Sounder

JAN-FEBRUARY 1976 Vol. IV No.1 Fisheries and Marine Service

FROM CHAIN GANGS TO LOG JAMS

Thanks to inmates from the Jordan River Corrections Camp, the log jam at the confluence of San Juan River and Mosquito Creek was removed at 10% of the expected cost.

An estimate of $50,000 was made to remove this jam and two others in the south fork tributaries which were presently passable but increasing in size. B. C. Forest Products and the B. C. Forest Service were not prepared to contribute funds to the removal project and contracting for removal was beyond the budgetary means of the Fisheries and Marine Service.

The Corrections Officer of the newly established Jordan River Camp, Mr. W. Dyke, was contacted through the B. C. Forest Service Ranger, Mr. R. Thomas. The appeal for a crew of inmates was well received since the camp staff were looking for projects for the residents.

With the manpower now assured, next came the problem of finding equipment. Crew transportation was provided by B. C. Forest Service with the loan of a "crummy." A local resident who owned a D-8 Cat was aggressively recruited by Fred Reder, Port Renfrew patrolman.

Besides obtaining the funding for the hire of the D-8 (with Mr. W. Dingee and his son as operators), George Neilson also purchased four chain saws and the project was underway.

Approximately two miles of access road was pushed in to the log jam sites under the direction of patrolman Fred Reder who pitched in bucking and setting chokers when time permitted.

Large logs were winched out, smaller ones bucked up and pushed to burning piles where three or four crew members kept the fires burning, and smaller debris was hand-picked and burned. Work crews averaged nine men.

Photos by Steve Zablosky
and Larry Duke

A spin-off from this project was the clearing-out of two coho streams using power saws and hand labour during the periods when heavy rain precluded burning at the jam sites.

As an alternative to leaving their pet stream enhancement projects untouched for lack of funds, I would recommend to those Officers who have a Correction Camp facility in their area that the cooperation of the local Forest Ranger be enlisted as they are responsible for detailing work projects to Correction Camps.

L. B. Duke

As in most working groups, among the inmates there were workers and non-workers. Once the purpose of their efforts was explained, most applied themselves well. Modern correctional methods are far removed from the stereotyped image of the chain gang making small rocks out of large ones. Today, inmate participation in work projects is strictly voluntary and restricted to inmates with "out of camp" clearance. Pay is 50¢ per day. Certain inmates may be cleared for "work release" programs in cases where the employer can supply accommodation etc., and under this system

inmates are paid at rates commensurate with those in industry.

From August 5th until October 10th inmates logged 336 man days. The D-8 (replaced later by a faster D-6) worked 180 hours. Total project cost, including purchase and repairs of saws and hand tools, was under $5,500.

BILLY

I was a Grade I Fishery Officer with less than two years of experience. My wife, my two little girls and I had moved to a new posting in October. The only accommodation available was in a shack on the waterfront and the rent was exorbitant. We were broke.

Two days before Christmas, I had exactly one dollar in my pocket. Therefore, when we saw that one more light was needed for the Christmas tree, we discussed, for some time, the pros and cons of spending fifteen cents for the lamp. The rest of the lights wouldn't work without the lamp so the cons won and I set out to the local hardware store.

Immediately before I reached the door of the store, I heard a soft voice behind me.

"Say! Is you the fish c'mmishner?"

I turned around to behold a short, grey-haired, tidy, elderly fisherman.

"I'm the Fishery Officer," I said.

"Oh! good. Say, I been lookin' for you. I got to get a fishin' licence. My name's Billy and I don't got no licence."

I asked him, "Do you want it for this year or next year?"

He looked sort of nonplussed so I went on, "Well, look. Did you fish this year?"

"Oh, sure," he replied. "But there was no fish commishner so I couldn't get no licence to catch salmons."

"Billy," I said, "you better save your buck. Then you come to see me on January 2nd and I will sell you a licence for the new year."

"Gee, thanks, commishner. Say! you know, I'm an old man and I walked all the way over here from the Village and I don't got no money to take the bus back. I walked all the way over here and I'm an old man. I'm seventy-six and it's a long way to walk all the way here from the Village."

"Sorry, Billy -- I'm kind of broke right now and --"

"Oh, gee, commishner. I'm an old man. I'm nearly seventy-six years old and I walked all the way over here from the Village and I don't got no money for the bus. It takes two bits to get a ride on the bus but I'm an old man and I don't catch much salmons 'cause the white mans come an' take all the salmons from us guys. The river use to be so full of fish you could walk across the river on their backs without getting no water on you feet but the white mans come an' took all the fish an' I'm an old man. I walked all the way over here from the Village and I don't got no two bits for the bus and the white --"

"Gosh!" I interrupted Billy. "I'm sorry, but I just can't --"

"Oh, chee whiz, commishner, I'm an old man and I walked all --"

"Hold it! Hold it!" I said. "Look. I've got to go into this store. You stay here. When I come out, I'll give you two bits."

"Gee, thanks, commishner. You're a good guy. I'm an old --"

Before he could get going on that again, I dashed into the store, bought my 15-cent item, went outside and handed Billy two bits.

"Gee, commishner! Thanks a lot. You really a good guy. Say! My old lady's just down the street. You got two bits for her too?"

I took back my quarter. Gave him four bits. And ran for home.

John Robinson

We the willing, led by the unknowing, are doing the impossible for the ungrateful. We have done so much for so long with so little, we are now qualified to do anthing with nothing.

- Found at joint U.S./Canada Military Base, Winchester, January 23, 1976

ALASKA TROOPERS VISIT PRINCE RUPERT

(l. to r. Officer Wendell Jones, Ketchikan; Sgt. Don Tetzlaff, Juneau; Tom Moojalsky, Prince Rupert; Officer Conrad Seibel, Ketchikan)

Four Alaska State Troopers, 3 from the Fish & Wildlife Protection Division visited the Prince Rupert Office of the FMS on the 2nd and 3rd of October, 1975. The Fish & Wildlife Officers were Sgt. Don Tetzlaff, Juneau, Officer Conrad Seibel, Ketchikan, and Officer Wendell Jones, Ketchikan, who doubles as a pilot on the division aircraft.

On the 3rd of October, '75, the troopers, accompanied by District Supervisor Tom Moojalsky, went for a short trip on board the "Kitimat II." The Alaskans were interested and impressed by our patrol fleet and vessels. The largest patrol vessel presently in use in Alaska is a 32' Bertram. Although our patrol fleet and calibre of vessel is far superior to what Alaska uses, we are behind in some other aspects of fishery law enforcement.

All agreed that it was beneficial to meet occasionally and exchange ideas and information. A similar meeting is planned for the spring in Juneau.

Tom Moojalsky

CANDU TAKES A WIFE

Following the killer whale capture in August, Marine and Game Farm in Niagara Falls then were faced with the problem of transporting the catch to Ontario. The following are letters with suggestions received from an elementary school in Beachville, Ontario.

Dear Sir,

I've got away to get the killer whale's wife overhere. Train it. Then get someone to ride it overhere. It is as simple as that. I hope you do it my way.

Yours truly

Allan

Dear Sir,

I know how you can get the Killer whale from Vancouver Island. Put a tank of water in a jet and fly her over.

Yours truly,

Jody

Dear Candu,

I have an idea haw to get the she whale over.

1. You can get a jet and put a tank of water in it.

2. or by boat

Will you please send me some tickets please?

Yours truly,

Scott Brett

Dear Sir,

I know how you can get Candu his lover. It is easy. All you have to do istake and you get a tank and a helicopter. Take the tank and hook it on the helicopter. Then take the tank over to Marineland.

Yours truly,

Eddie Roulston.

Dear Candu,

I think I have come up with an idea to get your wife to you. Build a big ark, with a pool on it. And put the whale in it and transport her.

Yours Truly,

Russel Pellow.

Dear sir. Tie a rocket on the Kiler whale with a thick rope and you follow Him with a boat.

Yours truly

Michael C

Dear Sir,

I have an idea for the whales. take a boat and a met on the bottom of the boat and put the whale in it.

Yours truly,

Steven

Dear Candu,

I like you very much.

So much that I want to marry you. But you're a whale. I want you to have a wife. I have an idea that will work. Why don't you all your helpers put their money to gether and buy a boat and get a plastic balloon with a boy whale on it. Let her run after it. She'll come soon Candu, I know it. There's more ideas.

Yours truly,

Kelly anne Heslinga

Dear Sir,

I have thought of a way to get the whale over to Marineland. Drag it in a boat.

Yours truly,

Lisa S.

Dear Sir,

Put a big tub in the jet and fill it full of water and put her in it.

Yours, truly,

David Ionson

Dear sir,

I have an idia so you can get the girl killer whale from British Clombia to Marineland. Make a cage whith bars a cross the top and thick seel walls. Fill it with water and then put a strong line on it and a helicopter. Then put the whale in it and fly it back to Marineland.

Yours truly

Daryl Dawson

Dear sir,

I know a way how you can get the lady whale from British Columbia to Niagara Falls. you take a rope and tie it on to a boat and drag itough the water.

Yours truly

Sherri Armstrong

THE Sounder

Kate Glover,
Editor
1090 W. Pender St.,
Vancouver I, B. C.

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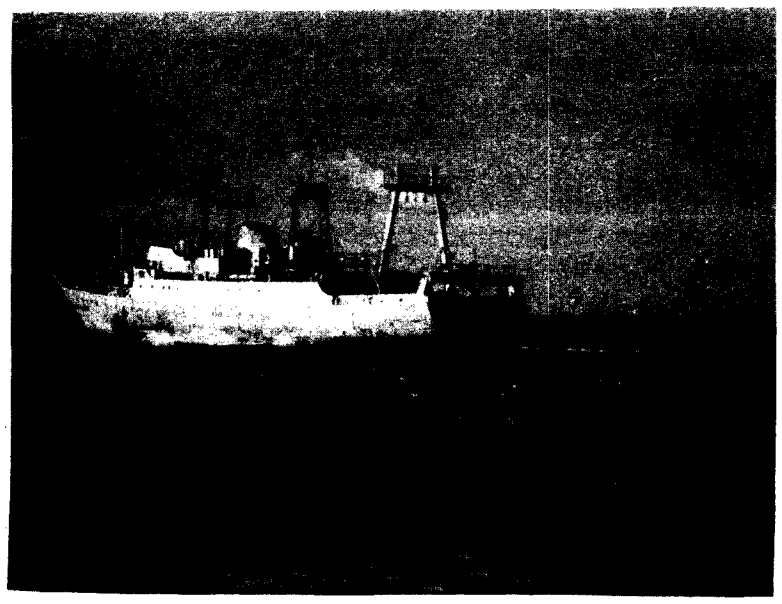
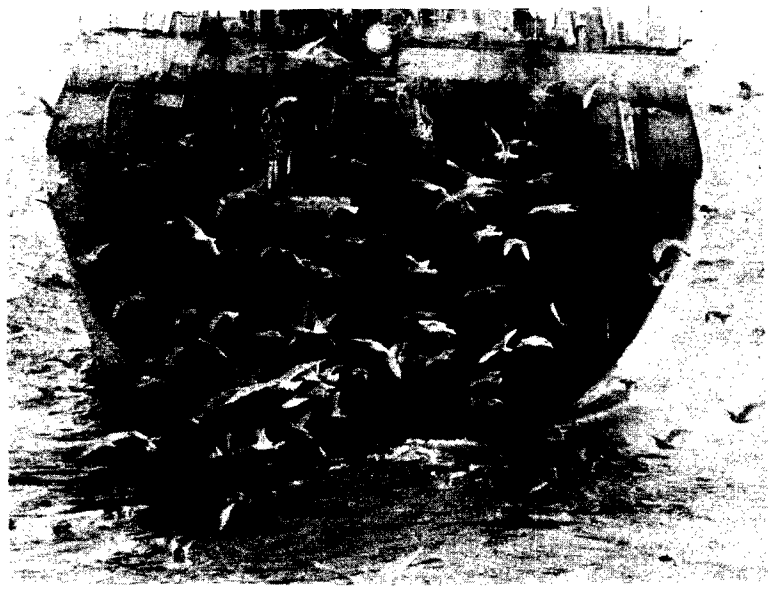
FOREIGN HERRING FISHERY

On December 10, 1975, Armed Forces Aircraft observed two East German (G.D.R.) trawlers working in the vicinity of the Finger Bank (in international waters) off of the West Coast of Vancouver Island. As large quantities of herring are known to be present in that area, the "TANU" was sent to observe their operations. By 0900 hours on December 12 the "TANU" had confirmed that the two vessels, "BERNHARD KELLERMANN" and "RUDOLF LEONHARD," did appear to be catching herring. The "TANU" made radio contact with the "RUDOLF LEONHARD" and concern was expressed over their fishing of herring.



On Monday, December 15, I left Victoria on the "LAURIER" to photograph the G.D.R. vessels and their fishing operation. Prior to the arrival of the "LAURIER" at the Finger Bank, Captain Monks and T. Preston of the "TANU" had boarded the "RUDOLF LEONHARD" and repeated the concern over their fishing of herring. They also obtained a sample from the "LEONHARD"'s catch.

On the trip to the Finger Bank, the "LAURIER" had picked up two Christmas trees for the G.D.R. vessels as it was known they would be spending Christmas at sea. On Tuesday, December 16, the Captain of the "RUDOLF LEONHARD" agreed to accept a boarding party from the "LAURIER" to obtain more information on their operation, their future plans, and to receive the Christmas tree.



Captain G. Nèlson, J. Gosse and myself made the transfer on the "LAURIER"'s canova boat. I felt somewhat dwarfed in the canova as I hopped in alongside the "LAURIER," and totally dwarfed as we came alongside the 250-foot "RUDOLF LEONHARD." Timing the swells to get a firm grip on the rope ladder, we scrambled one by one up the side of the trawler.

Our reception was cordial, and after presenting the Christmas tree, we were taken to the Captain's quarters for our meeting. The "RUDOLF LEONHARD"'s radio operator acted as translator while the formalities of our meeting were conducted over coffee and drinks. Following our frank discussion in which we expressed our concerns and the trawler's Captain indicated he must follow his orders, we were taken on a tour of the bridge, fishing deck, and fish processing facilities before returning to the "LAURIER."

I was impressed with the efficiency of the East German fishing operation, and the utilization of the catch which could be processed in the freshest possible condition with no waste. My estimate of the total catch for the two boats to leave loaded was 2,000 to 2,500 tons. Echo sounding by the "LAURIER" on the Finger Bank while I was aboard indicated substantial stocks of herring. I estimated in excess of 25,000 tons. So, for the current year, we should not expect a serious reduction in herring abundance for the roe fishery on the West Coast of Vancouver Island. However, the fact remains that substantial amounts of our

herring stocks are vulnerable to foreign fishing vessels. At present, Soviet Union and Polish trawlers have agreed not to fish our herring stocks, but until we have control over all of our continental shelf, we have no authority to manage a substantial portion of our fisheries resource.

Rick Boyd

Photos by Rick Boyd: 1. "BERNHARD KELLERMANN" towing. 2. "BERNHARD KELLERMANN" pulling full cod end of herring on deck (40-50 tons). 3. Boarding party on "RUDOLF LEONHARD" - Capt. G. Nelson, J. Gosse, captain and radio operator of "RUDOLF LEONHARD".

going home

Within the City's pallid smoke-gloomed
shell,
I mark my painful plodding daily place.
Pressed hard by civilisation - or by
hell,
Harried, hurried, hustled time - and
space.

Neighbours pressing close don't even
know me,
Downcast sun-drained faces boding doom.
Sounds of strife and anguish from below
me,
Four walls and a door, my world - my
room.

Bathing in the ceaseless stench of City,
Noise cascading numbly on my brain.
Pressing through my day, sans love or
pity,
Dealing as I'm dealt - deceit and shame.

Yet I know the far flung snow spread
mountains,
Learned to love them at my father's
knee.
Climbed the flower drenched fields
cascading down them,
Fled before them to the laughing sea.

Lord, the love of nature is bred in me,
Passed to me - a wilder legacy,
Sent to salve my slow death in this City,
Sent to save my soul and set it free.

And Lord, someday soon I'm going back
there,
Either as myself or as my son,
Back among the cougar and the black bear,
Back there when my City life is done.

To the stillness of the mountain valley,
To the desolation of the coast.
Back in life, or death - it doesn't
matter,
To the wild land that I cherish most.

Phil Meyer

DO THE FISH HAVE A CHANCE?

A look at the fish-finding equipment used on Japanese boats in Sakaiminato on the Sea of Japan suggests that the fish do not have much of a chance. The boats all had a large investment in electronics. HF, VHF and GRS radios were universally installed together with a pair of loran receivers and as many as three direction finders. Off the coast of Korea accurate navigation has become essential. Recently two crewmen were killed during the seizure of a fish boat that had strayed a little too close to shore.

The advanced design of the echo sounders and sonars in use was most impressive. It was common to find dual frequency 2 kw to 10 kw multistylus bottom-lock echo sounders. Some of these could give simultaneous high and low frequency records on 12 inch paper or display one frequency with very great detail across the full paper width.

A few sonar-equipped vessels were in port at the time. The sets were from 4 to 10 kw; these large sets being installed in vessels as small as 20 meters. None were of the 90° or 360° scanning types that are becoming popular.

There is a great deal of well-earned trust between the service technicians and the fishermen. This allows the technician to do adequate preventative maintenance so in-service failures are infrequent. The technicians I met had all been trained in the factory and were very competent at their job.

Almost all new fish boats under 25 meters are fibreglas; these boats have many unsolved HF radio and electrical noise problems. At least in this area some of the Sooke class vessels are far ahead of them.

Peter Ryan

Spurious Emissions

Doreene Barrow has retired after 30 years in the Public Service and another secretary, Marjorie Moffat, has resigned to go and work in Australia.

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Al Lill has moved to the Enhancement Program on secondment with Division staff filling in the Chief's position in the interim.

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Cleone Gallant is moving from Licencing to work for Phil Meyer in S.O.B.

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The 20th Century has finally caught up with the Fisheries office at Bella Bella. They finally got a telephone.

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Rod Palmer has been seconded by Dr. Geen to develop a support service for the Region. Al Gibson takes over as A/Manager, N.O.B., to be followed by Bern Hawley.

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Morley Farwell has joined the Central Coast staff as a biologist. His responsibilities initially will be in the area of salmon enhancement.

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It's somewhat disconcerting that the carving knife used for the smoked salmon at the Christmas party has gone missing just when the reorganization discussions are heating up.

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The following note was received recently accompanied by a $20 money order: This $20 is in payment of Dept. of Fisheries property retained unlawfully by me many years ago.

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CONTINUING: THE GREAT GUN DEBATE

The following article is reprinted from Wyoming Wildlife. It is an interesting account of how the Fish and Game Commission in that state handled the "sidearms issue" and covers the officers' feelings (pro and con) on the subject and also the way the Commission itself approached it.

Should a game warden go about his duties armed or unarmed? This question has started many a lively discussion among Wyoming game wardens. The number of different opinions expressed was usually equal to the number of wardens in the discussion.

You would hear remarks such as: "I wear my gun when I'm working at night."

"A gun will only get you in trouble."

"I always wear a gun when working on horseback."

"I can't hit anything with a pistol, so why wear one?"

"I think we should carry a pistol, but I'm not going to do it until it is required."

In past years a look at the Department policy manual was not very helpful in answering this question. The manual simply stated that the use of firearms was not justified in making a misdemeanor arrest. Carrying a pistol was not required, and it was not prohibited, nor was it officially permitted.

I think that all of us knew that we should be wearing a pistol because everybody had one. If there was a game warden in the state that couldn't find a pistol somewhere in his pickup, I don't know who he was. There was never any discussion about owning a pistol, just about wearing one.

In Wyoming, law officers of any kind are few and scattered. In any search or manhunt, the local game warden can contribute his knowledge of the country, four-wheel-drive vehicle, horse or snowmachine, and direct radio contact with highway patrol and sheriff's officers. Whenever crime gets off the paved roads, a game warden is usually called.

As far as I was concerned the discussion ended in July of 1971. I was asked to help two other wardens locate an alleged antelope poacher in Cheyenne. We were armed with an arrest warrant and the whole thing sounded quite simple. Our inquiries revealed that our man owned a business, had a wife and home in Cheyenne, his reputation was excellent, and he had suddenly left town. We knew he was avoiding us, but felt sure that with a little leg work and patience we could find him. In the course of our search we talked to a merchant that knew our man and we were told that we had the wrong name of the suspect, which was probably why we couldn't locate him. When we left the store we had another name, his date of birth, and social security number, which we fed into the National Crime Information Center. Within seconds, we were advised that we had a "hit" on the N.C.I.C. computer. We immediately drove to the radio room to pick up our copy of the teletype.

The message was quite long, and I have forgotten exactly what our citizen with the good reputation was wanted for, but there were some things in that teletype that I can still see whenever I think about it, such as: "interstate fugitive;" "mental patient;" "escape risk;" "armed and dangerous." Without uttering a word the three of us went to our trucks. Each warden got a pistol and put it on.

Since that time my pistol enjoys the same status as my hat and boots. I put it on when I leave for work and wear it until I get home. I have no idea what effect this incident had on the other two wardens, but I do know that since that time I have never seen either of them on duty without a pistol.

This incident only affected three officers and I don't believe it started a trend, but it has become obvious over the past four or five years that more and more wardens include a pistol as part of the uniform that they put on every morning. For reasons of their own, our officers are deciding that this is the right way to go.

Game division administrators have encouraged this trend in a rather indirect manner. For many years we were authorized to attend Wyoming's one police combat pistol match on Department time, however, we were to pay our own entrance fees and furnish our own ammunition. Then in December, 1969, a small amount of money was made available to help defray the expense of ammunition for wardens who had entered pistol matches.

In 1970 three of us were authorized to attend a police firearms instructor school, "if we wanted to." The first Department money for ammunition and tar-

gets became available in 1971 and all officers were required to attend training sessions and fire the national police course. The year 1974 brought even more changes. A firearms instructor was appointed in each of Wyoming's seven game division districts and the Wyoming Game and Fish Commission adopted a firearms policy for enforcement personnel. A Wyoming game warden now has official permission to carry a pistol. Money has been approved in the 1975 budget to purchase sidearms for all of the Department's law enforcement officers.

With the Department purchase of firearms, the easy part of the program ends and the never-ending hard part begins. The Game and Fish Department recognizes that it has taken on an added responsibility by arming their enforcement officers, and that a continuing training program is an absolute must. An armed officer must have confidence in his ability to quickly draw his sidearm and use it with accuracy. He must also know when to shoot and when not to shoot, and he must realize that by wearing a gun, he has taken on more responsibility. The public, often ready to criticize a government employee, will take a little closer look at the local game warden when he starts wearing a pistol.

