreproachable repute, and they agree with me that Rule No. 10 should more correctly be restated: "Try not to ever split infinitives".

May I now approach a further point which is emotionally, very close to that just mentioned. The Split Infinitive is to the Public Servant what musk is to the musk-ox: it permits him to recognize his kind. Pick up any collection of government regulations on your desk; leaf through it briefly. Note how every page abounds in split infinitives. Years of research have

established this axiom: It is demonstrably impossible to adequately pontificate without splitting infinitives. So please exempt us from rules designed to guide the common herd. Strike Rule No. 10 from your roster. We will all breathe more easily. Remember, while you hesitate, stacks of impending legislation stagnate, while its authors struggle to express their inmost thoughts in other, more alien ways.

Nick Neufeld

#### EDITOR'S NOTE

*We will try to not ever make that kind of mistake again. This mistake originated from the query - "to ever plagiarize or not to ever plagiarize?"*

Apologies to Joe Kambietz for neglecting to credit him with last month's centrefold showing the life cycle of the salmon.

Reprints are available from Al Wood if desired.

## E P S Swings

E.P.S. got into the swing of things by successfully hosting their first golf tournament on 30 September at the Seymour Golf and Country Club. Inland Waters, F.R.B., and Fisheries Service teams tried in vain to bag the now famed "TEE-CUP".

Double Bogeys to the E.P.S. "Second String", John Villamere, Duane Brothers and Darcy Goyette who by careful cheating, conniving, cajoling, concealment and out and out craftiness convinced tourney organizers that they were the "Champs".

Bogeys to Mike Potter (CCIW), Otto Rapp (F.S.) and Tom Teavendale (E.P.S.) who sandbagged and bottled a 3-way tie for men's low gross.

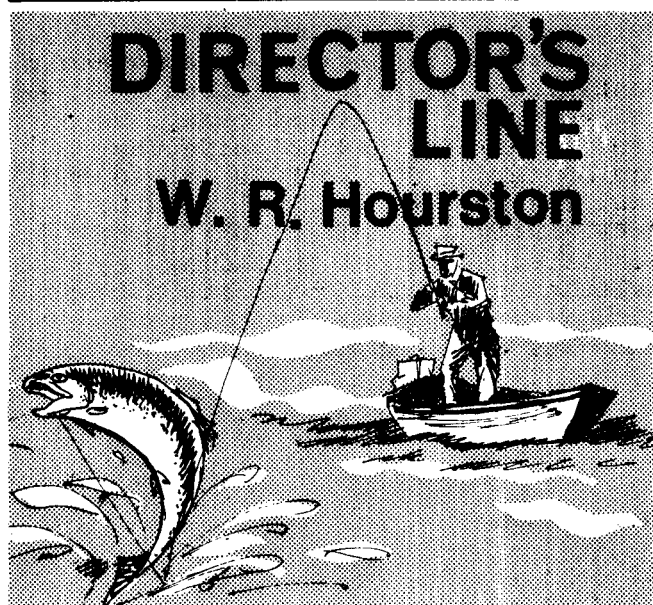
A Birdie to Flo Switz for ladies' low gross, who we hope transfers to E.P.S. before the next golf tournament.

Eagles to J. Landucci, S. Sidhu, H. Nelson and D. Sullivan for getting it all together.

Double Eagles to Bob McLaren for joining us and donating the "Tee-Cup".

It was a large slice of heaven. Hope everyone is hooked and will play again.





Well, it is hard to believe but another year is drawing to a close. I have taken a look back over it and the following are some of the highlights from my point of view.

January saw the Government/Industry Seminar on salmon enhancement. It was a successful meeting and gave enthusiastic endorsement to the implementation of a major salmon enhancement program for the Pacific Region. Progress has been made since that time. Hopefully we will be getting down to serious planning early in the coming year.

I also attended a Federal/Provincial B.C. Committee meeting in Victoria with our S.A.D.M., Ken Lucas.

In February we had another meeting in Seattle on Canada/U.S. salmon problems of mutual concern. These are very intense meetings because salmon are such a valuable resource to both countries. The sessions are straight negotiating ones and are extremely complicated because of the species of salmon involved, the type of gear and areas where interceptions are made and the interpretation of data compiled by both countries. I can only say that some progress was made. We were supposed to meet again in December but this has now been moved ahead to February of next year. Mr. Cliff Levelton is the head of the Canadian delegation on these negotiations.

March seemed a fairly quiet month, although I travelled to Ottawa as Chairman of the Regional Board of Directors, D.O.E. to attend a meeting of the Senior Management Committee. I was able to attend one of the breakfast meetings in the Parliamentary Restaurant which our Minister, Mr. Davis convened every week. It was a most interesting meeting with each A.D.M. briefing the Minister on matters of concern in their Service. I was quite impressed with the number of decisions made at that meeting. I was called on to review the status of our dogfish fishery and our herring licencing program.

April included another trip to Ottawa at which we dealt with the problems of upgrading our patrol and enforcement capability. The Pacific Region presented a very strong case showing that because of the rising costs and contract provisions our patrol capability had declined significantly compared to ten years ago. The result of this meeting was the provision of much needed additional funds and man years.