The Department marksmanship training program, so far, has consisted of firing the national police course. This is a 60-shot course fired at a silhouette target. All firing is against time at distances from 7 to 50 yards. The course incorporates both single and double-action shooting, firing with both right and left hands, and reloading under time. The training possibilities of this type of course are obvious. The drawbacks are, possibly, not quite so obvious. The amount of time and ammunition required to become proficient on this course is usually more than most departments are willing to invest.

A few Wyoming wardens have become interested in police combat competition. On their own time they have worked to develop their skill at the national police course. But for the men that do not have an interest in competitive shooting, the whole thing is pretty discouraging. Only about 10 percent of our officers are presently capable of shooting a 90 percent score on this course, another 10 percent can shoot a score of over 80 percent. This is not good enough but it probably won't change as long as we shoot a course that requires such a high degree of accuracy. Other courses of fire that place more emphasis on speed of the first shot and less emphasis on pinpoint accuracy are more practical for the average officer.

District five (Laramie), recently tried such a course, adding extra points for speed of the first shot to the actual score on the target. The scores for nine wardens varied from 60 to 84 percent of a perfect score. These same men on the national police course would shoot scores varying from 45 to 95 percent. It seems that the good shots were not quite as good as they thought, and the poorer shots were shooting a lot better than they thought they could. We will probably continue using different types of short-range courses for officer qualification, while continuing to promote interest in the national police course for those who wish to develop their skill and shoot competitively. One way or another, the armed game warden has arrived in Wyoming.

A PATROLMAN'S LOT IS NOT A HAPPY ONE

So heads a chapter of Fishing - British Columbia's Commercial Fishing History. Written by Joseph E. and Anne D. Forester of Victoria, the book traces the development of the B. C. fishing industry from the days of participation only by Indians through the days of expansion of canneries and unionism to the present period of highly sophisticated operation and covering fishing methods and government involvement.

Amongst the myriad of photographs, cartoons and sketches in the book is Hugh McNairnay's classic cartoon of the 1974 Sonar and Sounder Course.

Fisheries & Marine Service gets called by many names but plaudits abound and there is nothing but praise for the fishery officer and marine service personnel. The last paragraph sums this up. "Protection and encouragement of the fisheries remains the basic task of the Fisheries patrol. Now, as before, what may be lacking in manpower and number or size of vessels is compensated for by dedication and service on the part of the men."

George McIndoe's Enforcement Excerpts from one of last year's Sounders is also reprinted. But along with this lighter side of enforcement work the authors have added some perspective with "Fisheries officers assigned to the area to enforce regulations handed down by the government have, over the years, had to use their own judgment and sense of discretion in the interpretation of regulations, making representations to Ottawa for necessary changes. Their efforts to bring regulations more into line with local needs have been joined by those of the canneries and unions."

NEW UNIVAC 1106

The Department of the Environment has recently acquired a fairly large UNIVAC 1106 computing system to serve the combined requirements of all West Coast components of the Department, including ourselves. The system will be installed at Ocean and Aquatic Sciences at Patricia Bay, outside Victoria, and will eventually become part of the Institute for Ocean Sciences currently being built there. Startup date for the computer is scheduled for June, 1976.

Remote job entry facilities (high-speed card reader and line printer) will be located at Pat Bay and in downtown Vancouver. Eventually, other remote job entry points will be in Nanaimo, Victoria, West Vancouver, U.B.C. campus and a second terminal in downtown Vancouver. A Number of low-speed conversational terminals will also be available connecting over normal phone lines.

For further information contact Dave Stevens (666-6614), 6th floor, 1090 W. Pender Street.

Letters to the Editor

Editor:

Even further to the "Firearms Issue" published in the November - December issue, with respect I would like to comment on Alan Gibson's letter.

Your suggestions for a change of tactics are not "all wet," in fact, they have been tried to a considerable magnitude during the past eight months and I might say with some success.

We even experienced deterrent penalties in two instances. (One resulted in a $1,000.00 fine, the other in a 9-month prison sentence for assault).

With regard to the emphasis on the fish buyers it has always been our policy and philosophy, when possible, to attack the problem at this level, however, because we are responsible for the protection of the salmon resource in certain areas and localities, it is imperative that some races and stocks of salmon be protected on the migration route or spawning grounds.

In other words it would be acting after the fact and to the detriment of the resource if we allowed poachers to remove the fish unrestricted and put all the emphasis for enforcement on the buyer.

I agree support from our public relations unit and deterrent penalties (fines and incarceration) will help.

Now to get to the reality of the present state of affairs. Whether you wish to believe this or not, the situation in the Fraser Valley is so dangerous to the Officers involved, they will not carry out an effective preventative enforcement program unless they have adequate personal protection. In this regard, I support my staff wholeheartedly.

Firearms are used by policy and other law enforcement agencies for personal protection only. Are you personally offended, or do you feel threatened when you see an armed policeman in your community? I certainly hope not!

I have an alternative to providing Fisheries enforcement staff with arms -- training and expertise to deal with this problem.

Let us withdraw from this type of activity! It is extremely callous and insensitive to be opposed for ideological or philosophical reasons.

Let the R.C.M.P. have it -- the whole damn mess! You won't hear any squawks or complaints from the Fraser Valley.

L. S. Freeman

Dear Editor:

Whether to provide firearms to Fishery Officers appears to be a current question. However, it is not a new problem by any means; rather it is one that has been with us for many years and will continue to be with us unless a decision is made in favour of arms as a standard issue to all Fishery Officers, after an appropriate training period.

Fishery Officers of more than a few years experience can undoubtedly recall the periodic flare-ups of actual shooting incidents and/or intimidation by firearms at various times and places in the past -- apart from the Fraser Valley. One does not necessarily have to work that locale to appreciate the significance of the problem throughout the Region. There are numerous experiences amongst the seasoned field officers where merely the carrying of a rifle, to all intents and purposes for protection against bears and for predator control, was sufficient to offset a threat of violence. To my knowledge no violator was ever shot, nor is one likely to be. There is a common understanding amongst law enforcement people that initial shots by them are never aimed to maim or kill but are meant as a warning -- to cease and desist with the infraction at hand. Only under the most extreme provocation would there be any likelihood of a deliberate "shoot-to-disable" incident by a Fishery Officer. The necessary training program and Departmental policy should instill this concept in the minds of those who carry firearms.

Perhaps the illegal fish runners and fish buyers should receive more attention in our enforcement activities than what we are presently able to muster. However, improved public relations and heavy fines would not necessarily suppress the problem -- more men and equipment would be needed. Public relations and deterrent fines work well with socially conscienceable people but the hard-core fish peddlers do not fall into this category. They only recognize a force greater than their own before they will back down. This means better equipment, including firearms, is needed for our enforcement officers in addition to the tools-of-the-trade which they now work with.

J. A. Kent

Dear Editor:

I have just finished reading the Nov-Dec copy of the Sounder -- with much interest. A good issue. I would like to make reference to Mr. Alan Gibson's letter to the Editor on the Firearms issue and the poaching problem in general. And also the Sept-Oct issue of the Sounder on the same subject (Pages 6 and 7). As we have a few poachers on the Somass River system this subject is of interest to me and was discussed at some length at our last Divisional meeting in Port Alberni. It was apparent that direction on this matter still has not been finalized from the "Tower." However, during the course of the 3-day meeting

the situation was promptly solved by one of the Divisional jokers during a coffee break when the following appeared on a "flip-chart":

"Following our policy of having
no policy,
we will continue to do nothing."

Funny as hell, eh? Not if "they" are dropping boulders off bridges on your jet boat as it passes or threats to start shooting -- then not so funny. In regards to the Sept-Oct issue, pages 6 and 7 -- there is not much left to be said about guns -- for or against. Though the article "for" was pretty fair -- the section "against" was pure crap obviously written by someone who knows nil about the problem. Call Fishery Officers what you will -- but the image we present to ANY poacher must be that of an ENFORCEMENT OFFICER -- armed or not. Alan Gibson in the Nov-Dec issue remarks about our present public image. Good thing he didn't specify what it was -- the R.C.M.P. on Vancouver Island think we are a Division of "F" Troop -- the organized poachers think less of us -- and all due to last season's inaction. Solution to this poaching problem? Even when we FINALLY get into gear, it is not going to be easy. Too much money attached to it -- locally sockeye used to sell for $2.00 -- now it's $5.00. Seems to be a general breakdown of "Law and Order" generally throughout the country. I think if we look at it from a positive angle it's fairly simple -- we need: enough trained Officers to carry out whatever function so required. By this I don't mean mainly seasonal staff. Full time Officers with training have enough grief as it is trying to cope without depending or expecting miracles from hourly paid troops.

The issuance of and training in the handling of firearms to Fishery Officers where required and remove the "boogy man" attitude as it applies to Side Arms. What is the difference as long as it fires a lead slug? Easier to carry and God forbid -- if someone is shot -- if it's with a .38 or something -- at least you may still have something left for a trial. Not so with a rifle or shotgun. Our people who are going to have to solve this problem require some sort of self-protection. I don't like to admit it's a fact but it's either that or issue track shoes and little white flags -- that's where we are now . . .

Or . . . just hand out to Poachers et al the Branch book on -- "Report of Sales to other than Commercial Buyers" -- at least that way our statistics wouldn't be out too much.

J. D. McCulloch

P.S.
Reference the Nov-Dec issue -- re: Hugh McNairnay's solution. Thank you, Hugh, for enlightening us poor souls as to the present state of the outfit -- you are to be congratulated on your enormous insight in identifying this problem.

Dear Kate:

I thought your readers might be interested in a brief article which appeared in the St. John's, Newfoundland, Daily News on December 16 as follows:

FISHERMEN CONVICTED

MOSCOW (AP) - Three men were sentenced to two years in a Siberian corrective labor camp for illegally netting 70 sturgeon, the Communist party paper Pravda reported Monday. Sturgeon caviar is one of the Soviet Union's prime exports.

Some of your readers may be aware that the Government plans to amend the Fisheries Act in the near future to strengthen its penalty sections among other things. I would be interested to know if any of your readers could advise if our enforcement problems might be made easier by stealing a leaf from the Soviet's book and perhaps adopting some labour camp penalties!

K. C. Lucas,
Senior Assistant Deputy Minister,
Fisheries and Marine Service.

The Editor
The Sounder

Suspicions Confirmed

I read with interest the guest editorial on decentralization. Did I say interest? I mean amusement!

It should be apparent by questions raised by Brian Richman in the last edition of the Sounder and by others previously, that there is a very wide gap between field staff and others called headquarters personnel. By reading the editorial, it seems apparent that there are other, more pressing problems bothering some headquarters staff, other than problems directly related to the management and continuation of our fishery resource. Problems such as "Costs to the individual," "live in apartments," "lower level of recreational opportunity," "opportunity for shopping," etc. . . . These are where the real management problems are.

Never mind trivial matters such as adequate technical input at on-site problems on the many salmon rivers in the province. On-site discussion of a vexing road construction problem in the interior. Technical advice on sewerage disposal on the Queen Charlottes or Northern B. C. No time for an on-site biological study of a minor stream near Smithers.

These latter problems can be looked into by the Department's second class citizens, the Fishery Officer.

Fishery Officers are built in such a way that they do not require homes, education for their children, entertainment or any other amenities.

"Communication would become a problem." Communication is a problem when a person can eliminate from his mind a portion of the Department and think only of his personal comfort.

Also I did not realize that the fishing industry carried on so long in the Vancouver area as compared to the other (remote) areas of the coast.

FACT: Fishing is carried out year round in Prince Rupert and Vancouver.

FACT: Salmon fishing commences on February 1st in the Prince Rupert area but not until March 15th in the Vancouver area. There is a difference in degree, with a greater effort in the Vancouver area.

I would suggest to the writer of your guest editorial that he should remove the burr from under the saddle and tell us what is really bothering him. Is it a true concern for the operation of the Department, or is the problem more of a personal nature? I think that if this is defined, then other problems such as that outlined by Richman and Zealand, as well as others, could then be dealt with as the problems they are, without personal problems interfering with judgement.

G. W. Lowdon
Fishery Officer

And ... better late than never ..

Dear Ms Glover,

With the approach of Christmas, the season brings back memories of other times and people and what with the increase in retirements of (Old Sweats) Fishery Officers, I can't help but reflect on the conditions then and now.

About 22 years ago when I signed on -- the Vancouver Christmas staff party could have been held in one very small room -- in the office. The parties at Prince Rupert were usually held every Friday in the bull room at the back of the regular public office -- and about the only difference as Christmas approached was that more of the field staff were in for the year -- (although by late Friday not a few were more "out" than in).

I had occasion to visit Bella Coola a year ago with my son (we had lived there from 1958 to 1963) and I was suitably impressed with the amount and excellence of equipment. Boats, trucks, aircraft and helicopters -- Wow -- what a way to get around the spawning grounds. When I first arrived there on temporary duty in 1957, there was the old "Bonilla Rock" -- the rare occasional use of an aircraft and a 9' round bottom rowboat to ascend rivers like the Kwatna, Dean, Kimsquit, etc. What the current staff of Northern field officers may not appreciate is the fact that our Supervisors were unwitting products of the Depression. Our repeated requests for equipment sounded like the wildest of extravagance to a man that had been accustomed to bumming rides around his area on Company steam tugs and packers -- or getting around places like Rivers Inlet in a rowboat!

My first river boat was built by myself -- (no, I didn't use boundary signs like Joe Fielden used in his tippy lake boats) and the only way I could talk the Department in to supplying a bigger and better one was to threaten to put my boat in storage and forego spawning inspections.

My Christmas wish now is for more Northern types to move to the South with their expertise in obtaining equipment and perhaps "Santa" will supply Area 14 with an all season patrol boat since we have had none since the retirement of the old FD102 in 1970. If you chaps in the North get frustrated at times -- not all is sun and pleasure in the South. Try driving down our Island Highway, then to round a bend to view herring seiners, trawlers or whatever operating, only to realize there may only be two boats in service for all of Areas 14, 15, 16, 17 and 18. Now, aren't we supposed to keep HDQ advised as to what's going on in the briny?

I can't really complain when I review what I know went on in the North and the trials and tribulations then are now reflected in the early retirements currently taking place. Best wishes for those now leaving -- you've served your time through an era that hopefully the future will never repeat.

Cheers!!

Bill Webber

RECOMMENDATIONS FOR THE 1976
PACIFIC HALIBUT FISHERY REGULATIONS*

1. Area 2 will open on May 8 and close on attainment of a catch limit of 13 million pounds, or on September 8, whichever is earlier.

2. Area 3 will open on May 8 and close on attainment of a catch limit of 12 million pounds, or on September 8, whichever is earlier.

3. The opening time in Areas 2 and 3 will be 1500 hours and the closing time will be 0600 hours, Pacific Standard Time.

4. Area 4, east of 175°W, will open for a period of 18 days from April 1 to April 19 and reopen for a 14-day period from September 15.

5. Area 4, west of 175°W, will open on April 1 and close on November 15.

6. Area 4 will open and close at 1800 and 0600 hours, Pacific Standard Time.

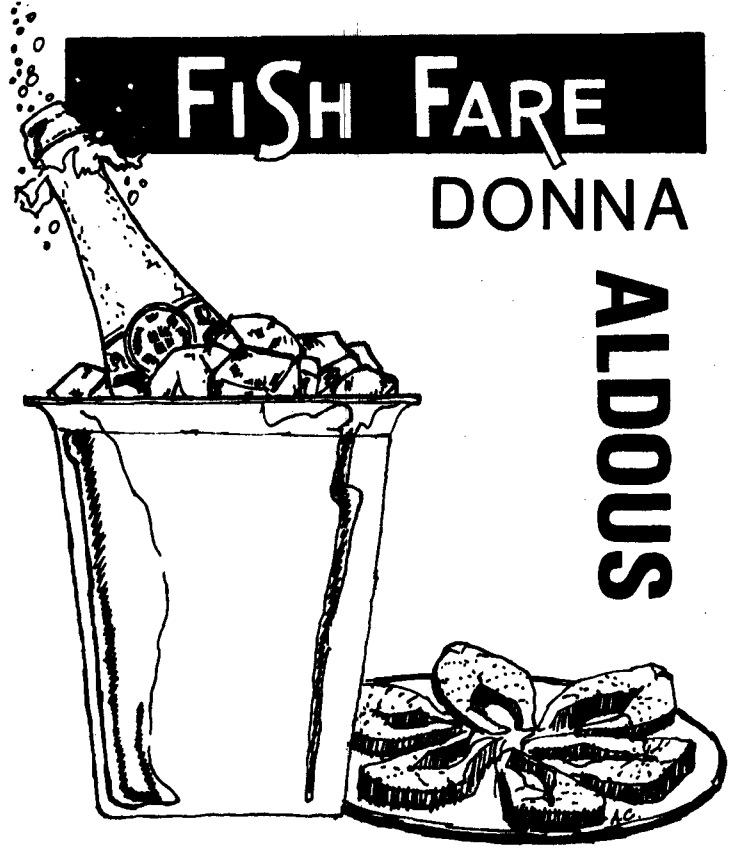
7. The minimum commercial size for

halibut caught in all areas is 32 inches as measured from the tip of the lower jaw to the end of the middle of the tail, or fish with head-off is 24 inches as measured from its most anterior point of the base of the pectoral fin to the end of the middle of the tail.

8. The Commission will provide at least 12 days notice of closure in Area 2 and at least 18 days notice of closure in Area 3.

9. The daily bag limit and the possession limit of sport-caught halibut will be two fish.

* Pending approval by Canada and the United States, the regulations will be published and distributed by IPHC.



The experience had been a painful one. Two hours spent squirming under the merciless hands of my dentist. (No, you can't have his name. I never encourage masochistic or suicidal personalities). Finally, I was allowed to creep home, to lick my wounds. One would think, after such an ordeal, that the thought of food would be the furthest thing from one's mind. Not me. I have a perverse nervous system which, under stress, demands to be fed. So, in a flash of inspiration, my thoughts turned to . . . soup! Ah yes, a hot, hearty, soul-satisfying soup, just the thing to comfort and sustain the injured body. As I entered the kitchen, I was greeted by a chorus. "What's for supper?" "Soup," I replied. "Just soup??" came the rejoinder. "yes, just soup!" "Okay, mush-mouth," said my ever-loving, "but it had better be good!" And it was. Here's the recipe.

SEAFOOD CHOWDER

3 pounds fish fillets (use different varieties e.g. cod, salmon, halibut)
3 strips fat bacon
1 large onion, chopped
4 medium potatoes, diced
2 cans (20 ounces each) tomatoes
1 tablespoon salt
1/8 teaspoon pepper
1/4 teaspoon thyme
1/4 teaspoon mace
3 tablespoons butter
1 can crabmeat (6 oz.) or shrimpmeat (5 oz.)
1 quart milk, heated

Cut fish fillets into one-inch pieces. Remove and discard any skin, if present. Fry bacon until crisp and brown; lift from drippings; crumble and set aside. Cook onion in bacon drippings until tender. Combine cooked onion, potatoes, tomatoes and seasonings. Cover and simmer for 10 minutes. Add fish and simmer 10 minutes longer. Drain the crab or shrimp and break into chunks. Add shellfish, butter and heated milk to fish mixture. Bring to simmering temperature but do not let boil. Garnish with crumbled bacon sprinkled over the top. Makes 12 generous servings.

The history of soup is an interesting one. Cookery actually progressed to its present form with the first cooking vessels of clay, then iron and finally copper, which could hold liquids over a fire.

One of the first written recipes for soups was recorded by Taillevant, around 1375, in the oldest French cook book known, called "Le Viander." Bread was used to thicken milk, flavoured with honey; this concoction was referred to as a "sop," and was the forerunner of pureed soups.

Others before me have recognized the curative powers of soups. The term "Restaurant" owes its derivation to a man named Boulanger, in Paris. Around 1750, he owned a street-side stall, whose fare was fish soups, sold under the label of "restaurants," meaning restoratives. It was only shortly after this that the idea of selling food and wine in an establishment for that purpose only, was adopted by a Mr. Beauvilliers. The four essentials were an elegant room, smart waiters, a choice cellar and superior cooking.

The term "chowders" hails from 13th Century French cooking pots, called "chaudieres," and these were used to cook fish stews, known as "chaudemers," the ancestor of chowder.

A "soupe," also a French term, is basically a clear broth with minced herbs, diced vegetables, fish or meat, and some type of garnish. In peasant households, the "soupe" was the main dish of "souper," now known as supper.

"Potage" is the term used for a thickened broth, using either egg yolks and cream, a starch, or a puree of vegetables. Each country has its own favourite soups, characteristic of the available foods and the tastes of the people. In Italy, for instance, a soup with a starch such as rice, potatoes or pasta is a "Minestra," all other broths, clear or thick, are called "zuppa." However, the real base of all soups are flavoured broths, also called stock,

bouillon, or consomme.

Get into the practice of cooking up your own broth, to keep in the freezer as a base for home-made soups and sauces. It takes little time, and the effort is well worthwhile in terms of the extra flavour.

BASIC FISH STOCK

2 tablespoons butter or margarine
1 cup minced onion
1 cup minced parsley
4 pounds fish bones, head and trimmings
3 tablespoons lemon juice
1 1/2 cups dry white wine
2 quarts cold water

Melt butter in a large pan and saute the onions and parsley just until wilted. Lay the fish bones over these, add the lemon juice and cook over low heat, shaking occasionally for 5 minutes. Add the wine and simmer uncovered for 20 to 30 minutes. Then add the water and bring to a boil. Boil rapidly until liquid is reduced by half, strain. Makes 4 cups.

Here are a few other "fishy" soup ideas, for a change from canned or powdered instant forgettables.

ITALIAN FISH SOUP

1 pound fresh fish fillets (pickerel, sole, cod or haddock)
3 tablespoons lemon juice
1 tablespoon salad oil
1/2 cup thinly sliced onion
1/2 cup sliced carrot
1/2 cup sliced celery
1 can (19 ounces) tomatoes
1/2 cup noodles, uncooked
4 cups boiling water
1 tablespoon salt
1/2 teaspoon pepper
2 tablespoons Parmesan cheese, grated

Cut fish in serving size portions. Sprinkle with lemon juice. Heat oil in saucepan, add onion, carrot and celery and stir until thoroughly coated with oil. Cover and cook over low heat for 10 minutes. Add tomatoes, noodles, boiling water, salt and pepper. Simmer for 30 minutes. Add fish and simmer 10 minutes longer. To serve, place a piece of fish in each bowl; fill bowl with soup; sprinkle with grated Parmesan cheese.

Makes six 6-ounce servings - approximately 160 calories per serving.

GOLDEN TUNA CHOWDER

1 can (7 ounces) tuna
2 chicken bouillon cubes - or 2 cups fish stock
2 cups boiling water
1/4 cup chopped onion
1 cup chopped celery
1/4 cup butter, melted
3 tablespoons flour
3 cups milk
1 1/2 cups grated Cheddar cheese

Drain tuna. Break into fairly large pieces. Dissolve bouillon cubes in boiling water. Cook onion and celery in butter until tender. Blend in flour. Add milk and bouillon gradually to onion celery mixture and cook until thick, stirring constantly. Add cheese and tuna. Heat and stir until cheese melts.