May saw the start of major Fisheries Service activity in connection with the Law of the Sea Conference. We had a briefing session from the International Unit from Ottawa headed by Mr. Len Legault and assisted by Dr. Mike Shepard. They briefed an Industry Advisory group on Canada's position with respect to the 200 mile economic zone and the policy for protecting our salmon.

The highlight for June was a trip I took to Campbell River with Ian Todd to inspect the new Quinsam hatchery. In addition to looking over this newest addition to our enhancement program I had a good chat with the Campbell River staff -- Joe Fielden, George Graham and Brian Richmond. The best part, however, was sampling the sport fishery. Joe made sure that Ian and I did not exceed the daily bag limit.

In July I attended a Federal/Provincial B.C. Fisheries Committee meeting in Ottawa. This was the first time the meeting had been held in Ottawa for at least four years. The meeting deals with fisheries items of joint interest to both Governments - seaweed, shellfish, salmon enhancement etc.

In mid-July I made a trip to Washington, D.C. to discuss with U.S. fishery officials problems that the decision of Judge Boldt had created in the operation of the Salmon Commission. Judge Boldt had ruled that in Washington State the Indian people were entitled to 50 percent of the allowable catch of salmon. At this meeting we made the point that insofar as Canada was concerned this was a U.S. internal matter and should not involve the management activities of the Salmon Commission.

The highlights in August were the Salmon Commission meetings in Bellingham watching the development of the Adams River run. Those involved in salmon management know the excitement that is generated in looking at the early signs of developing salmon runs and speculating on their ultimate size.

September saw the first opportunity of meeting with Mr. David McEachran, our new A.D.M., Fisheries Management. I had the opportunity of showing him a small part of our activities out here, including a visit to the Capilano Hatchery.

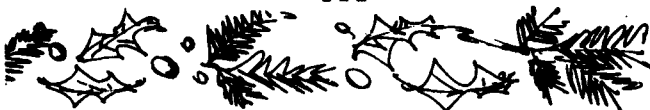
The highlight in October was the visit of Mr. R. LeBlanc, our new Minister of State - Fisheries, to the Pacific Region. His trip started off with a meeting in Kamloops with Mr. Radford, the Provincial Minister of the Department of Recreation and Conservation. Before the meeting there was a visit to the "Salute to the Salmon" exhibit at Adams River. Mr. LeBlanc was most impressed with his first look at Pacific Salmon. He had a chance of viewing the 500,000 brilliant red spawning sockeye from the air by helicopter and it was truly a magnificent sight. Later on the Minister visited the Qualicum project, the Biological Station, the Capilano Hatchery, and the Vancouver Aquarium. He also went on board Fred Kohse's vessel, "EASTWARD HO", looked over the groundfish processing operation at Canadian Fishing Company and then met with representatives from industry and fishermen's organizations. It was a very quick and concentrated visit but he learned a great deal about Pacific Region and has promised to return next year to see the salmon fishery.

October included a meeting in Toronto with all the Senior Management staff of the Fisheries and Marine Service. We were given a presentation on a new "Framework for Management." This is a program in which all Branch Managers and staff will look at what we do and how we do it. In the end it takes a look at how we are organized.

November was Program Forecast time -- what is our estimate of the resources needed to do our existing job and to undertake new challenges in 1976-77.

So all in all the year was a typical one. From a resource point of view we made our quota in herring; the halibut was a sad story, sockeye exceeded our expectations; pinks in the North and Upper Central Areas let us down, and the chums are about as predicted. Our groundfish fishery will probably equal 1973 levels despite weakening markets.

In closing, I would like to take this opportunity of extending to all the staff my best wishes for a Merry Christmas and a Happy New Year.



# Maurice P. Houghton

Joined Fisheries - 1947  
Retired - November 12, 1974

Maurice P. Houghton -- retired. Gone but not forgotten. Few people have retired from the Pacific Region leaving more of a mark than Maurice.

Known as "Maury" Houghton to all, he came to Fisheries in 1947 after a colourful term served in the Royal Canadian Airforce as an aircrew officer, a Flight Lieutenant, with service in India. With his tremendous memory he could recount many anecdotes of Poona, Punjab, and other exotic Indian places, often referring to his favourite description of a non meaningful occupation as "punka-walla".

In his early Fisheries service Maury served faithfully and well at Rivers Inlet and Butedale sub-districts. Soon, because of evident ability he was transferred to the Vancouver office, where as Marine Officer he was successful in having a number of good boats built, with the exception of "Houghton's Folly" the "Thrasher Rock", which vessel is still performing admirably.


His major field of interest and expertise was in salmon management. As Chief Protection Officer he was able to perform this function with broad authority. His good relations with industry and the ready co-operation of his field staff were important management tools.

Maurice represented the Department at many important meetings, including Nishga Tribal Council meetings, international meetings in Tokyo, Moscow and Washington.

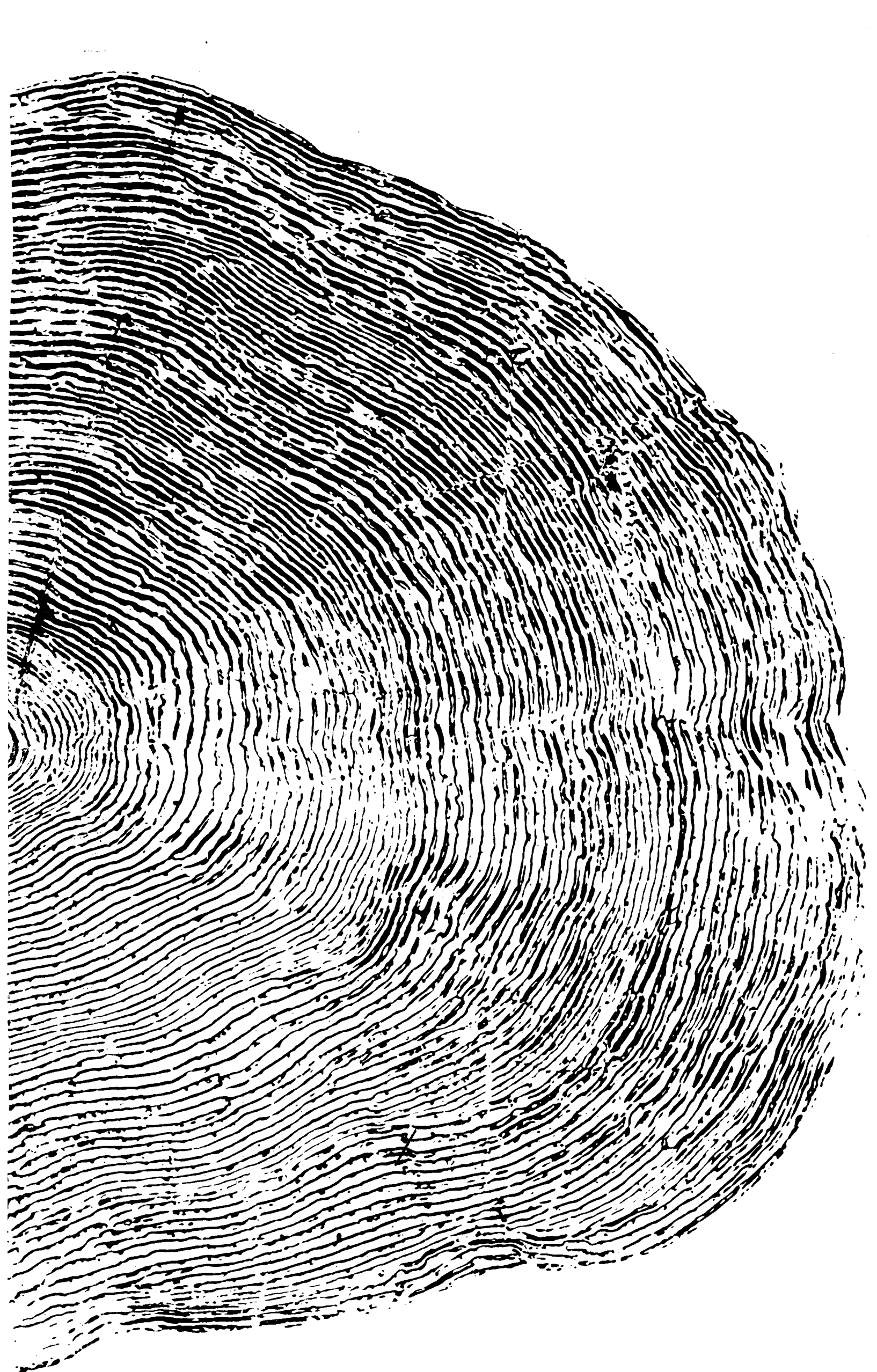
Before leaving Maury was responsible for the Vessel Subsidy Program, FIP, IFAP, IDB, Chairman of the "Buy Back" and Salmon Licencing Committee. He was always a pragmatist and very decisive, a firm believer that the requisite qualifications for a Resource Manager should be a non-professional. This belief was based on his understanding that management decisions should be tempered between biological, economic and political reality. Because of this, Maury delighted in pointing out the declines in world fish populations due to so-called "scientific" management. The strength with which he argued made him a tough adversary.

We wish him well in his retirement working on his lot at Sliammon and now the rest of us can relax without having to answer to his "What have you done that is meaningful today?"