Makes 6 servings.

You can achieve a good nutritious soup using canned soup as a base, when you are down-to-the-wire at mealtimes.

FAST FISH CHOWDER

1 package frozen cod or other fish fillets
2 cans (10 ounces each) frozen condensed cream of potato soup
2 soup cans milk
2 tablespoons chopped chives or green onions with tops
butter

To ease cutting, partially thaw fillets, then cut into chunks about 1 1/2 inches square. In a deep saucepan, combine soup and milk. Heat to simmering temperature, stirring occasionally. Add fish and chopped chives. Continue to heat below boiling until fish is cooked, about 5 to 10 minutes. Serve hot with a pat of butter floating in each bowl.

Makes about 7 cups.

PINK SALMON BISQUE

1-pound can pink salmon
1/4 cup finely chopped onion
1/4 cup finely chopped celery
1/4 cup butter, melted
3 tablespoons flour
1 1/2 teaspoons salt
3 cups liquid (salmon liquid plus milk)
1 cup tomato juice
popcorn (optional)

Drain salmon, saving liquid. Break fish into bite-size chunks. Crush bone with a fork and add it to fish. Remove and discard skin. Cook onion and celery in melted butter until tender. Blend in flour and salt. Add combined salmon liquid and milk gradually. Cook over low heat, stirring constantly until thickened. Stir in tomato juice. Add salmon; heat but do not allow to boil. Serve with a little popcorn floating on top.

Makes 6 servings.

NEW OFFICERS ORIENTATION COURSE

December 1-12, 1975

The first new fishery officers orientation program held in some time, began December 1, 1975 and ran inclusive through to December 12, 1975. The course was in many ways unique and provided the new officers with a wealth of information about their new careers and responsibilities as well as introducing them to over 50 of our senior and middle management people; biologists; engineers; technicians; personnel; marine service personnel; and various field personnel from around the lower mainland. The primary purpose of such a course was to provide as much information as possible, on a wide range of topics, so as to enable the new recruit officers to operate more effectively on the Fisheries Resource Management team.

Held in Vancouver at Inspection Lab and headquarters boardrooms, the course included 6 students from the Northern Operations Branch (Mr. B. Caspell, Kitimat; Mr. D. Leskowski, Q. C. City; Mr. J. Kozak, Prince Rupert; Mr. L. Gordon, Prince Rupert; Mr. L. Chambers, Whitehorse; and Mr. P. Woloshyn, Terrace) and 10 from the Southern Operations Branch (Miss P. Skilnik, Nanaimo; Mr. D. Girodat, Port Alberni; Mr. R. Brahniuk, Tofino; Mr. B. Jackson, Tahsis; Mr. D. MacLellan, Duncan; Mr. M. Farquahr, Campbell River; Mr. D. McDiarmid, Alert Bay; Mr. B. McDonald, Kamloops; Mr. H. Smith, Chilliwack; and Mr. J. Krywchuck, New Westminster).

The original impetus for such a course came from a variety of field people who felt that such a program would enable the new recruit officers to adjust more rapidly to their new positions. The various people that suggested the course, have often expressed the opinion that their lots would have been far happier ones if they themselves had been exposed to a similar program when they had first joined. Senior management was agreeable to the idea, because the large number of hirings at one time made the course feasible from a financial point of view and was very definitely needed to enable such a large number to learn about our organization as a group, instead of each one learning as he went along.

The majority of new officers had been stationed and working in a specific district for up to 6 months prior to attending the course. This period of time enabled them to find out what their new jobs were primarily about; learn about their individual areas and forced them to realize what they didn't know about the department and their particular role in it. Thus, the orientation program was specifically designed to answer as many of their questions as possible; expose them to the many and varied facets that make up our organization; introduce them to many of the headquarters staff that they will undoubtedly come into contact with in the not too distant future; and to try and create for them an image of their role as fishery officers in relation to the many other interdepartmental units of the overall organization.

This in itself proved to be the toughest thing to create or promote, for those of us involved in the planning of the course. We had hoped that by getting as many people as possible, from all parts of the organization, involved in the program, that some image of what a fishery officer is and what he does would emerge. Unfortunately, because of the turmoil, we as an organization are going through, our previous history and the quickly changing times such an image never really materialized. No one really knew, or was willing to establish what we are and what each of our individual roles are; if anything, they became more blurred than crystallized. However, what the program did do, for the first time that many can remember, was to get a tremendous amount of headquarters staff people from various professions, units and departments together, to discuss and explain their mutual problems with each other. For 12 days we as an organization were dissected, explained and discussed by various people in an attempt to explain ourselves to 16 new officers. For myself it was an eye opener and extremely beneficial part of the program. For to be able to explain your job and its relationships to other units, to people who for all intents and purposes know very little about it, can be a very mind boggling experience. All of us, too often fall into the trap of complacency -- when forced to explain ourselves, the reassessment of our jobs and responsibilities always promotes a better awareness of what we really are doing.

To help give you a better idea of just what type and how beneficial a program it was, the course included lectures and discussions on the organizational structure of the Pacific Region with the various senior management people giving a talk on their respective responsibilities and how they fit into the puzzle (Fisheries Management Service, Fisheries and Marine Operations, Pacific Environmental Institute, Fisheries Research Laboratory, Enhancement Program and Planning and Support Branch); the role of Personnel (pay benefits, allowances, leave, sick time, medical plans and benefits, classification structure, competitions, appeals, superannuation); an introduction to Administration and Finance (L.P.O.'s purchasing power and procedures, requisition forms, government purchasing agreements re: vehicles, supplies and field equipment, tax concessions, travel guidelines, expense forms and regulations); principles of Fisheries Management (economic principles, stock management principles, etc.); an introduction to engineers and their role; an introduction to biologists; Habitat Protection; the Inspection Branch; Fisheries Agreements - international; an introduction to the Marine Service; an explanation of the Herring Fishery in the Pacific; sport fishing; the Head Recovery Program; the commercial salmon troll fishery and some foreign problems in the offshore fishery; an explanation and introduction to licencing; economists, North and South; tour and explanation of the Operations Room; tools of Fisheries Resource Management; streamway and marine shore environments and streamside and marine shore management; the Enhancement

Program; Enforcement Procedures and Regulations; court appearance and deportment; the Indian Food Fishery; special enforcement problems; explanation and description of other interrelated Federal and Provincial agencies; and finally public relations, deportment and self-discipline. To supplement this vast amount of information, field trips were arranged to provide visual and personal experience relevant to the material being discussed in class. These trips included a tour of the patrol vessels secured at the New Wesminster Marine Repair Station, as well as the Station itself; various fishing vessels and gear along the waterfront at Campbell Avenue; a number of fish processing plants; a tour of the I.P.S.F.C. spawning channel at Weaver Creek and the incubation boxes at Inches Creek; an all-day tour of the Fraser River waterway aboard three of our patrol vessels, from the Mission Bridge downstream; and a practical demonstration of the Service's "protect" dog stationed at Mission and handled by J. Bentley. A list of the people involved in teaching and leading the discussions included Dr. Geen, Mr. Hourston, Dr. Razzell, Dr. Waldichuk, Mr. MacLeod, Mr. MacKinnon, Mr. Sweitzer, Mr. Gibson, Mr. Griffin, Miss Cook, Mr. Grant, Mr. Basson, Mr. Kerr, Mr. Scholey, Mr. Wallace, Dr. Newton, Mr. Zyblut, Mr. Deans, Mr. Argue, Mr. Harris, Mr. F. Boyd, Mr. R. Boyd, Mr. Campbell, Mr. Carson, Mr. Jackson, Mr. Roberts, Capt. Furlong, Mr. D. Wood, Mr. McIlwaine, Mr. Sigmund, Mr. Webb, Mr. Lill, Mr. Lowdon, Mr. Lemmen, Mr. Pitre, Mr. Cairns, Mr. Freeman, Mr. Scott, Miss Schuler, Mr. Meyer, Mr. Sinclair, Mr. Kent, Miss Dickson, Mr. Baur (an environment specialist from Seattle), Mr. Hurd (Dept. of Justice), Mr. Crouter, Mr. Connor, Mr. McIndoe, Mr. Giraud, Mr. Graham, Mr. Pastuch, Mr. Bentley, Mr. Elliott and Mr. Kennedy.

As one may imagine, from such an impressive and lengthy list, a lot of varied information was made available to the new officers and to the instructors themselves. Although confusion did reign at times, the "team" aspect of our organization was again demonstrated, and showed that working in conjunction with each other is the only way to go in the future. For the most part, the recruits themselves were impressive and demonstrated a thirst for knowledge and a desire to improve themselves through our organization. Being involved in such a program is very definitely beneficial for all concerned, and allows us to learn of and exchange ideas on mutual problems. The recruits have been asked to prepare critiques on the course -- and it is here that we shall see if their orientation has served its purpose; it being already a success in the ways discussed above. Judging from some of the comments following the conclusion of the course, from those people who had sat in on things that had interested them, it would be ideal if everyone involved in the Region could participate on a like scale. It would certainly go a long way to solving some of our problems and helping us establish our priorities in relation to how we all work together.

James Boland

APOLOGIES

(The following is the reference which was omitted in error from "Once Upon a Time ... Enhancement" in the last Sounder.)

REPORT OF THE DEPUTY MINISTER

WESTERN DIVISION

Following an investigation by the Biological Board the sockeye hatcheries in British Columbia (with the exception of Cultus lake where further study is being carried out) were closed as per Order in Council P.C. 518 dated March 2, 1936. Copy of the order follows:-

P.C. 518

CERTIFIED to be a true copy of a Minute of a Meeting of the Committee of the Privy Council, approved by the Deputy of His Excellency the Governor General on 2nd March, 1936.

The Committee of the Privy Council have had before them a Report, dated 21st February, 1936, from the Minister of Fisheries, submitting as follows:-

As it was not clear that the hatching of sockeye salmon in British Columbia was justifying the cost involved, it was decided in 1925 to have the Biological Board undertake a thorough investigation into the relative efficiency of artificial and natural reproduction of sockeye salmon, and at the time it was anticipated that it would take twelve years to complete it, but it found it possible to report finally in the premises at its recent annual meeting. The basis of determination as to the efficiency of reproduction in any year was the number of young fish that of their own volition left the lake for the sea. This young sockeye do in the second year of their age and they remain at sea until they reach maturity. The results of the investigation, which comprehend different methods of hatching and also the rearing of the young fish to various ages up to nearly one year are summarized in the following statement:-

Natural Reproduction	1925	1927	1930
Migrants as percentage of total eggs available.....	1.13	1.05	3.16

Artificial propagation with liberation of fry	1926	1929	1932
Migrants as percentage of total eggs available.....	3.93	2.38	1.71
Migrants as percentage of total eggs obtained from the adult salmon that were stripped.....	4.54	2.76	2.43

Artificial propagation with eyed egg planting	1928	1933
Migrants as percentage of total eggs available.....	0.95	3.55(a)
Migrants as percentage of total eggs obtained from the adult salmon that were stripped.....	1.44	4.67(a)

(a) Indicates that possible two year old migrants of the 1936 migration have yet to be added.

In the light of the above, the following conclusion was reached by the Biological Board:-

"On the whole it may reasonably be concluded that in an area such as Cultus lake, where a natural run of sockeye occurs with a reasonable expectancy of successful spawning, artificial propagation, for purposes of continuing the run to that area, is unnecessary and, if producing any additional results over natural spawning, these would not appear to be in any way commensurate with the cost.

"This conclusion may not apply to areas where there is no reasonable expectation of successful natural propagation."

The Minister observes that it was the hatching of sockeye salmon only that was in question, and the investigation does not reflect adversely on the hatching of trout and Atlantic salmon that is being carried on in different parts not only of Canada but of several countries in the world, the good effects of which so far as Canada is concerned, have already been reasonably established.

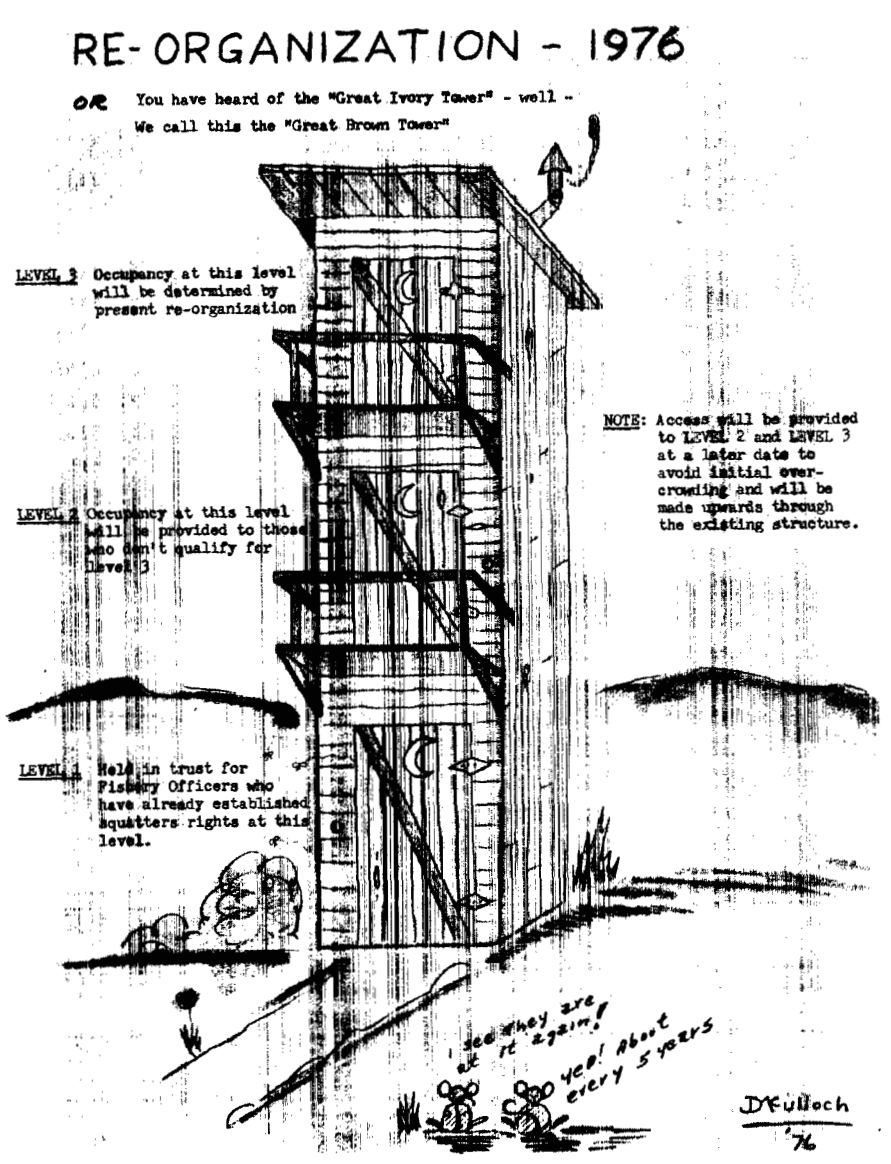
The following sockeye salmon hatcheries in British Columbia are being operated by the Department of Fisheries:-

Babine lake and Lakelse lake on the Skeena river; Rivers Inlet; Anderson lake and Kennedy lake on Vancouver Island; Cultus lake-Smith's Falls, Pitt lake, Harrison lake and Pemberton on the Fraser river.

In the light of the findings of the Board and as a natural run of salmon, with a reasonable expectancy of successful spawning occurs to all the areas in which the above named hatcheries are operated, the Minister, on the advice of the Deputy Minister of Fisheries, recommends that when the present season's operations in the above named hatcheries are completed, they be closed, and disposed of to the best advantage, and that the employees therein be then retired under the conditions provided by law.

The Committee concur in the foregoing recommendation and submit the same for approval.

(Sgd.) E. J. LEMAIRE,
Clerk of the Privy Council.



YUKON GOLD

by George Perry

In the Yukon, high above the 60
  There is gold in them thar streams
Tatchun, Teslin, Tincup, Harvey, Hess,
      Hoole
Not the gold that Robert Service wrote
      of.
Not the gold that George Carmacks panned.
  Gold that is real gold.

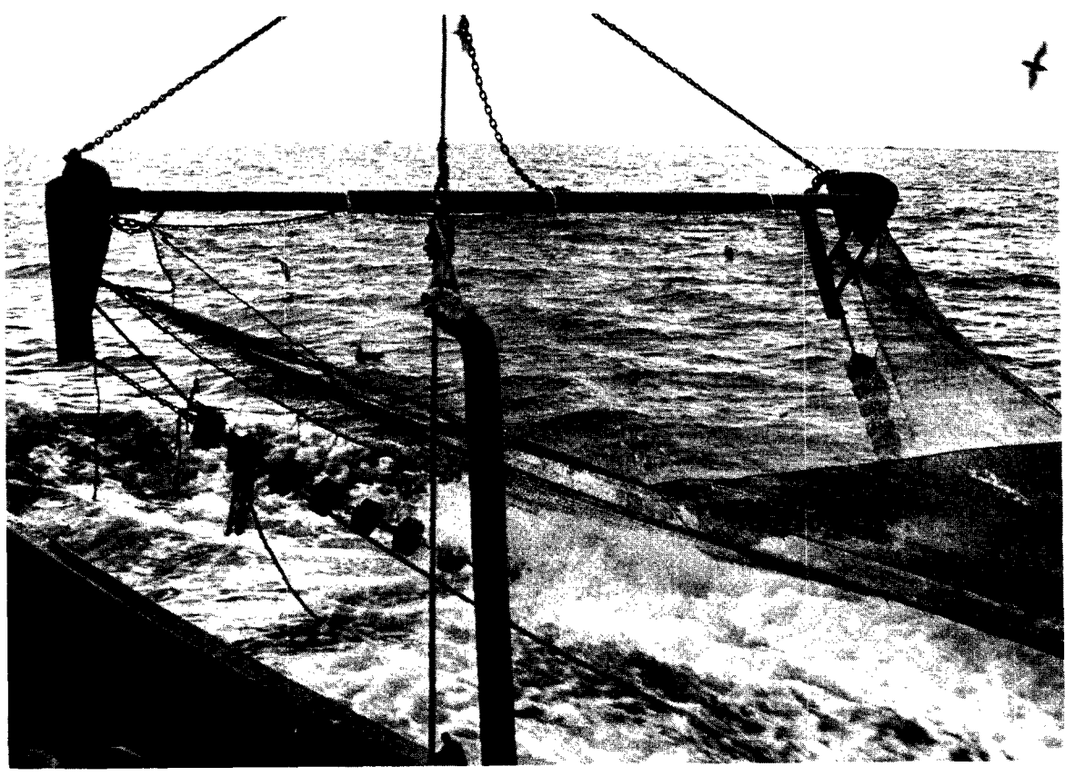
Fish are the real gold.
  35 rivers of gold
Gold that slips out of hand
  Gold that you weir gillnet or seine
Gold that fills your belly
Yes,
  There are strange things done in the
      midnight sun

Lota lota - Burbot,
  Coregonus - Humpback
Yellow gold and white
Prosopium gold so no one will know it.
Gold Gold Gold, it's all gold
From the lowliest Catostomus
  To the mightiest Esox lucius
Swimming gold is what I'd call it.

Sounder

MARCH-APRIL 1976 Vol. IV No. 2 Fisheries and Marine Service

SHRIMP TWIN BEAM TRAWLING IN B.C.



The majority of vessels fishing for shrimp in North America use the otter trawl method of fishing. Otter trawling is the standard method of bottom and pelagic trawling currently used in the world and consists of towing a net from the stern of a vessel with wire warps and using "otter boards" (more commonly called "trawl doors") to spread the net. (See Fig. 1).

Otter trawling evolved from beam trawling which dates back to the days of sail and was the principal method of trawling until the late 1800's. The net in this case is spread by a beam with or without shoes on its ends. (See Fig. 2). Although beam trawling was, for the most part, replaced by otter trawls, it is still used for certain species and under certain conditions. The Dutch have since the 1960's developed very modern techniques for handling twin beam trawls in the North Sea sole fishery (see Fig. 3). The beam trawl, rigged with tickler chains, has proven to be much more efficient than the otter trawl in this fishery.

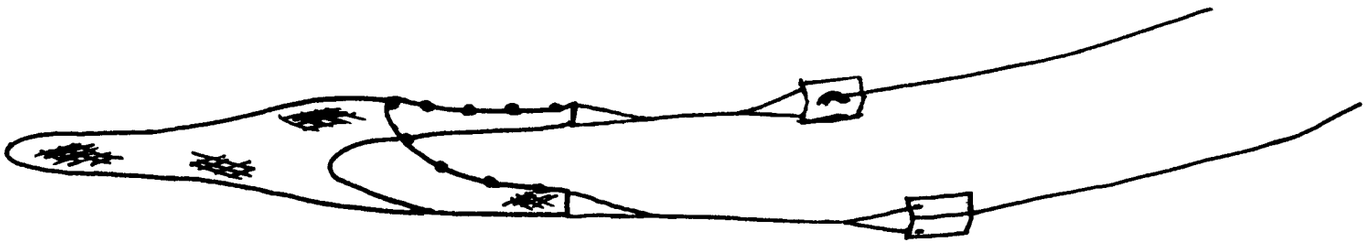
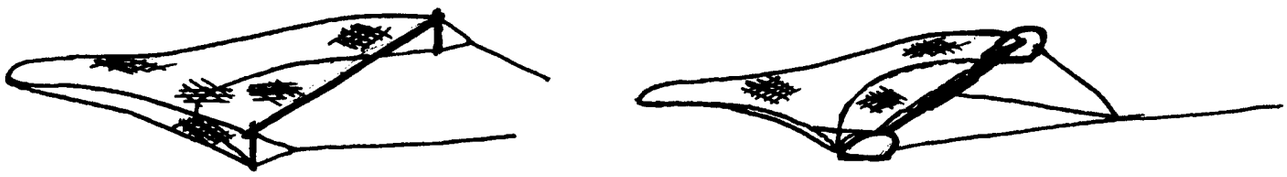


FIG 1

Until 1972, shrimp fishing in British Columbia was an inshore fishery, with most of the catch being taken by small gillnet type boats using a single Japanese beam trawl. Following an Industrial Development Branch exploratory fishing project carried out by the "Pacific Trident" in 1972, up to eight vessels have fished off the west coast of Vancouver Island using otter trawls of the semi-balloon type commonly used in the American shrimp fleets.

In the spring of 1974, Mr. Brian Berg of Nanaimo informed the Department that he was planning to purchase the 70-foot Dutch Beam Trawler "Twee Gebroeders." His plans were to fish for shrimp using two otter trawls, however this writer suggested that the beam trawls with which the vessel was equipped might be suitable for shrimp trawling in B. C. and that they would be very effective for flatfish in the off-season. The vessel subsequently arrived in the late summer with



JAPANESE TYPE BEAM TRAW

BEAM TRAWL WITH SHOES

FIG. 2

all of its gear in company with two other Dutch vessels purchased by B. C. fishermen.

The "Twee Gebroeders" (re-named "Deliverance") has a 235 H.P. Stork main engine and was equipped with two 27 foot beams with shoes for sole fishing, two shrimp nets and three sets of bobbin gear. To assist with the introduction of the Dutch method of beam trawling the Industrial Development Branch provided the services of Captain Norman Sigmund to assist the owner with the rigging and initial fishing operations of the vessel. The shoes were modified to increase the vertical opening to 3 feet, one of the Dutch nets was hung on one beam, and a trawl designed by Capt. Sigmund using the conventional 1 1/2" mesh nylon web was constructed and hung on the other beam. Trials were carried out off Point Grey in December with every indication that the gear was working satisfactorily.

The "Deliverance" commenced commercial shrimp fishing on the west coast in June, but with a less than expected catch rate (i.e., 7,000 lb. of shrimp per tow for 2 beam trawls compared with 5,000 lb. per tow for a single otter trawl). Captain Berg was tempted to change from beam trawls to otter trawls, but agreed to carry out a trip with one of the beam trawls modified by IDB to increase the vertical opening to 6 feet. This change resulted in some tows during the next trip where the modified net caught up to ten times more shrimp than the unaltered trawl. The other net was subsequently modified by the owner and the vessel has since fished with good results.

One particularly important advantage of the beam trawl is that it is able to obtain good catch rates while fishing below the schools of eulachons which have plagued the shrimp trawlers using the conventional otter trawl which has a higher opening. This year the conventional boats have had to discard as many as 5 tows per day due to excessive amounts of eulachons caught with the shrimp.

Some highlights of the "Deliverance's" shrimp fishing:

* 1 - 2 Sept.	45,000 lb. of shrimp in 18 one hour tows
* 6 - 7 Sept.	58,000 lb. of shrimp in 21 one hour tows
* largest tow	10,000 lb. in one net (split net)
* largest tow onboard	7,500 lb. in one net

* IDB net outfished other net by approximately 1/3

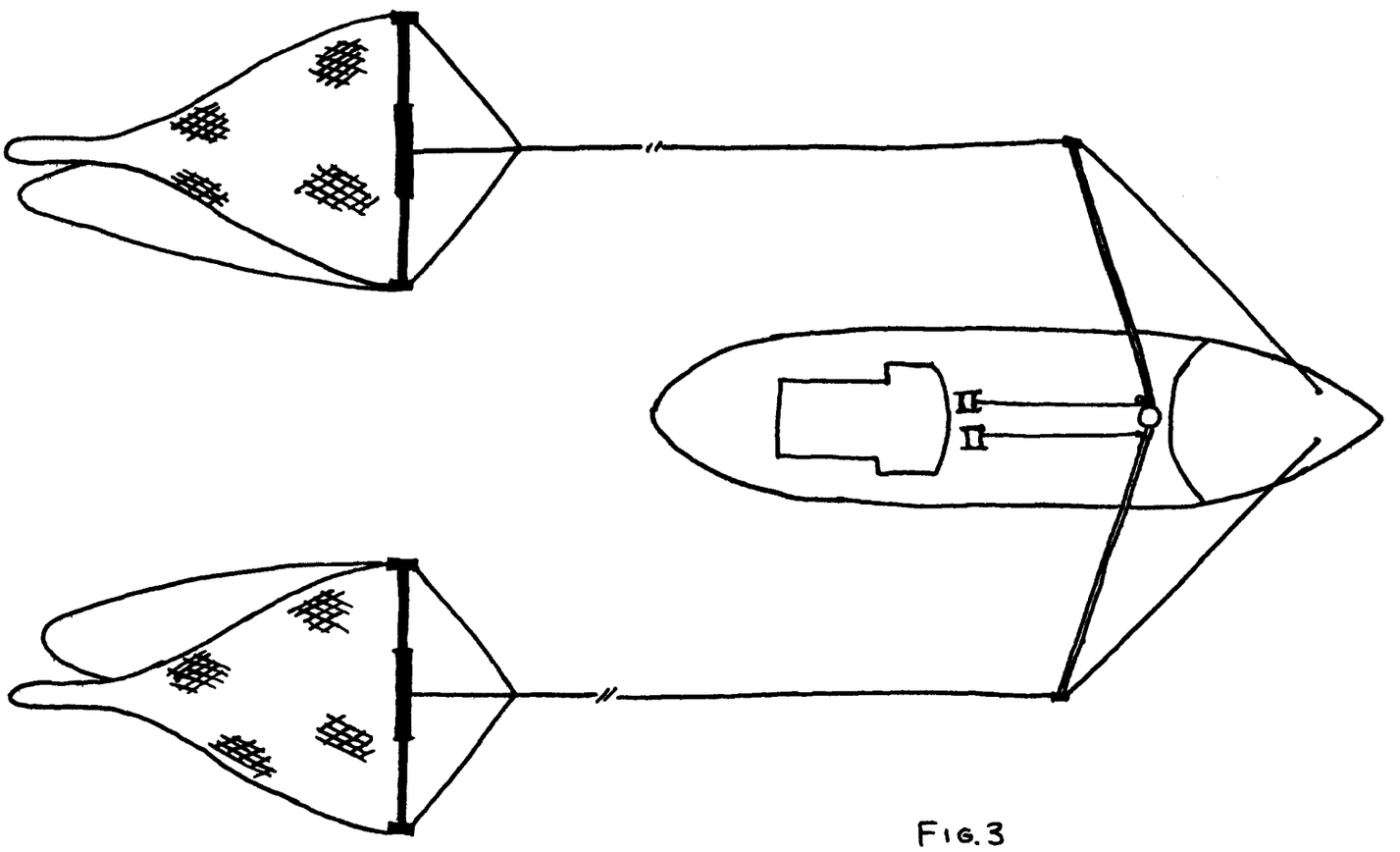


FIG. 3

* time to haul and shoot nets (from bottom to bottom) is 21 minutes.

The main advantages of the beam trawl:

* the net opening is constant at all towing speeds, in tidal currents and when turning

* there are no trawl doors to cross.

Disadvantages of the beam trawl:

* the gear is heavy and sometimes awkward to handle, particularly when bringing it onboard. This requires a steel vessel or suitable reinforcing.

* it is a nazardous method of fishing particularly when one net becomes fastened to a snag on the bottom.

Technical assistance was also provided to the "Gypsy Traveller" (Capt. R. McLean), another of the trawlers obtained from Holland. This vessel is also successfully shrimp fishing and it can be expected that other vessels will adopt this method of shrimp trawling.

R. H. McIlwaine,
Chief,
Industrial Development
Branch.

OCEAN RANCHING

In early January Ron MacLeod and I attended a special workshop session on ocean ranching called by the Prince William Sound Aquaculture Corporation in Cordova, Alaska. The background on the session is of considerable interest. Alaska salmon stocks have declined very significantly over the past 50 years. There is considerable public frustration at the apparent inability of the government agencies involved to manage the stocks back to health or to initiate large-scale enhancement. This frustration was expressed in the "Private Salmon Hatchery Act" of 1974 which was initiated by fishermen groups and, which rumor has it, was through the State House and on its way to the State Senate for final approval before the Alaska Fish & Game Department was informed of it.

This act is patterned after Oregon legislation with the major difference being that the Alaska Act limits participation to non-profit organizations. "It is the intent of this Act to authorize the private ownership of salmon hatcheries by qualified non-profit corporations for the purpose of contribution, by artificial means, to the rehabilitation of the state's depleted and depressed salmon fishery. The program shall be operated without adversely affecting natural stocks of fish in the state and under a policy of management which allows reasonable segregation of returning hatchery-reared salmon from naturally occurring stocks."

Passage of the Private Salmon Hatchery Act served as a catalyst to activate a number of groups in Alaska to explore the possibility of ocean ranching. The "Prince William Sound Aquaculture

Corporation", comprised mainly of the fishing community, is the furthest down the road at this time. The Corporation became a legal entity on December 30, 1974, and had an almost complete 20 million egg capacity pink hatchery by last fall. Cold weather prevented completion of the permanent water system and forced them to plant the 6-8 million eggs scheduled for the facility into an unutilized portion of the natural river.

There are a number of other non-profit groups also actively moving toward putting salmon incubation facilities into production in miscellaneous locations in Alaska. The following table might explain the economic rationale of sea rancing.

In Alaska, fishing licences are issued for specific geographic areas, so fishermen protecting or enhancing the resources in their licenced area can reap the benefits without having to share them with non-area fishermen. Under these circumstances, fishermen have an easily identifiable vested interest in enhancing "their" fish resources.

Where sea rancing will go in the long term will be decided by the success of these early ventures such as Prince William Sound Aquaculture Corporation's. The Corporation has a long-range goal of a 300 million egg hatchery to provide an additional 5 million adult salmon returning annually-independent of the average 4 million return from the wild salmon stocks (this would equal the 1925-45 peak population levels).

Al Wood

DISTRIBUTION AND VALUE OF ADULT RETURNS

WILD STOCK (28,000)		CATEGORY	HATCHERY STOCK (170,000)	
Fish	Value		Fish	Value
		Common Property Catch		
560	$ 2,800	Sport [1]	3,400	$17,000
16,240	24,685	Commercial [2]	98,600	149,872
		Hatchery Surplus Catch [3]	53,000	80,560
		Hatchery Stream Escapement		
5,600		Female Spawners	5,000	
5,600		Male Spawners	2,500	
		Incubation System Loading		
		Female Spawners	5,000	1,125 [4]
		Male Spawners	2,500	
	$27,485	Total Dollar Values		$248,557

Note 1. Assumes 2 percent of run caught by sportsmen; arbitrary sport fish calue $5 each.

2. Assumes 58 percent of run caught by commercial fishery; average weight 3.8 pounds per fish and value $.40 per pound.

3. Assumes 40 percent escapement to hatchery stream; surplus catch is remainder after loading hatchery incubators and metering optimum escapement and sex ratios of natural spawners into weired stream as brood stock insurance.

4. Assumes sale of carcasses for pet foot or crab bait at $.05 per pound and 3 pounds per fish.

REMEMBER WHEN -- Cigarettes were 25¢ a pack?

A glass of beer cost a dime?

Fishery Officers were paid $150.00 a month. They worked at least six days a week, sometimes seven, and overtime was an unmentionable subject. If you ordered a new propellor for the patrol boat, the District Supervisor demanded a written reason for this outrageous request. You got another letter when you told the truth about the cost of meals on the patrol boat. But if you, in preparation for a long trip on your one-man boat, ordered a small cake, the letter you got from the D/S would blister your fingers and, in no uncertain terms, you were told to "pay for the cake yourself in future."

Well, back in those good old days, the two-bit cigarettes and an occasional 10¢ beer were real luxuries. And it was on one of those days that I nearly crossed the street when I saw old Billy heading straight for me, for I feared that he would again hit me up for the price of a few beers. But I liked Billy. He had a sort of magnetic attraction; so I did not cross the street.

I was fascinated when I saw him remove his left hand from his pocket and start counting and placing something in his right hand. Then he put what was obviously some change back in his pocket. When he was about forty yards from me, his left hand removed something from his right and thrust that something into his pocket.

As we were about to pass, I said, "Hello, Billy".

"Hi," he said, "give this to your old woman, I owes it to her," and he thrust some money into my hand.

At home, I asked my wife how long she had been giving money to Billy. "Oh," she replied,"I've given him two bits or four bits the odd time when I've found him asleep on the steps. Only way to get him moving!"

"Yes. Well, here's 40¢ that he asked me to give you." Then I told of Billy's actions, and I asked, "What do you suppose he took from his hand and put in pocket just before I reached him?"

"A dime, Daddy-o. A dime. Just the price of a beer!"

John Robinson

40 TONS HERRING ROE DESTROYED

Norpak Fisheries lost 40 tons of herring roe in a plant fire on March 23rd. Although the loss represented only a small percentage of the approximately 90,000 tons of herring caught, it was valued at about $500,000.

Photo: The Vancouver Sun

Spurious Emissions

It has been suggested by the Fishery Officer who gave us "Ivory Tower" that 1090 West Pender now be know as "Famous Players Theatre".

* * * * * * * * *

Mary Harrison (Economics, South) gets married at the end of April to Bill Hobbs.

* * * * * * * * *

Howard Smith, Assistant Director at P.B.S., is leaving for Thailand for a years assignment.

* * * * * * * * *

Muriel Cook was the successful candidate for the position of Supervisor, Personnel Services.

* * * * * * * * *

Nineteen Fishery Officers have successfully passed an R.C.M.P. course in firearms handling and have been awarded "cross pistols".

* * * * * * * * *

Jim Mitchell and his wife have become the parents of a girl, Jennifer Lynn, weighing 5 lbs. 15 oz., and born March 5, 1976 and likewise Laurie Gordon (F.O. Prince Rupert) and his wife now have a little girl, a sister for Chris.

* * * * * * * * *

Jack Beadnell, who retired after working for 29 years as patrol boat skipper, Fishery Officer, appraiser and Assistant Manager of F.V.I.P., wants his friends in DOE to know that things are pretty rough for him - sometimes he has to get up at 7 a.m. to go sportfishing!

* * * * * * * * *

Clyde Mitchell, T.S.U. engineer, is leaving to accept a promotion with Indian Affairs.

* * * * * * * * *

Ray Kendall, Yukon biologist, is resigning his position to live in southern Canada.

* * * * * * * * *

C. C. Young will take over as Regulation Chief sometime in June.

* * * * * * * * *

John Greenlee is leaving Port Alberni to become the F.O. in Bella Coola and Lyle Enderud is leaving Bella Coola for a Mission posting.

* * * * * * * * *

Larry Ottman and Bill Pastuch are moving to Whitehorse to fill vacancies in the Yukon ranks.

* * * * * * * * *

George Barber has accepted a 90-day assignment as Acting Principal of the Marine School at V.V.I.

* * * * * * * * *

Pat yourselves on the back. In B.C. Packers Annual Report for 1975 is the acknowledgement: "The Directors wish to acknowledge and thank . . . the resource managers who contribute to the maintenance of (the) industry on which the economics of many coastal communities depend."

* * * * * * * * *

ARCTIC SALMON

This study was initiated in 1971 as part of the Environmental-Social Program, Northern Pipelines Task Force on Northern Oil Development. Mike Elson, Fisheries Service Biologist who was in charge of the project, was assisted in field operation support by Whitehorse office staff. Project administration was by A. Gibson and C.E. Walker. 1971 and 1974 funding was by Northern Pipelines while regular divisional funds were utilized in 1972, 1973 and 1975.

The Fishing Branch River, in the northern Yukon Territory, is a tributary to the Porcupine River which flows for 1600 miles before reaching the Bering Sea. A ten-mile stretch of the south fork of this stream, straddling the Arctic Circle, is the spawning grounds of large numbers of chum salmon. Smaller populations of chinook and coho also utilize this springwater area.

Louchieux Indians from Old Crow, a village on the Porcupine River, had long known of this chum spawning area. Chum salmon, migrating upstream past Old Crow, formed a substantial part of the domestic fishery there. Information received from the Old Crow natives prompted the first biological investigation.

1971

Helicopter-supported surveys were conducted over the Fishing Branch River spawning grounds in September, October and December, 1971. In conjunction with the first survey, a one-day downstream drift enumeration in areas of heaviest spawning was also conducted. In 1971 the highest population estimate by aerial survey was 115,000 chums (+ 50% due to observer variability). Aerial surveys of other tributary streams failed to locate any chum salmon.

Segments of the Old Crow domestic chum fishery were sampled for scales,

otoliths, lengths, weight, fecundity and sex. Statistical data indicated a larger mean fork length for male fish and age 5 fish were consistently larger than age 4 fish.

1972

A counting fence, downstream of the spawning grounds, was constructed in 1972 to obtain a more accurate spawning population estimate. Construction included the use of 2" x 4" lumber tripods, sandbag rock weights, concrete reinforcing bar and two types of aluminium grid panels.

To provide information on stream residence, 850 chum salmon received Petersen disc tags at the fence site. An additional 1,000 salmon were tagged 800 miles downstream at Ramparts, on the Yukon River, to obtain information on chum migration in the upper Yukon River system. Nine of these tagged fish passed through the counting fence.

An aerial photography experiment yielded unfavorable results because of camera and film deficiencies. Heavy silt loads resulted in poor visibility on two of the three surveys.

The 1972 cumulative chum salmon total was 35,125 which included a fence count of 17,190 and a tagging estimate of 17,935. This total would be increased as fish were still arriving when the fence was removed on October 21.

1973

The counting fence, with structural modification, was used from September 8 to October 22. A holding pen was incorporated into the fence to capture Alaskan-tagged chum salmon. 777 chums were tagged by the Alaskans at Ramparts (2 recovered at fence site) while 492 were tagged at the fence site. The fence count of 15,989 may be taken as the 1973 total population. Interesting data obtained in 1973 included:

1. average length of life of tagged fish (stream residence) was 21 days (30.5 in 1972); small sample size in 1973 may influence the average length figure;
2. Alaskan tagged fish travelled an average of 24 miles per day;
3. tagging resulted in disruption of normal migrational behavior, weakening the fish and delaying them for several days;
4. average fecundity was approximately 2500 eggs per female;
5. predation by grayling on both chum eggs and fry was documented;
6. approximately 5,000 chums were identified to sex; 47.6% males: 52.4% females; and
7. 9,000 grayling and less than 200 round whitefish inhabit the south fork of the Fishing Branch River.

1974

No chum salmon were believed to be present on the spawning grounds when the counting fence was installed September 4, to October 18 when the fence was removed, 31,525 chum had passed through. An aerial survey yielded approximately 5,000 chum salmon on November 19, 32 days after fence removal. As average stream residence determined in 1972 was 30.5 days from tagging to recovery, an inference can be made that the majority of these 5,000 salmon arrived on the spawning grounds after the removal of the fence, and hence the total population estimate would be increased.

Tagging was minimal; 19 chums were tagged with Floy tags at Old Crow, while none were tagged at Ramparts or at the fence site. Five of the nineteen fish were recovered dead at the tagging site, four were recovered at the counting fence and ten were unaccounted for.

Of 16,909 fish sexed, 52% were males; 48% females. Four year old fish were predominant in the sample.

1975

With a 1971 chum population of 115,000, the 1975 population was predicted to be in excess of 100,000 (assuming a good return from the 1971 brood year). Thus, the final estimate of 353,282 chum salmon in 1975 has resulted in an examination of the validity of the 1971 estimate.

A breakdown of the 1975 figures shows:

1. actual count Sept. 3-13 and Sept. 16-Oct. 9	301,296
2. estimate for fish present prior to Sept. 3	2,000
3. estimate for migrating fish from Sept. 13-16	28,000
4. estimate for migrating fish after Oct. 9	20,786
5. estimate for fish spawning below fence	1,200
	353,282

Actual fence count at removal (Oct. 9) was 329,378.

Aerial estimates are believed to greatly underestimate actual chum salmon populations. Poor color contrast between the river bottom and the fish seems to be the major factor. An aerial survey on October 3, 1975 estimated only 50% of the known number of chums upstream of the fence; an aerial survey by Alaskan fishery biologists on September 27, 1975 estimated only 29% of the known number. Thus, it is believed that the 1971 population estimate, as determined by aerial survey, would require an upward adjustment; and that the former figure of 115,000 should have been 250,000 - 300,000 individuals.

Complete and detailed information can be obtained from Chapter II & IV of

Northern Yukon Studies, 1971-1974, Vol. I PAC/T-75-19 and from Enumeration of the 1975 Chum Salmon Spawning Population in the Fishing Branch River PAC/T-76-1

J. Hrenyk

SAM PEPYS-

His Ottawa Diary

Monday - Up betimes and to the my office at the Fisheries wherein I did strive mightily to do my correspondence. This being very difficult, I draughting replies to the publique for my Lords of the Fisheries but one does not know what is in their minds these days past. It being wash day at home I dined on cold meats. To bed.

Tuesday - After at the office to the tavern where I meet with a fellow from Kebecque who is called Monsieur L'Impertinent for his merry tongue and philosophie. He notes that the Creditiste faction is lately come in at the B.C. colony. He says that the N.D.P. took the cash and let the Credits go. All amused at this sally and I intend to repeat it. And so home.

Wednesday- Much in the Newesheetes of a Two Hundred Mile limit of our sea boundaries but there are some who argue the Olde system is best, viz: the distance a cannon can be fired. I have no thoughts pro or contra but know that getting a thing may be worse than not getting it. By this I mean we must have the wherewithall to manage it. Do we expect to close our ports to Canadian fishermen as we did with law-breaking foreigners.

Thursday - To the office early to prepare my accounts for the knights of The Treasury. Those rogues have cut my budget and would have me pay off my clerkes and reduce expenditures and man-years. This all the while that the demands of the publique are for more services. To my shame I was short with them asking them to do themselves as they asked of me. They thought ill of my suggestion for them to reduce their salaries pro rata and reduce the staff of Personnel and other office holders. They gave me no hope and so to the tavern early.

Friday - To the office to do business. Everyone there, it being payday. A good jest by M. L' Impertinent. He asks: How many work in Policy and Planning? Receiving no reply he gives his own: About one-half! I laugh but I am angry again at the Treasury.

The Fisheries and the office are all chaos and flux. The fishermen have the cosiest of tasks which is but to catch fish (but Lord knows the hardest of fates) but the managers of the Fisheries are also upon hard times. We no longer know our tasks and continually wrangle as to who will do what and wherefore. We are liken a man forced to sleep in a bed fouled by a drunken stranger.

Saturday - Much cheered by the improvement in the weather. (Equinoxial weather being changeable). Parliament looked good in the sunlight I not caring that inside all may not be so bright. To the tavern early which is frequented by those Fisheries people who lately resided in B.C. Monsieur calls it the land of Fruits and Nuts. A jest that is lost upon them. My own sally against them is that they would seek to cure the toothache with License Limitation and Salmon Enhancement. This is received poorly.

Sunday Lord's Day - To the park in my new velvet suit which the Lord help me pay for. My wife with our child asks me again to tell her of how I got my office in Fisheries and of the joy I had on that day. This cheers me.

To a publique house with friends where I did tell of my experiences in B.C. Of the Tyme I was affrighted by the Beare. And of the tyme we fishermen moved a boundary sign. However, with too much wine (or lack of it) my audience cared not for why a sockeye jumps the same way as a dog salmon and a hump is yet different. Later to friends for supper and talk of family, children, fine cooking and fisheries mentioned not the once. So to bed.