Jim Connor



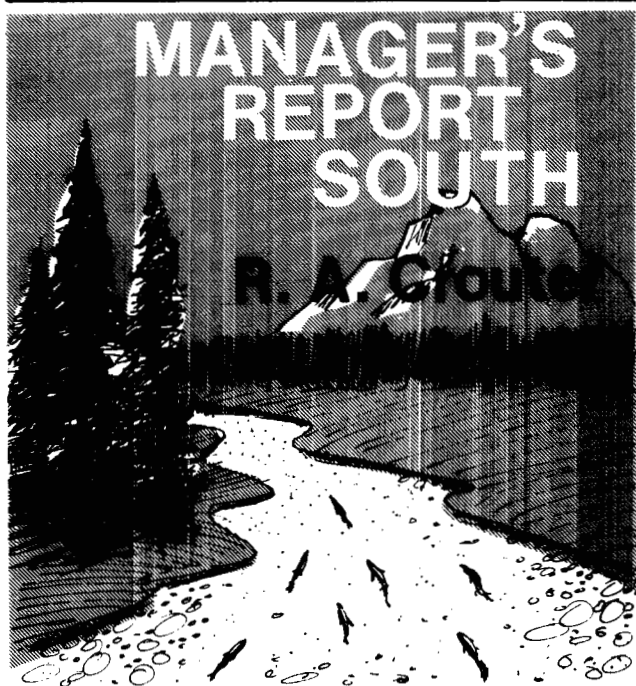
**SOCKEYE**



Lee Christensen

Reprints available from Al Wood





All too quickly it seems we are approaching the season when we look back and review the past year then look forward hopefully to what we might expect in the future. As is the case with most years, 1974 brought with it a mixed bag of tricks. On the disbenefit side there were problems related to inadequate resources with regard to maintaining a tight enforcement posture; we were faced with far greater militancy in certain Indian food fishing areas; the return of chum salmon in the Johnstone Strait to Fraser River was a disappointment; we faced many problems in initiating a licence limitation scheme in the roe herring fishery and then faced a hectic period in managing the roe herring fishery; the international negotiations with regard both to bilateral agreements with United States and at the Law of the Sea Conference have not produced any finite results although they hold considerable future promise; the workload from the habitat protection angle has increased tremendously over the past twelve months.

On the benefit side there would appear to be a number of gains. The development of a \$300 million salmonid enhancement program continues to appear promising; the returns to the Capilano and Qualicum facilities were particularly exciting; the mark-recovery program provided far more information and public response than was anticipated; considerable progress was made in our habitat protection activity with respect to an improved working relationship with the Province of British Columbia; finite gains were made on specific proposals such as the Nanaimo port development and cleaning up the Campbell River estuary; many gains were made with the forest industry; and considerable advances have been made on a number of technical studies such as those being carried out on the Fraser estuary, at Carnation Creek, on several hydro proposals and on a host of urban development investigations.

During 1974 we also received some budgetary relief. Funds returned from licensing revenue will permit the development of a sound herring management program for the coming season; they will permit a doubling of the capacity of Robertson Creek; and will provide the necessary subsidy funding at \$50/ton for a 1,000 ton catch of dogfish. During the year we also received operating funds to upgrade the patrolman and guardian activity and we are currently awaiting an adjustment in our operating funds for the Marine Service.

For the 1975-76 fiscal year we can look forward to the initiation of the major salmonid enhancement program; there is a real possibility that additional resources will be made available for fisheries management; habitat protection and the Marine Service. Much additional effort will be assigned to provide background information for the negotiations related to both bilateral agreements with the United States and with those related to the next stage of negotiations of the 200 mile limit which are scheduled for 1975.

Headquarters is now implementing a Management Framework and this Region has been nominated for a Treasury Board pilot study calling for the development of operational performance measurements. While both of these schemes will require considerable input on the part of most of you, we can assume that the final result will be an improvement in our total management approach both on a national and regional level.

While undoubtedly 1975 will bring us some mixed blessings, my prognostication would be that we can look forward to a productive year. With that note may I extend to all of you my personal best wishes for a Merry Holiday Season and may you enjoy the best of opportunities in the New Year.





# SALMON ENHANCEMENT

R. MacLeod



## Random Thoughts

By the time that this is printed we in the Fisheries & Marine Service well be entering a new era. Our Director-General will be established in office and, hopefully, will have given at least some indication of our future course. One thing for sure, he will find a receptive, eager, and deeply committed staff awaiting his direction.

The Salmonid Enhancement Program is not, as some seem to think, in limbo. Our Minister, the Honourable Romeo LeBlanc, and the Provincial Minister of Recreation and Conservation, the Honourable Jack Radford, met at Kamloops on October 12th. Both agreed that the design and implementation of an enhancement program is a very desirable goal to pursue. However, there are certain steps to be taken before initiating field activities. From the federal point of view, first, agreement in principle by the Cabinet is required. Secondly, funding must be arranged through the normal governmental processes. Neither of these steps are expected to delay a 1975-76 start-up. The program will probably develop in two phases: Phase I being the period 1975-76 through 1977-78 during which time equal emphasis will be placed on planning and technical studies as on construction of fish facilities; and, Phase II being the period 1978-79 to the conclusion of the program during which time in addition to intensive construction activities continuation of certain technical studies, evaluation and operation of facilities will also be added. More word on the program the next time around.

I want to take this opportunity to extend to all staff my best wishes for a festive and joyful Christmas. The coming year, 1975, will be a momentous year for all of us in one way or another. May your personal aspirations be furthered in the new year.

Ron MacLeod

## Spurious Emissions

### PERSONNEL ACTIVITIES

Hugh McNairnay and wife have a daughter, 8 lb., Moira, as of October 31. He assures us she is a treat.

\* \* \* \* \*

Ian Stout and wife added a pair of girls (i.e. twins) to their family on November 14 (6 lb. & 6 lb. 7 oz.), Karen and Kristine.

\* \* \* \* \*

Central Coast biologist, Russ Hilland got married last month.

\* \* \* \* \*

Dave MacNeil, also of Central Coast Division, is getting married this month.

\* \* \* \* \*

Chuck Walker is in hospital recovering from appendicitis.

\* \* \* \* \*

Maurice Houghton has decided to retire (after five months holiday to consider it).

\* \* \* \* \*

Grant Scott has left his self proclaimed cushy position in Sandspit for a position in the New Westminster office.

\* \* \* \* \*

Ken Lucas, S.A.D.M. of F & M, and entourage were off to China for the last two weeks of November. Wally Johnson, the Director of the Nanaimo Biological Station also went so we may be able to provide some feedback on the trip.