The Ottawa Correspondent

JAPANESE SALMON ENHANCEMENT

Japan is well into salmon enhancement. On Hokaido Island 41 National government, 5 Prefecture and about 100 private hatcheries produce over 90% of the total chum runs. Hatchery production varies for the different marine receiving waters with a high average of 4.0% fry to adult survival on the east coast and an overall average of 1.8% fry to adult survival (both exclusive of fish taken in the high seas fishery). The chums are produced at an estimated cost of $.30/ adult.

As the spawn is incubated at about 80° C. (warm) fry emerge early but are held and fed until river-sea conditions are favorable - this is determined by a "plankton watch" which pin points the timing of the spring plankton bloom.

Last year Japan caught 15 million artificially produced chums in their inshore fishery and at hatchery racks. That production was from a release of about 800 million chum fry. They expect to increase their fry output to up to 2 billion within a few years.

Al Wood

Marine Weather

To provide vital weather information Atmospheric Environment Service has arranged for the following stations to report observed weather and sea conditions at 0500, 0800, 1300, 1600, 1900 PDT daily: Sandheads, Vancouver Airport, Tsawwassen, First Narrows, Burrard Bridge, Jericho, Atkinson, Merry Island, Lazo, Mudge, Chrome, Sisters, Ballenas Entrance, Active Pass, Saturna, Discovery, Victoria Gonzales, Trial, Race Rocks. The B.C. Ferries report at Halibut Bank, Howe Sound, Hood Point, off Active Pass, and the Comox Queen at mid-channel.

When at sea, KEEP UP TO DATE ON THE WEATHER BY RADIO. The B.C. Safety Council is pleased to provide the following schedule of marine weather reports as indicated by participating radio broadcasting stations.

Service commences Monday, March 29 and terminates Thursday, November 11, 1976.

FREQUENCY	RADIO	LOCATION	DAILY BROADCAST TIMES
600	CJOR	Vancouver	0705, 0905, 1305 Extras on Fri., Sat., Sun.: 1505, 1605, 1705 and 1810.
690	CBU	Vancouver	Mon. to Fri.: 0550, 2400 Sat.: 0655, 2400 Sun.: 0705, 2400.
730	CKLG	Vancouver	0640, 1440.
860	CFPR	Prince Rupert	Mon. to Fri.: 0635, 0735, 0845, 1740 Sat.: hourly following news 0600 to 0900.
900	CJVI	Victoria	0635, 0935, 1335, 1835.
1130	CKWX	Vancouver	0605, 0905, 1305, 1805 Weekends: hourly following news Complete Marine Forecast: 2005
1220	CKDA	Victoria	Mon. to Thurs.: 0645, 0845, 1345, 2310 Fri.: 1245 to 1945 hourly Sat., Sun., and holidays: 0545 to 1945 hourly.
1240	CJAV	Port Alberni	0550, 0913, 1305, 1805, 2105.
1280	CHQB	Powell River	0635, 0735, 1305, 1740.
1320	CHQM	Vancouver	Mon. to Fri.: 0600, 0700, 0900, 1300, 1800, (following news) Sat. and Sun.: 0600 to 1800 hourly, (following news).
1370	CHPQ	Qualicum	Mon. to Sat.: 0610, 0645, 0855, 1305, 1815 Sun.: 0615, 0645, 1305, 1815.
1440	CFCP	Courtney	0605, 0705, 1305, 2410.
1470	CJVB	Vancouver	0614, 0752, 0904, 1204, 1504, and 1800* (* not Sun.).
1490	CFWB	Campbell River	0605, 0705, 1305, 2410.

FREQUENCY	RADIO	LOCATION
1500	CKAY	Duncan
1570	CHUB	Nanaimo

DAILY BROADCAST TIMES

0615, 0930, 1240, 1810.

Mon. to Sat.: 0610, 0645, 0855, 1305, 1815

Sun.: 0615, 0645, 1305, 1815

Marine Patrol Reports on weekends and holidays following news 0600 to 1800.

The following warnings will be issued by Environment Canada when winds are expected to be in the ranges noted within the 24 hour forecast period:

Small Craft Warning: 17 to 33 knots.
Gale Warning: 34 to 47 knots.
Storm Warning: 48+ knots.

FOR TAPED MARINE WEATHER INFORMATION TELEPHONE THE VANCOUVER WEATHER OFFICE AT 273-2373. (Updated eight times daily).

B.C. Safety Council

When this issue of the SOUNDER appears, the third substantive session of the 3rd U.N. law of the Sea Conference in New York will only be about half over. Judging by previous sessions we won't be able to assess the conference's progress until the session is finished. Nevertheless we are hopeful that advances will have taken place in drafting a new Law of the Sea convention. It is expected that any such convention will enshrine within it the concept of the 200 mile economic zone and coastal state rights to the resources in that zone.

As I have mentioned in previous columns the Canadian government is not putting all its eggs in the L.O.S. basket. Last fall we started negotiating with countries fishing off our coasts in anticipating of extension of jurisdiction. An agreement, subject to retification, was signed with Norway on December 2nd. The operative provision in this agreement is Article II and this reads as follows:

1. The Government of Canada undertakes, upon the extension of the area under Canadian fisheries jurisdiction, to permit Norwegian vessels to fish within this area, beyond the present limits of the Canadian territorial sea and fishing zones off the Atlantic coast, for allotments, as appropriate, of parts of total allowable catches surplus to Canadian harvesting capacity, in accordance with the provisions of paragraphs 2 and 3 of this Article.

2. In the exercise of its sovereign rights in respect of living resources in the area referred to in paragraph 1, the Government of Canada shall determine annually, subject to adjustment when necessary to meet unforeseen circumstances:

(a) the total allowable catch for individual stocks or complexes of stocks, taking into account the interdependence of stocks, internationally accepted criteria, and all other relevant factors;

(b) the Canadian harvesting capacity in respect of such stocks; and

(c) after appropriate consultations, allotments, as appropriate, for Norwegian vessels of parts of surpluses of stocks or complexes of stocks.

3. To fish for allotments pursuant to the provisions of paragraphs 1 and 2, Norwegian vessels shall obtain licences from the competent authorities of the Government of Canada. They shall comply with the conservation measures and other terms and conditions established by the Government of Canada and shall be subject to the laws and regulations of Canada in respect of fisheries.

4. The Government of Norway undertakes to cooperate with the Government of Canada, as appropriate in light of the development of fisheries relations between the two countries pursuant to the provisions of this Article, in scientific research for purposes of conservation and management of the living resources of the area under Canadian fisheries jurisdiction off the Atlantic coast.

The Norwegian agreement has been used as a model in negotiations with other countries. At the present time ad referendum agreements (meaning yet to be approved by governments) have been negotiated along much the same lines with Poland, Spain, and Portugal, and similar negotiations are also well advanced with the Soviet Union.

Salmon Negotiations

Canadian and U.S. officials met in Seattle February 18-20 to discuss our mutual salmon problems. The general feeling of the Canadian delegation was that some good progress was made. A round of formal negotiations is set for the week of May 17th.

Poland

The West Coast agreement initialed last November was signed March 27. This agreement provides for a closure to Polish fishing in a large area off the southwest coast of Vancouver Island. Polish vessels will only be allowed to conduct directed fisheries only for hake (for a quota of 7,500 tons) and rockfish other than ocean perch (for a quota of 8,000 tons). The agreement runs to December 31, 1976.

Dick Roberts

WHO SAYS YOU'RE SECOND CLASS CITIZENS?

Recent editions of the Sounder have relayed many "voices from the wilderness," bemoaning the lot of the fishery officer, suggesting that he is low man on the totem pole, level one in the outhouse, and clearly a second class citizen. Is this what the fishery officer thinks of his position? I hope not, and certainly don't see it that way. Nor do I know of many others who view the fishery officer as such.

Apparently there is "a very wide gap between field staff and the others called headquarters personnel." What is this gap? Is it monetary perhaps? I keep hearing rumbles about overpaid professionals and technicians, compared to the poor fishery officer. A look at the most recent contracts for these groups revealed the following:

Recruiting rates -

a)	Fishery Officer, GT 1 (2 yrs. Tech School)	$ 11,359
b)	Biologist, Bi 1 (4 yrs. University, BSc.)	9,660
c)	Biologist, Bi 1 (6 yrs. University, MSc.)	12,360
d)	Engineer, En 1 (5 yrs. University)	12,351

Working levels -

a)	Fishery Officer (GT 2) ----	$ 13,169 - 14,400
b)	Fishery Officer (GT 3) ----	$ 14,843 - 16,270
c)	Technician (EG 4-5) ----	$ 12,030 - 14,798
d)	Technician (EG 6-7) ----	$ 14,349 - 17,622
e)	Biologist (Bi 1) ----	$ 9,660 - 16,384
f)	Biologist (Bi 2) ----	$ 15,934 - 19,769
g)	Engineer (En 2) ----	$ 14,290 - 16,154
h)	Engineer (En 3) ----	$ 17,423 - 19,717

Granted there is a difference in salaries listed above, but is it as great as you thought? There are a lot of our staff not in these categories who, I am sure, would welcome a raise to the lowest of the working levels I've listed.

I sympathize with your cuts in staff and budget, but don't kid yourselves that you take all the cuts. Biological and engineering activities have also felt the axe. These, I believe, were particularly severe in the South, during the past year, where enforcement problems were such that additional resources had to be directed to fight the problem. I can't buy the suggestions that middle and upper management "don't give a damn about what is happening in the field," and that headquarters personnel "don't have time" for on site discussions or studies in the field. I suggest that these situations would not exist if everybody had adequate resources to carry out his responsibilities.

You tell us you are out "where IT is happening," where there's no entertainment, or any other amenities. I don't disagree with you, but you're not the only ones who spend long periods in the field. I've put in some field time, shared many good hours at work and play with field staff, and been royally entertained in their homes on weekends. Fishery officers seem to be able to get home for weekends. My technicians put in far longer field seasons than I ever have. One used to spend five weeks in the spring, five in the summer, and ten weeks in the fall at Rivers Inlet. Home was New Westminster. Two to three week trips are more normal, but carry on from April to November. Tell me why your lot is any worse than a technician's.

You say there is no opportunity for advancement for field staff -- the biologists and engineers are getting all the jobs. Have you applied for a promotion recently, or just bitched about the ones that other people got? Where were the ambitious GT 3's when the District 6 Supervisor's position was advertised a year ago? Only two applications -- and here was a job that offered the things you miss -- a residence on the lower mainland, good education for your children, a cushy headquarters job in the winter, and field action the rest of the year. The recent GT 4 competition for Kitimat didn't attract many more of you. Where were the District Supervisors when competitions were held for the Acting Chiefs' positions on the West Coast of Vancouver Island and North Coast Divisions? Don't tell me you didn't apply because the professionals were bound to win. As I write this, the following positions are occupied by people who came up through your ranks: the Manager of N.O.B., Chiefs of the North Coast Division, Central Coast Division and Northern B.C. and Yukon Division. There are others who have recently filled GT 4 and 5 positions, and I'll bet anything that these individuals won't be dead-ended where they are.

D.C. Schutz

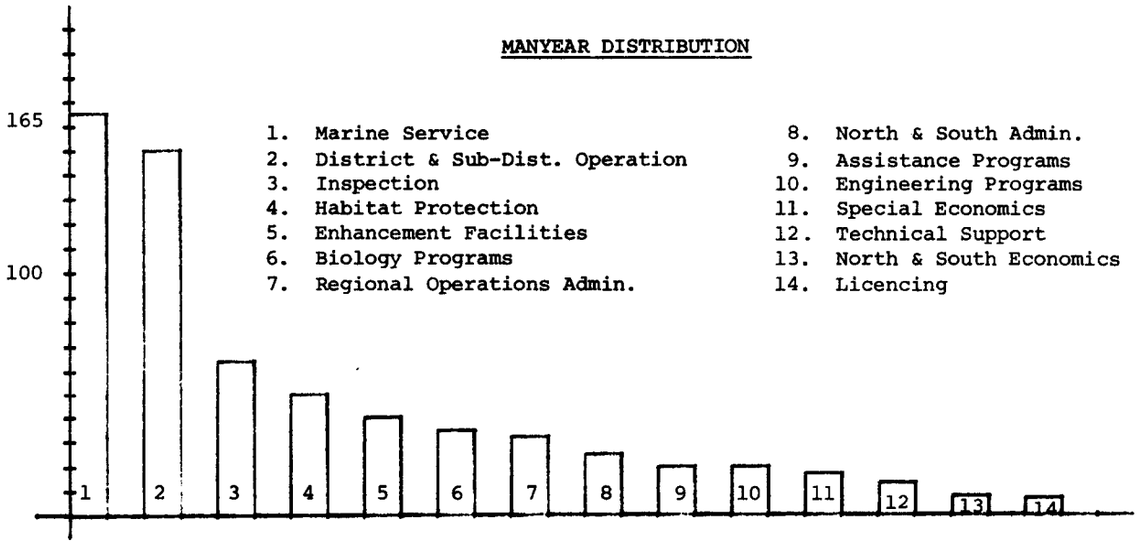
WHERE DID ALL THE MONEY GO?

During the fiscal year which ended March 31, 1976 Fisheries Management in the Pacific Region cost $28.5 million. Of this $14.5 million went to pay salaries of 926 man-years of staff, $9 million for goods and services and $5 million for equipment and construction. In addition, approximately $2.5 million was spent on grants and subsidies.

Since moving out of Northern Operations one job I have tackled is to look at the use of these resources in the Region and since staff and dollar resources are of interest to some readers I will try to summarize how they are spent. In this issue I will concentrate on Fisheries Operations, i.e. all functions in Mr. Hourston's directorate. Next issue I will report on the research stations and laboratories.

Fisheries Operations was allocated 646 man-years in 1975-76 including 552 permanent positions and 94 casual man-years. (1 man-year = 12 man-months = 260 man days of work in a year). In actual fact, because about 10 percent of the permanent positions were vacant at any given time during the year, the full quota of permanent man-years was not used. However, additional casual man-years were employed to balance off the vacancy rate. During the peak of activity in July over 300 casuals were on strength. Fisheries Operations also spent approximately $4.8 million for goods and services and $1.2 million for equipment and construction in 1975-76.

While that sounds like a lot of money and people it always seems to be spread very thin. Where does it go? An approx-



imate breakdown of man-years and goods and service dollars is shown below.

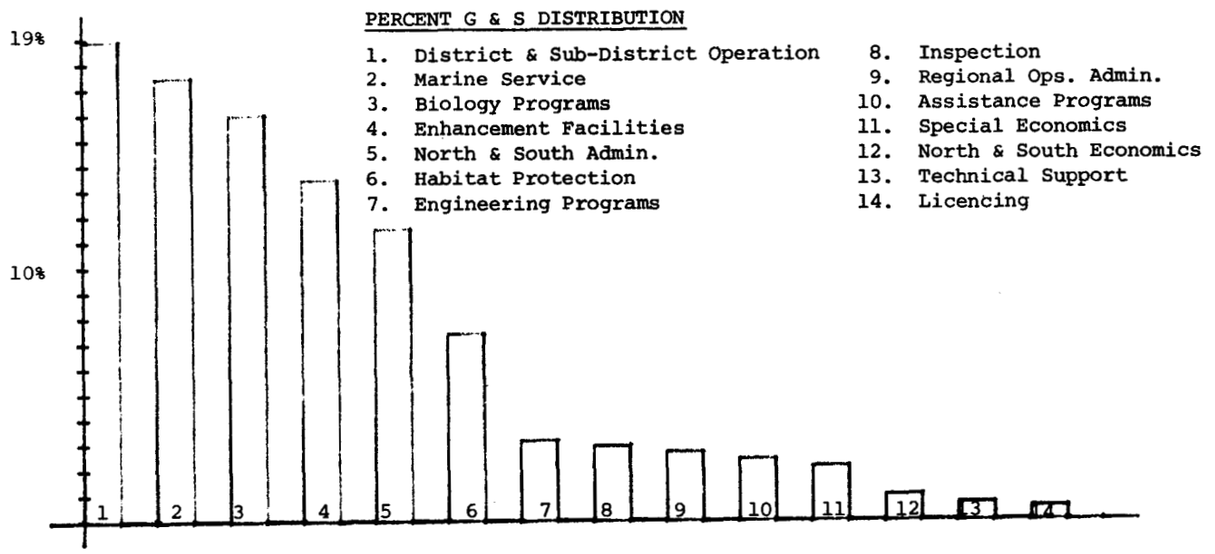
Northern and Southern Operations had the biggest piece of the pie, 513 man-years and $4.3 million dollars. Operations of the field districts and sub-districts, i.e. fishery officers, guardians, patrolmen and clerical support staff engaged in fishery management, surveillance, enforcement, habitat protection, licencing, public education etc. cost about 150 man-years and $905,000 for goods and services. Operation of the patrol vessels in support of the district operations and for offshore surveillance and rescue duty cost 165 man-years and $835,000.

Participation of the biologists, technicians and support staff in fishery management and salmonid enhancement planning studies utilized 35 man-years and $765,000 including $82,000 of special funds for herring stock assessment and $438,000 for salmon enhancement studies. The biologists' work included test-fishing, adult and juvenile salmon counts and estimates, participation in stock prediction and development of fishing patterns, participation in fishery management meetings and conduct of studies to select stocks and sites for enhancement.

Operation and assessment of the salmon enhancement projects including: Babine Project, Atnarko Project, Quinsam Hatchery, Blaney and Inches Creek Incubation Boxes, Capilano Hatchery, Big Qualicum Project, Puntledge Hatchery and Robertson Creek Project cost 40 man-years and $642,000.

The engineering staff engaged in stream clearance and improvement, and design, construction and maintenance of enhancement facilities and other buildings and works utilized 20 man-years and $151,000 goods and services in 1975-76. This total included $78,000 for salmon enhancement surveys and planning.

The Habitat Protection units in Northern and Southern Operations are responsible for investigations and for provision of specialist advice and recommendations for protection of the aquatic habitat from the effects of logging, mining, hydropower development, water diversions, flood control, estuary development and biochemical pollution. This work required 50 man-years and



$353,000 in 1975-76.

The provision of specialist socio-economic advice and investigations such as resource use and evaluation studies and cost-benefit analyses utilized 8 man-years and $48,000.

A number of technical support and fishery management support functions in Northern and Southern Operations required 13 man-years and $33,000. This work included specialist support in communications, electronics, scale reading, computer analyses and equipment and technique development. Also included were operation of the Regulations unit, radio room and operations room and publication of the Sounder.

The Regional licencing office for administration of the fishing licence program required 7 man-years and $25,000 in 1975-76.

Management and administration of the Northern and Southern Branches required 25 man-years and $550,000. The staff in this group included the branch managers (2), division chiefs (6), regional warehouse (4), secretaries (8) and administrative support clerks (5). Some of the items funded out of this pot include: staff training, branch meetings, removal expenses, management travel, telephone, telex, publication and printing, office supplies and uniforms etc.

The regional Economics and Intelligence Branch provides catch statistics, market research and resource allocation advice. The staff of economists, statisticians, computer experts, technicians and support staff used 17 man-years and $102,000 in 1975-76.

The Inspection Branch utilized 64 man-years and $140,000 in 1975-76. This branch is responsible for fish product inspection to ensure quality and safety to consumers, fish processing plant inspection to ensure compliance with regulations for construction, equipment, operating methods and sanitation, and fishing vessel inspection for compliance with requirements for storage and handling of fish. The branch also conducts a consumer consulant program for development, testing and promotion of fish products and administers sanitary shellfish control and paralytic shellfish poison programs.

Management and administration of financial and technical assistance programs in support of fishermen and the fishing industry required 20 man-years and $116,000 in 1975-76. These programs included the Fishing Vessel Insurance Plan, Industrial Development, Indian Fishermen's Assistance Program and Vessel Subsidies.

General management and administration of Fisheries Operations accounted for 32 man-years and $130,000. Included in this group were the Director's office (3 MY), Administration (14), Finance (9), Information (2), Planning and Emergency Measures (3) and International Advisor (1).

Next month - The Pacific Biological Station, Vancouver Laboratory, Pacific Environmental Institute and Small Craft Harbours.

Rod Palmer

Streams at Squamish

Gerry Harris, information type for the Georgia Strait Head Recovery Program, has produced a slide package with anaccompanying taped narrative (on cassette) entitled, "Coho Streams at Squamish". About 10 - 15 minutes long, it is aimed at elementary to junior high school audiences. Although the emphasis is on streams at Squamish, the package explains why small, seemingly insignificant streams are so important to coho production. To borrow the slides and tape, contact:

Gerry Harris
Georgia Strait Head Recovery Program
Fisheries & Marine Service
1090 West Pender Street
Vancouver, B.C. Phone: 666-6383
V6E 2P1

TANU RETIREMENTS

There has been a few noteworthy happenings from the "Tanu" this last couple months. After reading a few of the editorials in the last "Sounder", I decided a voice from the "Tanu" would not be out of place.

Our theme lately has been 'retirement' and in case there are any who haven't heard, I'm enclosing the following article published in the Victoria Daily Colonist on January 16th:

PARTY TONIGHT

Old salts toted up 91 years

Three Greater Victoria employees of the federal fisheries department with a total of 91 years' service have retired.

They are Capt. Reg McLellan, who in his 26 years with the department has skippered the patrol vessels Kitimat, Laurier and Tanu; A.G. (Sandy) Service,

chief engineer, with 37 years, and Walter Bytolan, a cook, with 28 years.

McLellan as master of the Tanu was the first person to apprehend a foreign fishing vessel after establishment of the 12-mile limit. He escorted a Japanese longliner into Prince Rupert harbour early in 1969.

He also took part in many marine searches and rescues, including the rescue of eight men in a lifeboat, survivors of the sinking of the Alaska Queen in the Gulf of Alaska in the early 1970s during a heavy storm.

Associates of the three men will be giving a party for them at the Tally-Ho tonight, which will be attended by Rod Hourston, Pacific area director of fisheries, and other officials from Vancouver.

This pretty well sums up the big event - the retirement party for Captain Reg McLellan, Chief Engineer Sandy Service and senior Cook Walter Bytolan. We all had a wonderful time with a turnout of about one hundred people at the "Tally-Ho" banquet room in Victoria. Incidently, Captain Furlong and his wife Val did an excellent job of conducting the behind-scenes preparations. We on the "Tanu" will certainly miss them all but luckily they live in Victoria so expect to see them aboard from time to time for a 'chin-wag'.

Not too many weeks after was another retirement - Third officer Jim Phillips. Jim's now off on "comp" and annual leave til pulling the pin later in the spring. Since he lives over on the mainland side, this called for another 'shindig' before going on leave, resulting in a gathering at the "Holyrood House" for a delicious Scottish smorgasbord. Reg, Sandy and Walter, the other three retirees, joined us in what turned out to be another very enjoyable evening.

In between these two events, we had a special luncheon on the "Tanu" when the "years of public service" certificates signed by the Prime Minister were presented by Captain Gay to Captain McLellan, Sandy Service, Walter Bytolan and to Les Morris who had retired from the "Howay" earlier last year.