\* \* \* \* \*

Rumor has it that by the time you get this paper the Regional Director General for Fisheries will have been announced and that most people will be pleased.

\* \* \* \* \*

The Rivers Inlet chinook sperm and egg take by the Washington Hatchery people went off without hitches again this year. Results from the first sperm take were supposed to be in this year but due to a breakdown in communications two different batches of fish were marked with the same mark. In short, the measureable results will be in next year. Because of the very poor water conditions there was some worry that the hatchery people would not even be able to get enough hatchery stock sperm to fertilize the few Rivers Inlet eggs taken.

Butter clams must be profitable now as both B.C. Packers and Babcock in Prince Rupert are processing butter clams. Harvesting is on permit. Siphons are being clipped.

\* \* \* \* \*

Also on clams, another experimental clam dredge has been tried on North Beach of Q.C.I. It seems more acceptable to Fisheries than the other because it damages fewer clams. It is unacceptable to some Islanders because of the noise pollution.

\* \* \* \* \*

How poor are chum returns this year? So poor that Blaney Creek incubation box facility is going to run about 20% short of eggs.

\* \* \* \* \*

Bumper stickers in Washington suggest there is a considerable backlash developing in response to that State's Indian fishery.

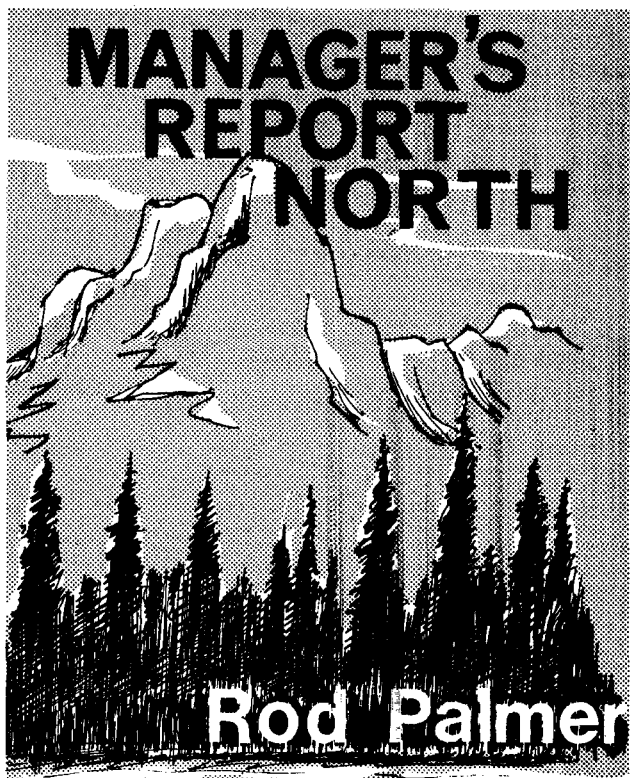
\* \* \* \* \*

A six section incubation box is now in operation at Fulton River site. The box, which filled with sockeye, is being used to determine winter problems in a severe climate as well as some loading tests.

\* \* \* \* \*

The Pacific Environmental Centre, the proposed home of D.O.E. in West Vancouver, has been shelved for an indefinite period. It would appear that our address will remain 1090 W. Pender for a while longer as Fisheries will be taking over E.P.S. space there.

\* \* \* \* \*



In this year-end issue it is perhaps appropriate to reflect on the past year and take a look at the future. The 1974 fishing season is now history and presents a story of both successes and failures.

The herring fishery was successfully managed in the respect that an adequate spawn deposition was achieved but management problems during the season were a frustration to both the managers and the fishermen. Looking to the future, we have now received an allocation of \$400,000 to manage the herring fishery in the Region. This will provide for charter patrolmen, aircraft charter, overtime, purse seine sampling, more fish finding equipment and hopefully the first steps toward development of a radio-telephone privacy system. Also, I hope the lessons we learned this year will result in better and less frustrating management in 1975.

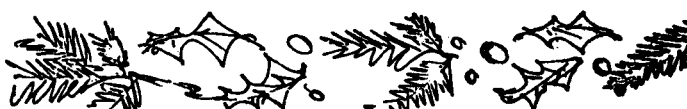
The bright spots of the 1974 salmon season in the north were the strong returns of sockeye to the Skeena River and Smiths Inlet and pinks to Area 8. The improved Rivers Inlet sockeye escapement which resulted from the closure of the fishery was also very encouraging. The pink salmon return to most northern areas was very disappointing in 1974 and low escapement followed by flooding in October portend a poor pink fishery in 1976. While I have not seen the prospects for 1975 at the time of writing, the expectations and management plans for next season will be developed during the next few weeks.