So much for retirement talk and what sounds like a series of social events from the "Tanu". We got down to business shortly after, having had a somewhat shorter than counted on winter tie-up interrupted by a trip to North Van for dry-dock. Our first patrol of the year was up the "west side" and around the "Charlottes" covering our usual stomping grounds. The offshore activities are a little more vigorous than usual for this time of year with, in addition to five or six Japanese and Korean long-liners plus the ever present "Koyo Maru No. 2", the arrival of two Taiwanese long-liners. These are the "No. 61 Feng Bang" and "No. 3 Dong Hong" registered in Kaohsiung, Taiwan (Formosa) - according to the ship's dictionary, a city of 250,000 in south-west Formosa. They, like the other long-liners, are picking up black-cod between the 200 to 300 fathom edges. We noticed what seemed to be a lesser degree of efficiency in their operating of gear than the others, who, incidently, perform with obvious expertise. These new-comers seemed to pick up at a slower rate and it made me wonder if they're new at the game. This may be due to their equipment being more out of date; their vessels are of an older vintage - that is in comparison to the Japanese and Koreans. They have a rather unusual profile with a long, low after-deck extending forward into a shelter deck, with a low wheelhouse on top. Aft of the wheelhouse is the funnel - the height only reaching five or six feet above the after deck. Some more structure extends aft which merges into the raised poop-deck; this in turn sweeps up from the main deck to the height of this other superstructure. The bow has quite a flare and overhang. This, along with the pronounced poop-deck, gives the vessels the appearance of an elongated version of a Chinese junk. I wonder if there is some architectural influence originating from the age-old Chinese junk in their modern-day design motif.

With reference to our first trip out after the few weeks at base, (the later being a time when the engine room is seething with activity - auxillaries stripped, pistons and liners pulled, all accompanied by usual but unforseen complications), we were spoiled the first three days with the finest weather one could wish for. All was ended with a sudden sou-easter when up around the Fredrick/North Island vicinity and we were jolted back into reality. This continued in its usual off and on fashion for the remainder of the patrol.

Back to the 'noteworthy happenings' - I would like to take this opportunity to, on behalf of the "Tanu", wish our 'retirees' all the best in the forthcoming years.

Harold Monks,

F.P.C. "Tanu"

We would like to express our thanks and appreciation to all shipmates and friends, in the Fisheries Service, who kindly contributed to our gifts and the party given for our Retirement.

Yours sincerely,

Reginald D. McLellan,
A. (Sandy) Service,
Walter Bytolan.

THE Sounder

Letters to the Editor

J. A. Kent, E. W. Armstrong, W. L. Hitchcock, J. R. MacLeod, H. J. Engelson, B. Rogerson, W. D. C. Webber, O. M. Bussey, W. R. Burton-Forster, P. D. Rutherford, H. Hedquist, O. N. Wingham, A. P. Kennedy, R. J. Walker, D. E. MacIntyre, L. J. Gelley, A. C. Skipper, P. J. Sims, C. K. Rowe, V. H. B. Giraud, T. L. George, R. K. Johansen, J. H. Hageman, L. R. Herring, G. W. Winsby, D. E. Sampson, B. C. Edwards, C. B. Davis, R. R. Mallory, D. G. Lundago, H. Marshall.

Dear Editor:

The enclosed fisheries group photo came to hand during a recent sorting of "Odds & Ends" of memorabilia. The photo features "Old District No.,2" C.P.B. personnel (Both sea farers & land lubbers) assembled in Rupert for the annual C.P.B. meeting in the year 1960. Old District 2 hands Joe Fielden & Harry Grainger are not present in the 1960 mug shot because a few months previously they had both "cracked"- The Mason-Dixon Line-(i.e. U.S. History buffs will recognize the significance of the "line")-; i.e. Joe to Campbell River & Harry to Alert Bay. Both men gave "round the clock" service in Dist; 2 over a period of some 12 years prior to leaving "sunny" Rupert for the "sordid" South.

When viewing the enclosed photo I took a quick "rule of thumb" March/1976 Inventory of the current whereabouts of the "Groupies" in the 1960 "mug shot" & the "Bottom Line" shows 8 "old hands" are now deceased, a few have resigned, some have retired and several recently attended the "Geritol Seminar" - more properly known as the Pre-retirement Counselling Program. Prominent among the familiar faces still on the Fisheries Cod Jigging or paper shuffling "Grounds" are Ron McLeod, Bill Webber, Jim Kent, Bob Walker, Doug McIntyre, Roy Johansen, Bill Winsby, Bob Mallory & this writer. Out of the whole group only Bob "money" Mallery is still holding down Third Avenue in the Fish Capital of the North.

When reviewing an "old photo" nostalgia reigns supreme & tends to dim other memories of honest differences of opinion or personality, long hours of work both pleasant and unpleasant and the occasional interludes of forthright controversy. However the "things" foremost in my nostalgic memories are the "shared" Belly Laughs & Chuckles which kept the Fisheries Show on the Road despite trials & tribulations. "Smiles & Chuckles" Lou Gelley-(i.e. the "gent" immediately behind Reg Edwards") was rated No. one by his buddies & colleagues in "old" District #2 days. I think Lou is living somewhere near Smithers & knowing Lou I feel sure it is a "Happy Retirement".

Enough is enough I suppose & to quote "The Bard"---"The moving finger writes & having writ moves on"---

Regards & Cheers,
Andy Skipper

THE Sounder

Kate Glover,
Editor
1090 W. Pender St.,
Vancouver 1, B. C.

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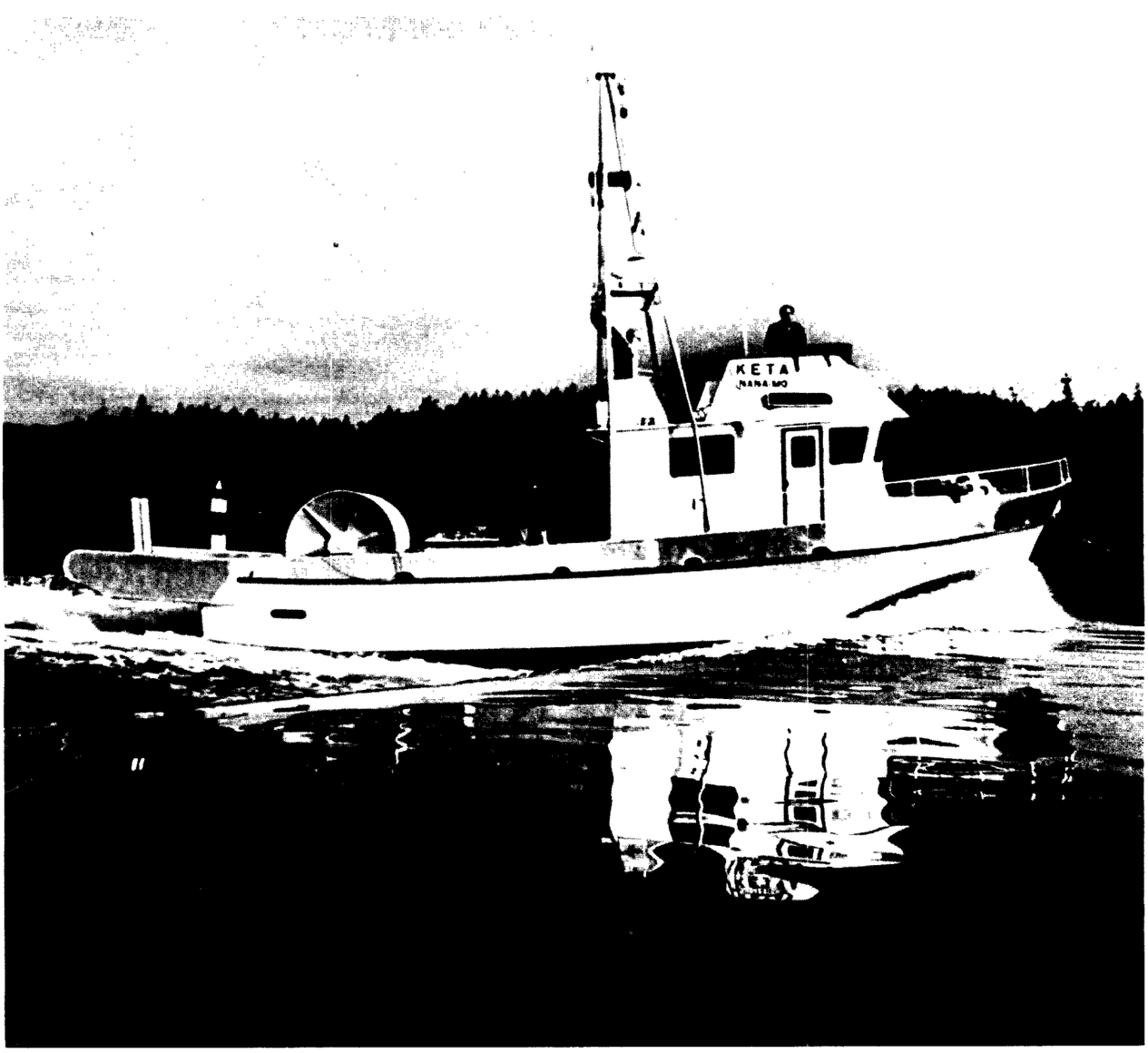
Sounder

MAY-JUNE 1976 Vol. IV No. 3 Fisheries and Marine Service

KETA JOINS PBS RESEARCH FLEET



In April the Biological Station at Nanaimo took delivery of its new combination fishing vessel the "Keta". Built by Philbrook Shipyard in Sydney, the "Keta" was designed by Naval Architect William Garden. The Keta has a fibreglass hull, 38 feet at the waterline, with a beam of 13 feet 4 inches and a depth of 5 feet. She is powered by a Detroit Diesel model V-71 which develops 170 S.H.P. at 1800 R.R.M. The Keta cruises at just under 8 knots.

The Keta is designed for efficient operation by a small crew and has three control stations; in the wheel house, on the flying bridge and aft, by the net drum. Her electronic navigation and scientific equipment includes a Decca Super 101 radar Marconi VHF and SSB radio and a Simrad model EH38 AC echo sounder. The Keta sleeps four and is fully equipped for extended voyages with large, comfortable sleeping quarters and galley.

The Keta is equipped for research on a wide variety of coastal fisheries. She has a Pilkington seine drum, 7 feet wide by 5 feet in diameter. The boom can be fitted with a 19 inch MARCO seine power block. She carries a MARCO 50-109 long line hauler and a Vickers crab pot lifter. For trawl work the Keta is fitted with a Hytac winch with a capacity for 500 fathoms of 3/8 inch wire. The winch has a 8,000 pound pull at 300 feet per second.

The Keta is currently undergoing shakedown trials under a variety of fishing conditions at the Biological Station. Once over her growing pains the Keta will perform a variety of functions in the ongoing research at the Biological Station on young salmon; groundfish such as hake, pollock and dogfish; lamprey; crabs and shrimp. She was designed as a multi-purpose fishing vessel for research on environmental and fisheries management problems in the Strait of Georgia, and this will be her prime function for a number of years.

SALMON ENHANCEMENT

An open letter to concerned staff:

I think that it is about time that somebody told it like it is with regard to our Regional situation and the Salmonid Enhancement Program (S.E.P.)

First, Regional management has been trying unsuccessfully to get adequate funding for fisheries management since at least 1968. They have put forward major budgetary initiatives to seek new funds for the Marine Service, fishery officers, habitat protection, resource inventory studies, international affairs, stock development, enhancement studies - all to no avail. In this period, the organization has survived and functioned by self-cannibalization and on skim from special programs (winter works, students etc.) or special one-shot allotments.

There is a lot of bitching about the monetary problems experienced by various segments of the organization, in some cases tying these problems to our 1971 reorganization and related monetary transfers. These are the facts:

- more money and man years have been committed to fisheries protection activities than would have been in the previous organization - but still not enough.

- capital facilites (residences, fishways, enhancement facilities) are falling apart because of diverted maintenance funds.

- large biological studies which were formerly funded from regular budgets are no longer carried out except by special funding.

- resource inventory groups, engineers, economists, etc. all have had inadequate funds to operate effectively.

- catch sampling projects initiated in 1906-1910 were discontinued in 1972 because of lack of funds, thereby foreclosing possible future management options.

There are numerous other examples of our autoparasitism. Regional management has tried to get the resources needed to reverse this trend, but with no success - so the self-consumption goes on.

Most of our initiatives for increased funding have failed. The monetary environment is contracting, and for the foreseeable future it seems unlikely that even our basic programs related to meeting statutory commitments will receive adequate funding. So, what are the options left open to us?

Do nothing? Cry a lot? Keep fighting the same battle?

No! Hard sell a program in some area where there is a good chance of getting funding. Make the program big enough so that it will provide financial bouyancy to the entire Region. (Any big money coming into the Region has spin-offs to all components of

Fisheries). Design the implementation organization, roles and rules tightly enough that the program can't get out of control and cause more problems than it solves. The Salmonid Enhancement Program fits these criteria: It is saleable (federally, provincially and publicly); it is potentially big ($300 million); it impacts on most aspects of Fisheries so can reasonably contribute to them; and with careful working together and planning and well thought out criteria, it is controllable; and, most importantly, it can generate a rich flood of benefits.

Staff fear the formation of a competitive enhancement bureaucracy which will rip the organization apart, but S.E.P. has gone to great lengths to assure that this won't happen. There is a dilemma though; namely, that unless the organization can mobilize to meet the enhancement program submission deadline of March, 1977, formation of a separate bureaucracy is the only option to defaulting that deadline. It is recognized that the pressure of continuing workload acts as a constraint on staff participation in the program, but the need to design an integrated enhancement program is an over-riding constraint.

Enhancement is only one of several facets of fishery management. Of necessity, the quality of fishery management will have to be improved to permit enhancement to proceed safely. S.E.P. will underwrite some of these fishery management improvements as a spinoff from biological studies directed to enhancement goals. Enhancement plans are being called for from Geographic Working groups. These will be carefully screened to assure that proposed projects won't conflict with fishery management goals.

Enhancement may stick in your craw; it might give nightmares, it may seem to be all bogeymen rolled into one - But everyone of you must be able to think of at least one positive thing about enhancement. If you really try, you will think of a lot more.

I think it is time we all recognized that S.E.P. may be our last chance to save the salmon resource - if it comes off as planned, it may ease our situation for as long as 1990. Admittedly, if the program isn't strictly controlled, it could become a nightmare. However, if the staff rally around the program, they can prevent their fears coming to fruition; they can get the benefits of improved management, habitat rehabilitation, etc. They can maintain the fishery resource as a viable entity. Let's get with it!

F.E.A. Wood

FOR YOU-A CAREERS DAY PACKAGE

A "Careers Day" package has been recently assembled, and although it may undergo some changes (one hopes improvements), it contains:

- A slide package of 80 slides showing some of the activities of fishery officers, biologists, lab and field technicians, patrol boat crews and engineers. It is currently without a script, although one will be made when it is requested. (A list of slide captions is supplied.)

- Calendars from Kelsy Institute, NAIT, College of Fisheries, St. John's. (B.C.I.T. and Lethbridge will be added shortly.)

- Handbook, "Examination and Certification of Masters and Mates", plus a sample of the M.O.T. application form for Master's or Mate's Certificate.

- Booklet, "Environment Canada - Guide to Services".

- Some commercial fishing training information on:

Fishermen's Upgrading Course, Northwest Community College, and Troller Deckhand Training Course, Douglas College.

- Several sample competition posters.

- Brochures on the Pacific Biological Station, Nanaimo.

- A compilation of Questions and Answers on careers in the Fisheries and Marine Service.

Depending on the type of presentation to be made, two half-hour films are also of interest:

- "North Pacific" shows the work of the Biological Station, Nanaimo and of the work of the research vessel the "G.B. Reed".

- "Oceans of Science" covers the work of the Fisheries Research Boards in the Pacific, Arctic, Central and Atlantic regions.

To request the films, contact:

Ms. Alice Sunderland,
Information Branch,

and to request the Careers Day Package, contact:

Maxine Glover,
Information Technician,

both at:

Fisheries & Marine Service
1090 West Pender Street
Vancouver, B.C.
V6E 2P1

LIFE ON THE BERING SEA

by Jim Connor

In company with Dr. Keith Sandercock, I left Vancouver via Seattle to Anchorage, Alaska on February 24th. We spent two days in Anchorage awaiting weather to fly to Dutch Harbour. On arrival in Dutch Harbour in deep snow, we spent three days there, sleeping on board an old liberty ship converted to a U.S. Shellfish factory. On the night of the 29th, we were enjoying a pleasant dinner at the home of the American biologist when the phone rang advising us that a Japanese Fisheries Agency vessel was entering Dutch Harbour to pick us up half a day before schedule. We dropped our drinks and rushed down to the dock. (Before going any further, the stay at Dutch Harbour was quite pleasant with walks through the deep snow in sunny weather).

On board the Japanese Fisheries Agency Vessel, we spent the night travelling up into the Bering Sea. At about 10:00 a.m. the following morning, it was Keith Sandercock's turn to go abroad the Japanese trawler "Tenyo Maru V". This was accomplished by means of a basket in which was loaded with Keith and his assorted equipment. Shortly afterwards, I was put aboard the "Tenyo Maru II" in a similar manner. It was a nice soft landing. These two boats are in excess of 4,000 tons and each have 101 men in the crew including a doctor. The boat was quite new and very comfortable. My bunk, despite what I was led to believe, was 6'6" in length and not 5'5". I had a very comfortable private room. The first day I acquainted myself with the vessel and as many of the personnel as possible. The Captain, Chief Engineer and the Radio Operator spoke some English but not sufficient for easy conversation.

The food on the boat was excellent. At each and every meal, in addition to other things, we were served a hot bowl of soup, a bowl of warm rice, an excellent salad and fish. For breakfast we also had a cold fried egg. For the other two meals, we had much raw fish including octopus, squid, shrimp, whale, tuna and cod in abundance. There was also any amount of seaweed; also pickled kelp stalks and pickled lily stalks. These were excellent to my taste. We also had many raw eggs into which we dipped hot meat or fish from the sukiyaki pot. Fruit was abundant, especially apples, oranges and grapefruit. Japanese oranges other than tangerines are very sour. No alcoholic beverages were served until dinner time, when Japanese Scotch whisky flowed in abundance, also beer.

The hot saki was served once a week, usually on Sundays. The whisky was served in hot water. That concludes the accommodation and refreshments.

The vessel fished 24 hours a day, setting on the average 4 times for an average haul-time of about 3 hours. Average catches were approximately 35 tons per haul and sometimes up to 80 tons. The bulk of the catch was pollock and there were many species of fish, including a few salmon, (chinook), grey cod, skate, octopus, halibut, various species of sole, tanner crabs, sea lions and squid (much larger than our local ones and red and white in colour). A few herring were taken also.

Our job was to monitor the halibut and the crabs and ensure that they were returned to the sea. We had to determine the number of tons going across the conveyor belt in a given period of time to estimate the number of halibut and crabs per ton. We also took basket samples to determine the catch composition. We also had to measure, weigh and sex the pollock and take otolith samples.

UTILIZATION OF CATCH:

The pollock which was the target species, was used for surimi, which is the product which in its final processed form, is much used by the Japanese for sandwiches, frying etc. Surimi is made from the filleted pollock which are finely ground, mixed with we never found out what, put through a big centrifuge into blocks about 3 inches thick, 12 inches wide and 2 feet long, wrapped in plastic and frozen. A quality control sample of this product was taken by the doctor's assistant daily. He pressed some of this raw surimi into sausage skins which he boiled and then munched as he wandered around the ship. I tasted this product many times and it was very good.

All of the processed fish was still practically kicking as it was being processed. The sole and the grey cod were sent to Japan either filleted or whole and frozen. Squid and octopus were frozen in like manner. Scrap species or those not used by the Japanese for human consumption and offal, were taken by conveyor belt to the reduction plant, one floor below the factory. The reduction plant was amidships on the lower deck. The reduction plant operated continuously, producing meal and oil. The meal was packed in 35 kilogram plastic bags. For fresh food for use aboard, the cook and helpers would go to the factory once or more each day and take what was required. Frequently they would take one or two ocean perch which were rinsed in cold water, put in the oven and baked i.e. head and guts intact. These ocean perch were delicious. One interesting item which I have not mentioned is quail eggs of which the Japanese used many, both raw and boiled.

THE FISHING OPERATION:

Fishing was done in depths of 50 to 200 fathoms. When the fish arrived on deck, the cod-end of the net was split and the fish dumped through chutes in the deck of the factory - which was one deck below the boat deck - into a 150 tons storage area from where it went to the various production areas. Repair and turnaround of the net between each haul took from one hour to three hours.

On the night of March 6th, in a 50 knot gale, one of the two shackles holding the net broke and the other shackle parted with the double strain. They then put on their spare net and continued fishing. Four days later, when the seas had calmed, they returned to the place where they had lost the net and dragged for it with a chain and hook. It was located after five hours and returned to the deck with much jubilance. This was a result of extremely precise navigation, mainly Loran.

RECREATION:

A Japanese bath or Ofuro was available at all times, 24 hours a day. I had one everyday, occasionally twice and I am sure, every member of the crew did like-wise. Leaving your slippers outside the bathroom door was a sign that the bath was occupied. Only occasionally, did we see two pairs of slippers outside the door. For those not familiar with the Japanese bath, the bather sits on a small **stool** and with soap and hot fresh water, lathers and cleans himself thoroughly. Then and only then, does he go into the Ofuro which on the boat, **was** a large tank of salt water heated to a very hot point by steam. Here you soaked for as long as you wished or as long as you could stand it. There was a small washing machine in the bathroom where your washing was done while you were having a bath.

TELEVISION:

Television was the canned variety and we watched it everyday at lunchtime. It was mostly of Japanese production and frequently musicals However, we saw "Custer's Last Stand" in Japanese. Custer and Sitting Bull spoke fluent Japanese. I remarked that it was too bad the film had to be made in the Indian language which brought some laughter from the Japanese who understood Enlgish. Then we saw "Bridge over the River Qwai", all in Japanese. That was interesting. I spent a lot of time in the engine room with my friend Nishi Hara, the Chief Engineer, **where I** watched many repair jobs in progress. Frequently, Nishi Hara would be teaching some of the younger engineering staff to wind an armature. They would sit on their heels in the Japanese manner and I have seen them sit thus doing this precise work for two hours without moving their feet. The company which owns these two vessels, the Taiyo Company, has operations in all or nearly all the oceans of the world and many of the crew have fished off Africa, south of New Zealand and in the Indian Ocean.

On or about the 26th of March, our replacements had arrived on the supply ship, the "Tama Gawa Maru", a vessel of 1,800 tons. The Captain of the Tenyo Maru II had a farewell dinner that night for Keith Sandercock and myself. We then went on the supply ship on which we expected to return directly to Japan. However, fishing had been poor for the last few days and the supply ship was ordered to wait for further fish to take to Japan and in the meantime to survey the icepack. We spent a week in the Bering Sea thus engaged, unloaded one more ship, then proceeded towards Japan on the night of April 3rd. We crossed through the Aleutian Islands on the night of April 4th, continued towards the end of the Islands for two more days then headed south, towards Japan. We got caught in a bad storm and had to jog slowly into it for three days, about 1,400 miles east of Japan. By this time, we were down to 40° north latitude and the weather was getting pleasantly warm. We hit the coast of Japan at Barking Dog Point, north of Tokyo, on 14th April and proceeded down coast to Nagoya, arriving there on 15th April.

A company representative from Tokyo took us on a tour of Nagoya, including a very ancient Japanese castle. Then we proceeded to Tokyo by the Shingkonsen, otherwise known as the Bullet Express which goes approximately 125 miles per hour. The 250 miles non-stop trip took us exactly two hours. Scenery was very interesting. The train was very comfortable, it did not appear to be going anywhere near 125 m.p.h. Refreshments were served continually - beer and dried fish, etc. By this time, it was 19° Celcius in Japan and very pleasant. Keith and I wandered around Tokyo for two days. We had to visit the American Embassy regarding the equipment we had to send to Seattle. We visited gunshops, camera shops etc. We had one dinner at Coloner Sander's Kentucky Fried Chicken.

Tokyo was very interesting and I would have liked to stay longer. However, I was homesick and left Tokyo for Seattle at 4:00 p.m. on 17th April. Just before leaving Toyko Airport, I had a very nice lunch of sushi and beer. Because of the change in time, I had two breakfasts on 17th April. One in Tokyo and one in Seattle. A very nice trip.

I caught a glimpse of Priblof Islands, the only land we saw during the month of March. I have not mentioned it, but the weather in the Bering Sea was well below zero and would have been very uncomfortable if we had to work out on deck, but inside the boat, the air-conditioning was first class. This boat manufactures its own fresh water from salt water to the amount of 30 tons a day. Strangely enough, because of the freshness of the fish and the general cleanliness of the whole operation, there was no smell of fish anywhere on board above the factory deck and even in the factory, it was practically undetectable.

FO's ON THE MOVE

The recruit Fishery Officers for 1976 are now on strength. Three will go up north and two will remain south for the time being. Don Ross will be stationed in Prince Rupert; Bob Lajoie in Kitimat; Randy Webb in Rivers Inlet; Jim Duxbury in New Westminster; and Ron Kehl in the Operations Room in Vancouver.

Last year's new arrivals are on the move once again with their promotions. M.K. Farguhar goes from Campbell River to Nanaimo; L.K. Chambers moves from Prince Rupert to Bella Coola; W.B. Caspell goes to Duncan; Jerry Kozak goes to Tahsis; R.A. Brahniuk, from Tofino to Bella Bella; and B.P. Jackson moves from Tahsis to Prince Rupert.

Laurie Gordon takes over as senior officer in Grenville-Principe and Byril Kurtz is returning and will be working the lower Nass sub-district.

TO SEE OURSELVES

AS OTHERS DO

A quote from a draft description for career counselling forwarded for comment by Manpower and Immigration:

"Fishery Officer, Marine

Physical Activities: Physical demands are light. Frequent physical activities include: seeing, hearing and talking.

Aptitude Factors: This occupation usually requires people with average ability to: learn, understand and make logical decisions and understand and use words to express ideas and/or information. Also necessary is some ability to: coordinate hand and foot movements in response to observations .....

In 1975 there were 1,125 people in this groups of occupations in (British Columbia)...."

DATA STREAM

What better time than re-organization to do something about that new Data Stream record that recently appeared on your desk.

For the staffing that will take place in the months to come, Data Stream will come into play for some groups and levels in the Scientific/ Professional and Administrative categories.

If Public Service Commission decrees that a competition has to be opened up to DOE across the country or interdepartmentally anywhere in Canada, it is usually considered preferential, at least initially, to consult Data Stream.

Some examples for minimum eligibility areas for various groups and levels follow:

SX1-4	Public Service	National
BI5-6	Public Service	National
BI4	DOE	National
BI1-3	DOE	Regional
AS6-8	Public Service	National
AS4-5	DOE	National
AS1-3	DOE	Regional
PM6-7	Public Service	National
PM1-5	DOE	Regional

PROTECTION OF SOCKEYE

From a letter from Owl Creek in 1936 to the Supervisor of Fisheries in New Westminster:

" I can assure you that (the) innovation of canoe patrol is one of the most important improvements that has been made here in protecting ascending sockeye, and, taking everything into consideration, I feel confident that we now have an air-tight blanket of protection on the spawning grounds of this valuable fish".

THANK YOU

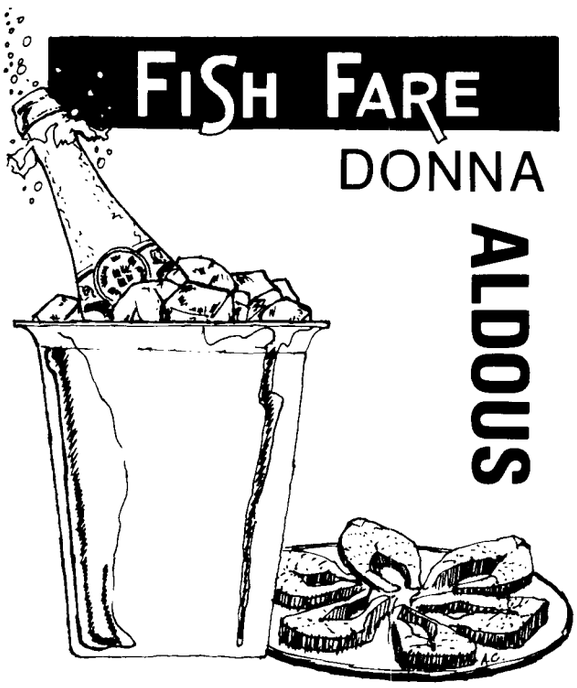
To everyone who helped make April 3rd such a happy and memorable day for me, my sincere thanks.

I shall look on the gold chain as a link with D.O.E. and the beautiful watch will remind me how precious time is - and not to waste any of my retirement. The ear rings I shall wear with great pleasure, as I shall spend the cash donations.

Thanks also to those who had a part in arranging the luncheon.

Sincerely,

Gwen Nadiger.



NET VALUE: SMELTS

Our seasons come and go, marked by a variety of signs in our different regions, but one common sign of spring **across** Canada is the running of the smelts.

These silvery little fish have been a staple food of the North American Indians for hundreds of years, and are still popular with fish-lovers everywhere. The name smelt comes from the ancient Anglo-Saxon word "smoelt," which means smooth and shining, an appropriate description. Several species of small fish are referred to as smelts, but the surf (or silver) smelt, whitebait, and Eulachons, or Columbia River smelts are true smelts. The Eulachons are so rich in oils that the Indians of the West Coast caught quantities of them each year, for their nutritious oils, and for use as candles, hence the term "candle-fish."

Smelts are actually a very distant relation of salmon, and are small, slender, and silver, with an average length of 6 to 8 inches. Smelts can be anadromous (**mature** fish live in the sea, and return to fresh water to spawn), or fresh water. The Great Lakes received smelts as an experiment in 1906, when they were introduced as food for salmon which had been planted in the lakes. The salmon transplant failed, but the smelts thrived, and are now an important species in the eco-system.

With spring, the smelts travel, after dark, from lakes into tributary streams, or from ocean to rivers, to spawn. The smelt run is a time of great excitement, and smelt fishing parties have become a tradition. The fish are caught with nets, or any scooping device, although catch limits and type of gear restrictions control the resource.

Besides the ease of capture, other advantages of the smelt are its delicate sweet flavour and texture, and its ease of preparation.

Simple cooking methods are best with smelts; pan-fried, oven-fried, or broiled are the most popular methods of presentation.

It is not necessary to scale the smelts. To clean remove the head and tail: (some people like to leave the tails on and eat the tails; when smelts are pan-fried these taste just like a potato chip). Using a small sharp knife remove the back and belly fins, and slit the body open all the way down. Remove the viscera by washing under cold running water. It is not necessary to bone the smelts before cooking, as the bones are easy to remove, and each person can remove their own. If you wish to bone the fish before cooking, simply slip the thumb under the back bone, between bone and flesh, and pull towards the tail. The tiny bones will all come out in one long piece.

Smelts can be frozen for up to 3 months, but as with all fish are far better fresh.

The following are some **recipe** suggestions for smelts, from the simple to the superb.

PAN-FRIED SMELTS

24 smelts (approx. 2 pounds), **pan**-dressed (boned, if desired)
1 cup A.P. flour
1 teaspoon salt
1/4 teaspoon pepper
cooking oil (use 1/2 butter and 1/2 shortening).

Place flour in a plastic bag, with salt and pepper. Add fish to flour, a few at a time. Shake well to coat fish. Heat fat in frying pan, up to 1/4 inch covering the bottom of the pan. Fry fish over medium high heat, approx. 10 minutes, or until fish turns opaque. Turn once during cooking time.

Serves 6

SMELTS IN TEMPURA BATTER

Make a meal of this, by adding vegetables to the batter, such as sweet potato, cut in cubes, broccoli, whole mushrooms, green pepper, sweet onions, etc.

2 pounds smelts, cleaned and dressed (remove bones if desired).

Batter:

1/4 cup cornstarch
3/4 cup A.P. flour
1 egg
1 teaspoon baking powder
1/2 teaspoon sugar
2 tablespoons oil
ice water (approx. 1 cup).

Combine all ingredients in a large bowl, stirring well. Add enough ice water to make a thin batter. Dip the fish, vegetables in the batter, drain slightly to avoid excess batter, then fry in hot fat, at 375°F. Serve with a Tempura sauce, if desired.

Serves 6

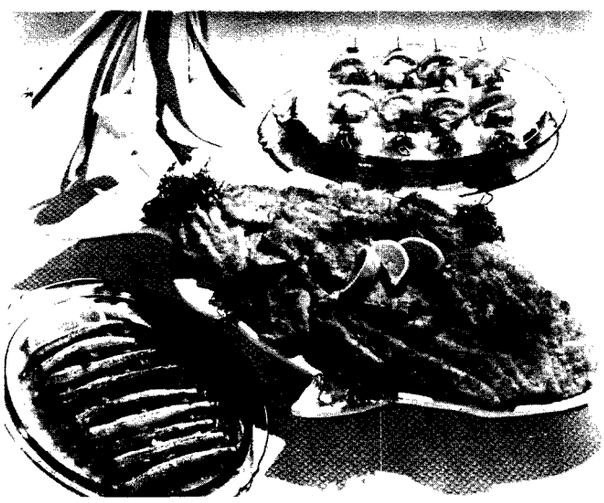
PARMESAN SMELT

The flavour of the parmesan complements the smelts beautifully. Try this recipe with any pan-fish, next time you have some.

2 pounds smelt
1/2 cup flour
1/2 teaspoon salt
1/8 teaspoon pepper
1 egg, beaten
1 tablespoon lemon juice
1/2 cup cracker crumbs
1/3 cup grated Parmesan cheese

Clean and bone smelt. Combine flour, salt and pepper. Coat fish with mixture. Dip fish in combined egg and lemon juice. Roll in mixed cracker crumbs and cheese. Panfry in about 1/4 inch of hot fat. When golden brown on one side, turn and brown the other side.

Serves 6



BONELESS SMELT KABOBS

2 pounds smelt
1 can (14 oz.) pineapple slices
8 pieces mild onion
1 green pepper, cut into 2" cubes and blanched.

Defrost frozen smelts in refrigerator, 4 - 6 hours, until firm. Cut off **tail,** head and fins, slit from belly to tail, flatten out fish. Holding both sides of fish from underneath with left hand use the right hand to gently lift out the backbone and attached bones, starting at the **head** end.

Divide ingredients into groups of 8. Roll the boned smelts; arrange with other ingredients on 8 greased skewers. Brush with sauce and broil, 4" from heat, 6 - 10 minutes. Turn once during cooking, brushing with sauce after turning.

PAPRIKA BUTTER SAUCE

1/4 cup butter or margarine
1 1/2 teaspoons paprika
2 tablespoons lemon juice
1 tablespoon orange juice concentrate
1/2 teaspoon onion powder
1/2 teaspoon salt; pepper, to taste
Melt butter; remove from heat.
Add remaining ingredients and mix well.

Serves 6.

ORGANIZATION

So, we've been reorganized.

Now, the discussions and chatter use the term "organization". I guess that's progress. To date, we have identified an interim exexutive pending classification and staffing action. We should probably be thankful that the outcome of months (or is it years) of haggling at least has brought us what could be a good functional executive that is diversified enough to look at broad problems with each **person** bringing a different kind of background and different expertise.

Then, the discussions moved down a level or two and produced a few directorate organizations. With the fine points of jurisdiction and function still to be worked out probably bustle and confusion will reign for a few months yet. And that doesn't take into account the trials and tribulations of classification and staffing.

Basically, the memo to staff of May 25th from Dr. Geen and the subsequent ones from the Directors did not indicate a summation or an end. This is just the beginning. Now comes the hard part - making it work.

Presumably the present **raft** of "acting" appointments (you have to admit you expected that given the Famous Players Theatre) will now slowly begin to dwindle.

Only time will tell whether we achieve an executive that will give true and timely direction and whether the directorates can establish good working relationships (or is it "interdependence")?

It will be interesting.

FIREARMS TRAINING

Shotgun at 7 yards

Kneeling at 25 yards

Freeman, Scott and Sgt. Hull in foreground

Left to Right

Rear: A. Groat, M. Bogart, D. Teskey, J. Stephen, A. Grayley, J. Bentley.

Centre: C. Kennedy, J. Krywchuk, T. Germscheid, L. Freeman, G. Scott, M. Draginda, Sgt. R. Hull.

Front: C. Forbes, J. Hipp, C. Bourne, T. Long.

Missing: I. McCormick, W. Lowdon.

March 20th to April 2nd saw the first of the officers of the Pacific Region complete the combat firearms training course. Fifteen officers from District No. 2, one from District No. 1 and two officers from District No. 8 attended the four full days of instruction. The instructor for the course was R.C.M.P. Sergeant R. (Bobby) Hull. The facilities used were those of the Delta Municipal Police.

Two half days of classroom instruction with Sgt. Hull and Mr. G. Carruthers from the Department of Justice and the remainder of the time on the range with the care and use of firearms.

Instruction in the use of service revolvers included firing from various positions (standing, kneeling, prone) and at ranges from 7 yards to 50 yards.

Shotgun shooting included trap (for sighting) and use from the shoulder and hip at various ranges. Demonstration of the effect of shotguns at different ranges was also given.

In speed and accuracy in the use of revolvers a minimum of 180 points of a possible 300 is required and must be surpassed to qualify in this course.

The group of officers in this first course not only surpassed this mark they all surpassed the R.C.M.P. **crossed** revolver standard of 240. The lowest mark made by our officers was 253 in the final qualification shoot to a high of 288. The highest score of the week was 293.

All final qualifications were based on speed and accuracy of each shooter and a psycological evaluation of each of the participants.

As of this writing the final tabulation of results has not been made.

The weather also cooperated very well giving a variety of rain, frost, wind and sunshine - a good cross section of all conditions.

Lunch time on Wednesday provided a bit of a diversion as Cal brought some of his private collection of muzzle loaders and percussion cap firearms. These proved to be a little slower than the modern equipment but no less accurate.

G.W. Lowdon

Spurious Emissions

Vi Kingston, S.O.B. finance clerk, has resigned - off to greener pastures.

* * * * * * * * * * * * *

Gwen Nadiger has left the Personnel office following a royal send-off at the Ritz.

* * * * * * * * * * * * *

Susan Furr has left her accounts job of scrutinizing travel claims to accept a promotion with Public Works.

* * * * * * * * * * * * *

Mr. Hourston is now working on a special assignment for the Region as co-ordinator for International activities and Regional representative for Land Claims negotiations.

* * * * * * * * * * * * *

Dick Roberts has returned to the Ottawa scene to work on matters related to the extension of jurisdiction.

* * * * * * * * * * * * *

Eric Pickering of F.I.P. died suddenly on May 31st. He joined Fisheries in 1969, and spent time before that with DND following 25 years in the Navy.

* * * * * * * * * * * * *

A quote from the folks who run Lord Jims in Sechelt (after two Fisheries meetings back to back): what's the matter with Fisheries people - they all look so unhappy and sad.

* * * * * * * * * * * * *

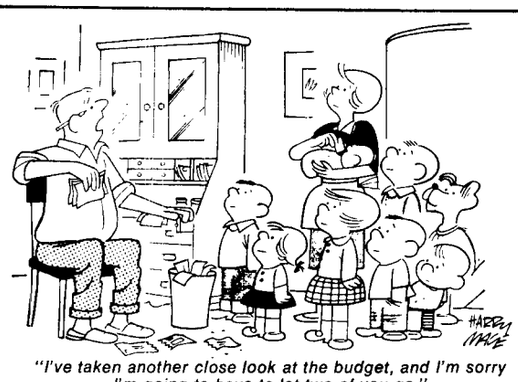
Bill Sinclair, chief economist N.O.B., has resigned to accept a promotion with Fisheries and Marine in Burlington, Ontario.

* * * * * * * * * * * * *

Congratulations to Dick Crouter getting the work on Field Operations organization out to the masses before the news was cold - hope its a precedent for everyone.

* * * * * * * * * * * * *

"My friend, never speak unkindly of economists never knock them. Because God made them the same as he made fleas, rugs, lice, wasps, snakes, skunks, and other unpleasant things. In his inscrutable wisdom he made them. Why he made them only he knows. Some day he may enlighten us. But up to now I'll be damned if I understand."

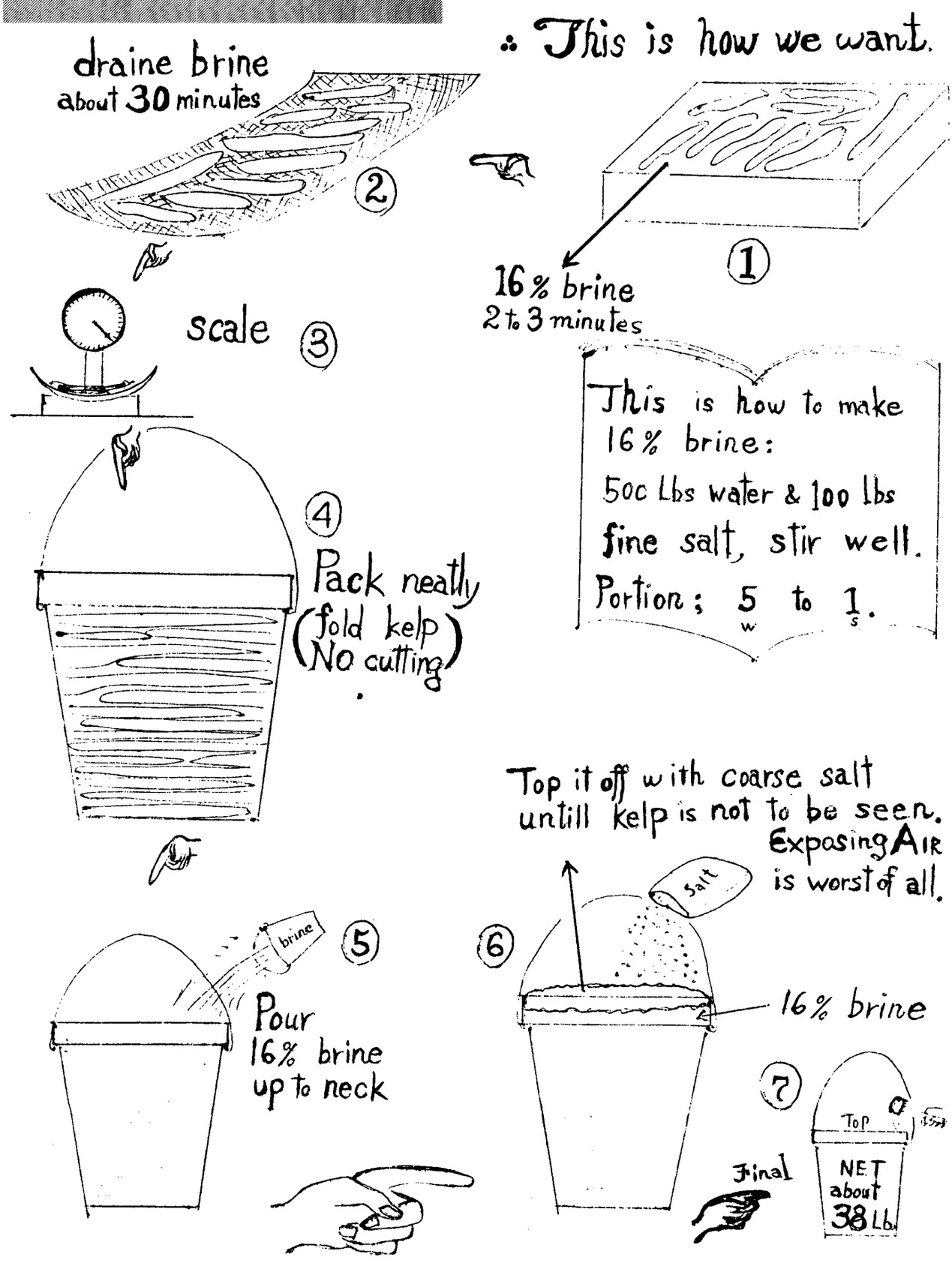


"I've taken another close look at the budget, and I'm sorry I'm going to have to let two of you go."

THE Sounder

Letters to the Editor

JUST FOLLOW THE DIRECTIONS



Belated greetings from the Sunshine Coast where the blooming Dogwoods are out and generally, so is the Fishery Officer. After reading the past issues of the Sounder, I can only surmize that most of the personnel are suffering from common frustrations .... We have been periodically asked to submit intelligent items that would be of interest to all, if our paper is to be a success so again I strike out.

Enclosed is the official instruction sheet from the orient to the Roe on Kelp operators, if you read it carefully, you can detect the tremendous technical input from the draughtsmen (or cartoonists), to ensure the mixed up occidental mind follows the oriental thinking.

This relatively new industry is on its way and from the interest expressed, expansion is foregone. This year, the primary project from 1975 was expanded and 5 tons was harvested by one operator,

streamlining the techniques should result in full quotas being reached by all. A total of 15,000 lbs was harvested at Deserted Bay in Jervis Inlet by two operators, a grade of 80 °/° number one product with an overall price of $3.25 obtained per pound. Couple this with the sale of herring on the fresh or frozen market and we have a lucrative business.