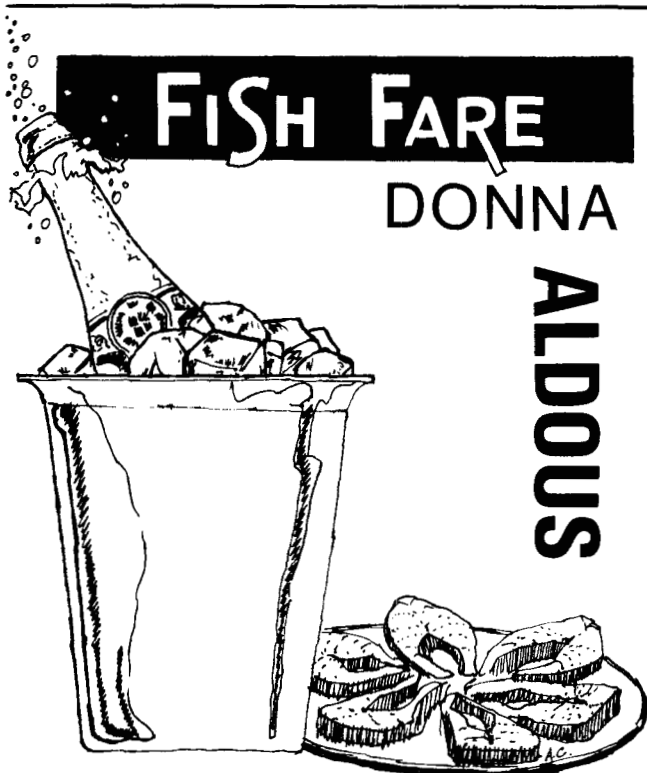
During the past year we have seen the first positive steps towards the birth of a major long-term salmon enhancement program. Ron MacLeod has devoted the past six months to incubation of the egg and we expect that an active program will be hatched during the coming year.

A modest in-service staff training program was carried out this year and this program will continue in 1975. Courses and seminars in resource management technology, use of sonar and sounders, blasting techniques, marine safety and equipment operation will continue during the coming year. George Barber has a heavy schedule planned for January.

Since I last reported to you in this paper I have attended meetings in Kitimat, Prince Rupert and Queen Charlotte to discuss our operational program and salmon enhancement. These sessions were very valuable to me. Recently I attended the International North Pacific Fisheries Commission annual meeting in Seattle and obtained some perspective of fisheries management at the international level. By the time this paper reaches you we will have held our herring and salmon expectations meeting here in Vancouver.

In closing, I would like to wish everyone a Merry Christmas and a prosperous New Year.





Let's face it, Christmas is upon us. It's time to dust off the tinsel and shine the silver for another round of holiday entertaining. Somehow, all the year's social commitments loom like unpaid debts, and we rush to return hospitality before the New Year rolls around. This is also a time of renewing old friendships, and for making new ones, which is done best by inviting people to your home.

The easiest plan for making a success of both of these aims is to hold a traditional "at home". The invitations simply state that you and yours will be At Home from, say 5:30 to 10:00 p.m. and your guests are cordially invited to join you. By extending the time past the usual cocktail hour, you can include more guests in a single evening, and in this way avoid holding several parties to complete your list of guests. Another helpful idea is to hold two parties on consecutive days. By planning and preparing the same menu in advance you will save yourself much time, energy and cost and the decorations will be fresh for both evenings.

It is not necessary to serve a dinner menu, buffet style. Plan a variety of hors d'oeuvres, both hot and cold, a cheese fondue and a tray of sweets, and you will have ample food for this type of entertainment.

Many appetizers can be prepared days in advance and frozen, to be thawed as needed.

Brighten your buffet with these canapes and hors d'oeuvres, made with fish and seafood.

#### ANGELS ON HORSEBACK Simple, but elegant!

Fresh, canned or smoked oysters  
Side bacon, sliced.

If oysters are very large, cut into bite-sized portions. Cut bacon slices into thirds, and wrap around the oyster. Secure with a toothpick and place on a broiler pan. Broil about 4 inches from the source of heat, for 8 to 10 minutes or until bacon is crisp. Turn once and complete cooking.

#### SALMON MINI-BITES

1 (3-3/4 ounce) can salmon  
1 cup corn flakes, crushed (1/4 cup crumbs)  
1/2 teaspoon seasoned salt  
2 tablespoons mayonnaise-type salad dressing  
2 teaspoons sweet green pickle relish  
Corn flake crumbs

Flake salmon with juice; remove bones. Mix with crushed corn flakes and seasoned salt. Blend salad dressing with relish. Add to salmon mixture; mix well. Make into tiny bite-size balls. Roll in cornflake crumbs. Chill. Makes about 12 balls. Recipe can be doubled or tripled, if desired.

#### SEAFOOD PRETTIES

Cut fancy Christmas-shapes from thinly sliced white, whole wheat or rye bread. Spread with softened cream cheese (use half and half cream to soften, if necessary) and top with smoked salmon pieces, caviar, pickled herring or crabmeat. Garnish with additional cream cheese in borders (use a pastry tube) and bits of pimento, green pepper or ripe or stuffed olives.

#### CLAM-STUFFED MUSHROOMS

Minced clams give decisive flavour to this stuffing for extra big mushroom caps. Let these garnish the platter of roast chicken or turkey on Christmas day.

8 large mushrooms (about 2 1/2 inches in diameter)  
1 small onion  
4 tablespoons butter or margarine  
1 slice white bread, diced  
1 can (7 1/2 ounce) minced clams, drained  
3 tablespoons shredded Parmesan cheese



1 tablespoon chopped parsley  
 3 tablespoons dry white wine  
 1 clove garlic, minced  
 $\frac{1}{4}$  teaspoon dried tarragon, crumbled  
 1 egg yolk  
 3 tablespoons whipping cream

Pull the stems from the mushrooms and reserve caps. Finely chop the stems along with the onion and saute in 2 tablespoons of the butter. Add the bread cubes, clams, parsley, wine, garlic, and tarragon, and cook a few minutes longer. Beat egg yolk until light, blend in cream and stir into the hot stuffing mixture. Melt remaining butter in a shallow fire-proof baking pan or frying pan and turn mushroom caps in it, coating both sides. Turn caps hollow side up and mound stuffing mixture in them. Sprinkle stuffing with cheese. You can refrigerate at this point. Bake in 350 degree oven for 15 minutes, or until hot through. Use as an hors d'oeuvre, or arrange around roasted turkey as a garnish. Makes 4 servings, 2 per person.

#### SMOKED SALMON ROLLS

1 can (7 ounce) smoked salmon  
 $\frac{1}{4}$  cup mayonnaise or salad dressing  
 2 tablespoons lemon juice  
 1 teaspoon horse-radish

1 teaspoon grated onion  
 1 cup pastry mix  
 Paprika

Drain and flake salmon. Add mayonnaise, lemon juice, and seasonings; blend into a paste. Prepare pastry according to directions. Divide in half; roll very thin in circle about 9 inches in diameter. Spread with salmon mixture. Cut into wedge-shaped pieces, and roll in jelly-roll fashion, beginning at the round edge. Score top of rolls with fork, and sprinkle with paprika. Bake in a hot oven, 425 degrees F., for 15 to 20 minutes or until brown. Serve hot or cold. Makes approximately 32 rolls.



NATIONAL FILM BOARD PHOTO

#### CLAMDIGGER DIP

1 can (7 $\frac{1}{2}$  ounces) minced clams  
 1 package (8 ounces) cream cheese  
 1 tablespoon lemon juice  
 1 tablespoon grated onion

1 teaspoon chopped parsley  
 1 teaspoon Worcestershire sauce  
 $\frac{1}{4}$  teaspoon salt  
 $\frac{1}{8}$  teaspoon hot pepper sauce

Drain clams and reserve liquid. Cream the cheese. Add seasonings and clams. Mix well and chill. To thin dip, if necessary, add clam liquid gradually. Serve with raw vegetables, chips or crackers. (Makes 1-1/3 cups)



NATIONAL FILM BOARD PHOTO

#### TUNA PUFFS

2 can (6 $\frac{1}{2}$  or 7 ounces, each) tuna  
 1 cup finely chopped celery  
 $\frac{1}{2}$  cup mayonnaise or salad dressing  
 2 tablespoons chopped onion  
 2 tablespoons chopped sweet pickle  
 Salt to taste  
 Puff Shells

Drain and flake tuna. Combine all ingredients, except puff shells. Mix thoroughly. Cut tops from puff shells. Fill each puff shell with approximately 2 teaspoons of salad. Makes approximately 55 hors d'oeuvres.

Looking for a different idea for New Year's Eve? If you like to have people in, why not try a Paella Party? This is a gourmet's delight that is easy to prepare, and can be stretched to serve a crowd. It is flexible, and if the fresh seafood is not available, canned clams, frozen shrimp, and even pieces of fish can be substituted. At any rate, it will be a most welcome change from poultry and ham, and all the more mundane traditional foods commonly served at this time of year.

The recipe originated in Spain, when the Moors brought saffron and rice to that country. A paella pan is commonly used, which is a heavy, double-handled, broad flat pan. If you don't have one, a large casserole or dutch oven will serve. The recipe is related to the one created in New Orleans called Jambalaya, a combination of ham and paella.

#### PAELLA VALENCIANA

A 1 $\frac{1}{2}$  to 2 pound live lobster, or 1 $\frac{1}{2}$  lbs. lobster tails, thawed  
 24 medium-sized raw shrimps in their shells  
 12 small hard-shelled clams  
 12 mussels

3 chorizos, or substitute  $\frac{1}{2}$  pound other garlic-seasoned smoked pork sausage  
 A  $1\frac{1}{2}$  to 2 pound chicken, cut into 12 serving pieces; or 3 legs and 3 breasts  
 2 teaspoons salt  
 Freshly ground black pepper  
 $\frac{1}{2}$  cup olive oil  
 2 ounces lean boneless pork, or ham, cut into  $\frac{1}{4}$  inch cubes  
 $\frac{1}{2}$  cup finely chopped onions  
 1 teaspoon finely chopped garlic  
 1 medium-sized sweet red or green pepper, seeded deribbed and cut into strips  $1\frac{1}{2}$  inches long and  $\frac{1}{2}$  inch wide  
 1 large tomato, peeled, seeded and finely chopped  
 3 cups raw medium or long-grain regular-milled rice or imported short-grain rice  
 $\frac{1}{4}$  teaspoon ground saffron or saffron threads pulverized with a mortar and pestle or with the back of a spoon  
 6 cups boiling water  
 $\frac{1}{2}$  cup fresh peas ( $\frac{1}{2}$  pound) or substitute  $\frac{1}{2}$  cup thoroughly defrosted frozen peas  
 2 lemons, each cut lengthwise into 6 wedges

Note: In Spain, a paella may be simple or elaborate. Vary the combination of chicken, meats and shellfish, if you like, to suite your taste. For example, you may omit the lobster altogether or replace it with 6 or 8 additional shrimp. Clams and mussels may be used interchangeably. Add rabbit or let it replace the chicken. Cubed ham, veal or beef might be used instead of the pork or the sausage. Squid - even snails - are appropriate. Cooked green string beans or artichoke hearts may be added, or substituted for the peas.

With a cleaver or large, heavy knife, chop off the tail section of the lobster at the point where it joins the body and twist or cut off the large claws. Remove and discard the gelatinous sac (stomach) in the head and the long intestinal vein attached to it. Without removing the shell, cut the tail cross-wise into 1-inch-thick slices and split the body of the lobster in half lengthwise, then crosswise into quarters. Set aside.

Shell the shrimp, leaving the tails intact. With a small, sharp knife devein the shrimp by making a shallow incision down their backs and lifting out the intestinal vein with the point of the knife. Scrub the clams and mussels thoroughly with a stiff brush or soapless steel-mesh scouring pad under cold running water and remove the black, ropelike tufts from the mussels. Set the shrimp, clams and mussels aside on separate plates.

Place the sausages in an 8 to 10-inch skillet and prick them in two or three places with the point of a small, sharp knife. Add enough cold water to cover them completely and bring to a boil over high heat. Then reduce the heat to low and simmer uncovered for 5 minutes. Drain on paper towels and slice them into  $\frac{1}{4}$ -inch rounds.

Pat the chicken dry with paper towels and season it with 1 teaspoon of the salt and a few grindings of pepper. In a heavy 10 to 12-inch skillet, heat  $\frac{1}{4}$  cup of the olive oil over high heat until a light haze forms above it. Add the chicken, skin side down, and brown it well, turning the pieces with tongs and regulating the heat so they color evenly without burning. As the pieces become a rich golden brown, remove them to a plate.

Add the lobster to the oil remaining in the skillet. Turning the pieces frequently, cook over high heat for 2 or 3 minutes or until the shell begins to turn pink. Set the lobster aside on a separate plate and add the sausages to the pan. Brown the slices quickly on both sides, then spread them on paper towels to drain.

To make the SOFRITO, discard all the fat remaining in the skillet and in its place add the remaining  $\frac{1}{4}$  cup of olive oil. Heat until a light haze forms above it, add the pork and brown it quickly on all sides over high heat. Add the onions, garlic, pepper strips and tomato. Stirring constantly, cook briskly until most of the liquid in the pan evaporates and the mixture is thick enough to hold its shape lightly in a spoon. Set the SOFRITO aside.

About a half hour before you plan to serve the Paella, preheat the oven to 400 degrees. In a 14-inch Paella pan or a skillet or casserole at least 14 inches in diameter and 2-to 2 $\frac{1}{2}$ -inches deep, combine the SOFRITO, rice, the remaining 1 teaspoon of salt and the saffron. Pour in the boiling water, and stirring constantly, bring to a boil over high heat. Remove the pan from the heat immediately. (Taste the liquid for seasoning and add more salt if necessary.) Arrange the chicken, lobster, sausage, shrimp, clams and mussels on top of the rice and scatter the peas at random over the whole. Set the pan on the floor of the oven and bake uncovered for 25 to 30 minutes or until all the liquid has been absorbed by the rice and the grains are tender but not too soft. At no point should the Paella be stirred after it goes in the oven.

When the Paella is done, remove it from the oven and drape a kitchen towel loosely over the top. Let it rest for 5 to 8 minutes. Then garnish the Paella with the lemons and serve at the table directly from the pan.



PHOTO BY K. GLOVER

Nov - Dec / 74



# The Night Before Christmas

T'was the night before Christmas and all thru' the house  
There were empties and butts left around by some louse,  
And the last quart I'd hid by the chimney with care  
Had been swiped by some bum who'd discovered it there.  
My guests all long since had been poured in their beds  
To awake in the morning with God awful heads.  
My mouth, full of cotton, hung down to my lap,  
Because I was dying for one more nightcap.

When through the north window there came such a smell  
I sprang to my feet to see what the hell ...  
And what to my wondering eyes should appear  
But, hitched to a beer truck, eight bloated reindeer.  
With a little old driver so like a hick,  
But I saw it was Santa, as tight as a tick,  
Staggering onward, those eight reindeer came,  
While he hiccoughed and belched as he called them by name.

"On Schenley! On Seagram! We ain't got all night!  
You too, Haig and Haig! and you too, Black and White!  
Scram up on this roof, get the hell off this wall,  
Get going, you dummies, we got a long haul!"  
So up on the roof went the reindeer and truck  
But a tree branch hit Santa before he could duck,  
And then, in a tinkling, I heard from above,  
A hell of a noise that was no cooing dove.

So I pulled in my head, and I cocked a sharp ear,  
Down the chimney he plunged, landing smack on his rear.  
He was dressed up in furs, no cuffs on his pants,  
And the way the guy squirmed, well, I guess he had ants.  
He had pints and quarts in the sack on his back  
And a breath that'd blow a train right off the track.  
He was chubby and plump and he tried to stand right,  
But he didn't fool me, he was high as a kite.

He spoke not a word, but went straight to his work  
Missed half the stockings, the plastered old jerk!  
Then putting five fingers to the end of his nose,  
He gave me the bird, up the chimney he rose.  
He sprang for his truck at so fast a pace  
That he tripped on a gable and slid on his face.  
But I heard him burp when he passed out of sight  
"Merry Christmas, you rum-dums, now really get tight!"

Maxine Haugen