For you world travellers, on your next visit to Japan, partaking of those oriental delights (hereafter called roe on kelp), think kindly of our finny friends who gave so much that we would have millions of smiling Japanese (I think its the salt content), with the end price, they haven't anything to smile about. We like to think they're smiling about the excellent quality of our product.

Ray Kraft,
Fishery Officer.

Kate -

Remember -

When Tom Mix was every boy's hero?

A Saturday matinee cost 10¢ - and, occasionally, the theater gave every kid a gift?

When right in the middle of the city, the people next door kept chickens and you got to feed them once in a while?

The barber gave a kid a trim for 10¢? You went to the butcher shop to get "5¢ worth of liver for the cat" - when you got home, Mother cooked it and you ate it?

Some women, in the cities, did the laundry in large copper tubs? And the water in the tubs had been heated over an open fire in the back yard?

When people made their own soap out of lye and wood ash? How, if you were faster than your brothers and sisters, you got to lick the cream from the milk bottle cap? And on frosty mornings, the caps popped up and gave you a good half inch of lickings?

When the breadman, the milkman and Chinese vegetable man went from door-to-door?

The sound of the horses hooves as the milkman came along your street?

Taking the coal shovel and collecting horses' donations to put around the rose bushes?

Cutting kindling and firewood; packing up buckets of coal, carrying ashes to the back garden and sweeping a kitchen floor for the old lady down the street - all for 15¢ a week?

How you tossed a cord of silvery millwood into a basement for 15¢?

When the postman was a rich guy - because he had a job? When coke was a superior fuel?

How, on Easter Sundays, everyone climbed a hill to attend a Sunrise Service?

When Clem Davies was the Billy Graham of his time? The Oxford Group Movement?

The bus that took you to Sunday School picnic had no aisles and the two doors for each row of seats had big brass handles?

When a trip from Victoria to Sidney, on a bus that had straw seats seemed to last forever and you were sorry when it ended?

When the cure for a wasp sting was to put a mixture of spit and earth on the wound?

When you had tremendous respect for the teacher who wielded the strap judiciously?

When everyone took a gift from the larder to school, the school nurse took the donations to the Friendly Help Society, and then on Thursdays, after school, you took a paper bag to the Society where you were given enough grub to keep you going for a couple of days?

When new clothes were owned only by rich kids? How the wind-up toys you got for Christmas would seldom work by Boxing Day?

When ice cream was a treat? How you sucked on pieces of ice that fell off the iceman's truck?

The thrill of being allowed to sit beside the iceman while he drove to his next stop a block away?

Of course, you don't remember, Kate. But I remember these, and many more and there is not one unhappy memory in the lot!

John Robinson

THE Sounder

Kate Glover,
Editor
1090 W. Pender St.,
Vancouver 1, B. C.

Opinions expressed herein do not necessarily reflect Fisheries Service policy.
No articles may be reprinted without permission from the Editor.

PIP INFO SHEET
July 16, 1976

SALMONID ENHANCEMENT PROGRAM

Question: What does PIP stand for?
Answer: Public Involvement Program.

* * *

Info Sheet will be printed twice a month, and will detail PIP staff activities. The Sheet will be distributed to Fisheries and Fish & Wildlife Branch staff, and interested public.

* * *

SEP Brochure should be printed sometime in August. It contains information on the salmonid resource and potential for its enhancement. Initial distribution will be to Fisheries and Fish & Wildlife Branch field staff, and interested public on our mailing list. More available on request. (see address below)

* * *

Native Summer Student Program The Fisheries Service in contract with the Aiyansh and Bella Coola Indian bands, is employing 20 students for various fisheries activities this summer.

4 at Meziadin R.	1 at Prince Rupert
4 at Nass	4 at Owikeno
1 at Terrace	4 at Bella Coola
1 at Kitimat	1 at Bella Bella

* * *

Native Technician Training Program is a two year program, leading to employment opportunities with the Fisheries & Marine Service. The 6 trainees are currently working at the Quinsam and Capilano Hatcheries, Babine and the Central Coast.

* * *

Educators' Workshop is tentatively planned for August 23-24. Its purpose is to bring together a cross-section of educators to discuss:

1. SEP/PIP
2. what materials they could use
3. what help PIP can give them, and vice versa.

* * *

Stream Clearance Training Program In a joint contract with the Sliammon Indian Band and Canada Manpower, the Fisheries & Marine Service will undertake to train and supervise 4 native people for stream clearing. Six streams will be cleared before the salmon return to spawn this fall, and hopefully the team will undertake similar projects in the future.

* * *

Staff Workshops One-day workshops are planned for 11 areas throughout the province starting in late summer. They will deal with issues that concern field staff about SEP and PIP.

HEADQUARTERS: 1090 WEST PENDER STREET, VANCOUVER, B.C. V6E 2P1 PHONE 666-1384

Salmonid Enhancement Lecture Series	starts September 14 at Douglas College, one evening a week for 12 weeks. The course is open to Douglas College students and the general public. It will be a prerequisite to the Directed Studies Project which will be offered in January. The course fee is $18. For further information contact: Douglas College, P.O. Box 2503, New Westminster, B.C., or Maxine Glover 1090 W. Pender St., Vancouver, B.C. V6E 2P1. (666-1727)

* * *

Comments & Inquiries	regarding PIP, SEP, the Info Sheet, any of the above activities are always welcome. The SEP Information Centre line is 666-1384.

* * *

and finally	There is no truth to the rumor that the "PIP team" is a cheerleading squad.

1975-76
Complete
years

Sounder

NOV.-DEC. 1976 Vol. IV No.4 Fisheries and Marine Service

EXTENSION OF JURISDICTION—Pacific Coast

In June of this year, the Canadian Government announced that it would be extending Canadian Fisheries jurisdiction to 200 nautical miles and that this extention would take place no later than 1st January, 1977. The preparations for implementing this decision has been a monumental task since it involves legislation for extension, requirements for surveillance and enforcement in the new zone, regulations governing fishing by foreign vessels including licensing, the establishment of allowable catches, their allocation to foreign countries, the monitoring of these catches, and the research requirements associated with the new responsibilities of ensuring the conservation of all species of fish that would come under Canada's new area of fisheries jurisdiction. In addition, there are some fisheries' problems associated with the United States who will be extending their fisheries jurisdiction to 200 miles on 1st March, 1977.

In order to deal with these tasks, a Steering Committee composed of Mr. Lucas, S.A.D.M. Fisheries and Marine, Mr. McEachran, A.D.M. Fisheries and Mr. Legault, D.G. International Directorate was established. A special "working group" chaired by Dick Roberts seconded to Headquarters from the Vancouver office and composed of representatives from the appropriate Headquarters Directorates and the Regions was appointed. This working group was responsible to the Steering Committee for developing the various elements needed for putting the 200-mile limit in place by the designated time. I served as the Regional Coordinator on this Committee and in order to cover all aspects of the Pacific Region, a special Committee composed of Chris Newton, Ian Todd, Keith Ketchen, Bern Hawley and Ken Pitre was appointed by Dr. Geen. This Committee has worked long hours, traveled to Ottawa many times, drafted and redrafted numerous documents, participated in countless meetings, and argued endlessly for what's needed in the Pacific Region.

Well - what's been accomplished - I don't intend to report on everything in this article, but for starters, I would like to give you some idea on how foreign fishing will be controlled under extended jurisdiction.

Regulations will be enacted and enforced by Canada under two federal statutes: the Coastal Fisheries Protection Act and the Fisheries Act. In general terms, the proposed regulations under the Coastal Fisheries Protection Act will establish a licencing scheme, while those to be made under the Fisheries Act will set out some of the technical requirements applicable to foreign vessels such as national quotas, closed areas and mesh size restrictions.

The Coastal Fisheries Protection Act regulates the entry of foreign fishing vessels into Canadian fisheries waters and permits the control of activities within such waters.

Under the new regulations, a foreign fishing vessel will normally require a license in order to enter Canadian fisheries waters. Unlicensed vessels will be authorized to enter and transit the new Canadian fishing zones in the course of a voyage to a destination outside Canadian fisheries waters, provided that their fishing gear is removed from its place of operation or stowed away, and that they comply with directions and requests for information by Canadian enforcement officials. Unlicensed vessels will also be permitted by the regulations to enter Canadian fisheries waters in cases of distress or medical emergency.

It is anticipated that, as a normal rule, licences will be issued to foreign fishing vessels only where the appropriate authorities of the state of registry have prepared and transmitted to the Government of Canada a general fishing plan for the year in question.

This will permit the Canadian authorities to consider applications not in isolation, but in the context of the operations of an entire fleet over the course of a fishing season.

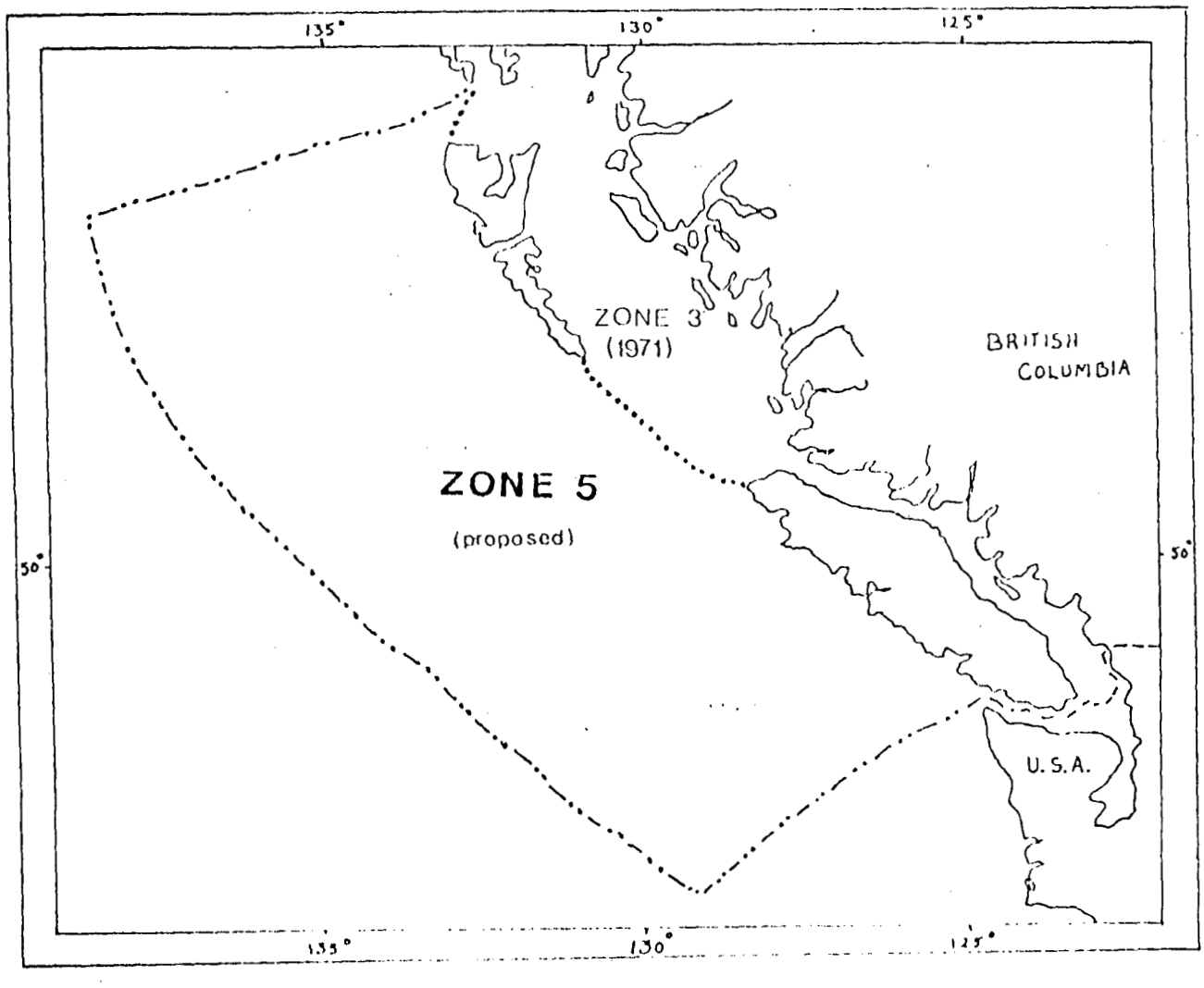
The regulations will require that applications include a description of each vessel for which a licence is sought, and of equipment and crew; its side number and radio frequencies; its state and port of registry; the name of its owner and master and, where applicable, its charterer; the proposed activities and the period for which the license is sought; and the name of a person resident in Canada with a permanent office in Canada who is authorized to represent the owner of the vessel for the purpose of providing liaison with the appropriate Canadian officials.

As required by the Act, the regulations will list the various purposes for which a licence may be granted. These will include: fishing, processing, transhipping and transporting fish at sea; transhipping outfits or supplies at sea; and provisioning, servicing, repairing or maintaining other foreign fishing vessels of the same fleet. The regulations will also contain procedures for authorizing, in appropriate cases, the exercise by foreign fishing vessels of the following privileges at Canadian ports: purchasing fish, fish products, bait, supplies or other outfits; landing fish or fish products; unloading, landing, transhipping or re-embarking equipment belonging to the vessel or to any other fishing vessel of the same national registry; granting shore leave to the crew; and discharging or taking on board a member of the crew of the vessel or of any other fishing vessel of the same national registry.

A licence will be valid for a period to be determined by the Canadian authorities and the Minister will have the authority to cancel or suspend a licence.

The licence will set out in detail the particular activities which the vessel is authorized to carry out in Canadian fisheries waters and may include stipulations respecting the directed fisheries which the vessel may conduct; quotas both for directed fisheries and by-catches; prohibited catches and a description of the kind of equipment and gear which must be used.

The regulations will state that written records must be maintained on a daily basis of the vessel's fishing effort and catch and these records will have to be transmitted to the Canadian authorities at any time, at their request. In addition the regulations will require that periodic reports be made to designated Canadian authorities - normally by radio - of the position of the licenced vessel and of its current activities including its catch statistics and any transhipments or other dispositions of its catch.



The masters of the licenced vessels will be required tofacilitate boarding by Canadian enforcement officials. They will also be obliged to provide suitable accommodation to protection officers remaining on board for more than four hours for purposes of observation; to provide all reasonable assistance to such personnel in the exercise of their duties; and, upon request, to arrange for messages to be sent or received by them while they are on board by means of radiotelegraph or radiotelephone facilities.

Where it is feasible under the circumstances, the master of a licenced vessel may be asked to take on board a technical observer, designated by the Canadian authorities, for the purpose of recording scientific data and observations or taking samples.

Each licenced vessel will be required to fly its national flag in Canadian fisheries waters and to display in a place that is clearly visible both from the air and from sea level the letters and numbers identifying the vessel as set out in its licence.

Except when a licenced vessel is in an area in which it is authorized to fish at that time, all its fishing gear will have to be removed or stowed away so that it is not ready for fishing.

Licenced vessels will normally be required, at least twenty-four hours prior to entering Canadian fisheries waters, to notify a designated Canadian official of their estimated time of entry and of their intended activities. A licenced vessel will also have to notify a designated Canadian official of its intended time of departure at least seventy-two hours prior to leaving Canadian fisheries waters.

The proposed new regulations to be made under the Fisheries Act have not yet been finalized. For the Atlantic Coast, the regulations will incorporate the measures agreed upon at the recent ICNAF meeting in Montreal, including national allocations. On the Pacific Coast our Licence Committee has prepared a first draft.

Infringements of Canadian fisheries laws and regulations including breaches of the terms and conditions established in licences issued to foreign vessels, will be dealt with in accordance with the provisions of the relevant Canadian statutes, which authorize the arrest of vessels and, upon conviction by a Canadian Court, the imposition of fines and other penalties.

More to follow on surveillance - U.S./Canada problems and allowable catches by foreign fleets in 1977.

W.R. Hourston

---

a Guardian

Who is always ready for action
Even if his arms in traction - A GUARDIAN
Who keeps the Fisheries out of the red
While the D.C.O. stays in bed - A GUARDIAN
Who puts fear in all the bears, and climbs
The cliffs like they had stairs - A GUARDIAN
Who with all his aches and pains, still works
Out in the bloody rain - A GUARDIAN
Who clutching his little bottle of rum
Goes out to make his closing run - A GUARDIAN
Who chases poachers in the dark and thinks
It is a bloody lark - A GUARDIAN
Who braves the equinoctial gale
Who squares his cap and then sets sail
A GUARDIAN

"Profit has come to occupy something of the same position in the public mind that sex used to have. Most people think there is more of it around than there really is, and are convinced someone else is getting it all."

H.E. Wyatt to the Canada Jaycees
41st National Convention, 1976

Asking Sperry Rand employees what they thought about Ms. and other titles for women, one response was: "I'm the head of the family and my wife is the neck. Usually she twists the head the way she wants it to turn."

Regional Public Service Commission Courses

COURSE	DATE	FEE
Introduction to Surveying	Jan 17-21/77	$200
Person-to-Person Communication	Jan 19-21/77	$155
Report Preparation & Oral Communication	Jan 24-28/77	$235
Basic Supervisory Workshop	Jan 31-Feb 4/77	$235
Management of Time	Feb 2-4/77	$155
Marine Safety	Feb 14-18/77	$200
Writing for Results	Feb 16-18/77	$155
Person-to-Person Communication	April 13-15/77	$155
Writing for Results	April 26-28/77	$155
The Manager as a Person	May 2-6/77	$325
Career Growth for Administrative Support Staff	May 16-20/77	$235
Human Relations and Behavioural Development	June 6-10/77	$235
Writing for Results (NANAIMO)	June 14-16/77	$155
Person-to-Person Communication (VICTORIA)	June 21-23/77	$155
Financial Management for Non-Financial Managers	June 27-29/77	$155
Implementation of Computer Based Systems	Sept 7-9/77	$300
Pay and Benefits for Support Staff	Sept 12-16/77	$235
Career Growth for Administrative Support Staff (KELOWNA)	Sept 26-30/77	$235
Staff Relations for Managers	Sept 26-30/77	$300
Person-to-Person Communication	October 12-14/77	$155
MBO Orientation Seminar	October 18-19/77	$150
Career Growth for Administrative Support Staff	October 24-28/77	$235
Basic Supervisory Training	Oct 31-Nov 4/77	$235
Records Management	November 21-25/77	$235
People in Organizations	Nov 28-Dec 2/77	$325
Management by Objectives Concepts Application Seminar	January 9-13/78	$325
Basic Supervisory Workshop	February 20-24/78	$235
Material Management and Inventory Control	Feb 27-March 3/78	$235
Writing for Results	March 14-16/78	$155
Pay and Benefits for Support Staff	March 20-24/78	$235

Note: Location is Vancouver unless otherwise stated. Fees shown are based on 1976-77 prices. They are subject to slight variation in 1977-78.

STREAM CLEARANCE

$1,300 of the Public Involvement funds for Salmonid Enhancement has been spent on a stream clearance project at Morrison Creek near Courtenay.

The Courtenay and District Fish and Game Protective Association members carried out the work, with some guidance and assistance being provided by Fishery Officer Bill Webber and Patrolman Jack Trent of the Federal Fisheries Service and by Conservation Officer Ray Rogers of the Fish and Wildlife Branch.

Work commenced on August 28th, and several hundred man-hours have been expended by Club members and their sons.

The Creek is tributary to the Puntledge River, which it joins on the outskirts of Courtenay. It has been an important contributor, particularly to our Coho salmon population over the years. Debris and silting have accumulated to the point where fish production was in danger of being seriously affected, hence the necessity for the project.

It should be pointed out that any Enhancement funds were spent only for rental of power saws, a backhoe, other equipment, and for purchase of gravel. The Club members contributed freely of their time and labour to make the project a success.

George McIndoe

NEW STATUS FOR FISHERIES

The official report of the House of Commons Debates of October 12, 1976 states that Romeo Leblanc is Minister of Fisheries and the Environment.

That makes it official. Fisheries and Marine Service will remain as is. Hence all us regional folks are part of Fisheries Management, Pacific Region, Fisheries and Marine Service, Fisheries and the Environment.

In trying to come up with a short title, there were a couple of suggestions:

Fisheries & the Environment - FATE

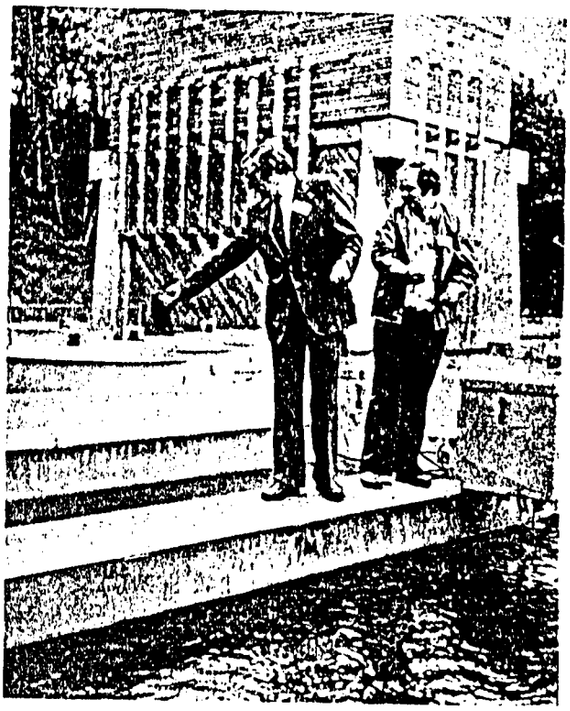
or

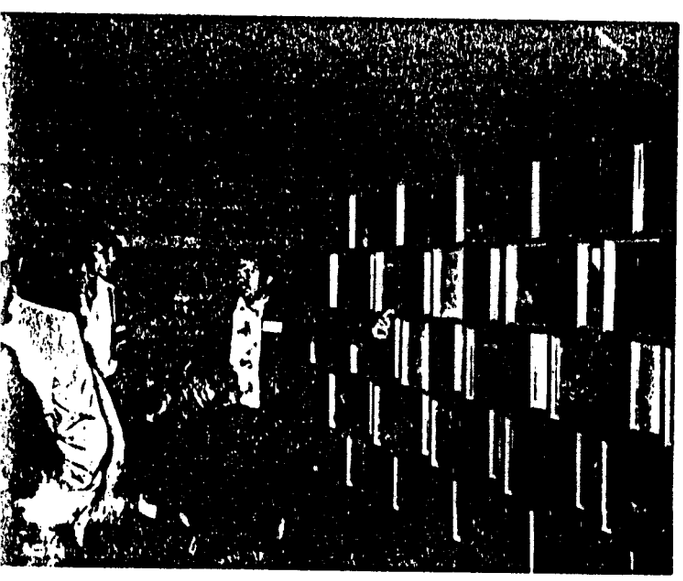
Department of Fisheries and the Environment - DFE

-- the latter is the one to be used.

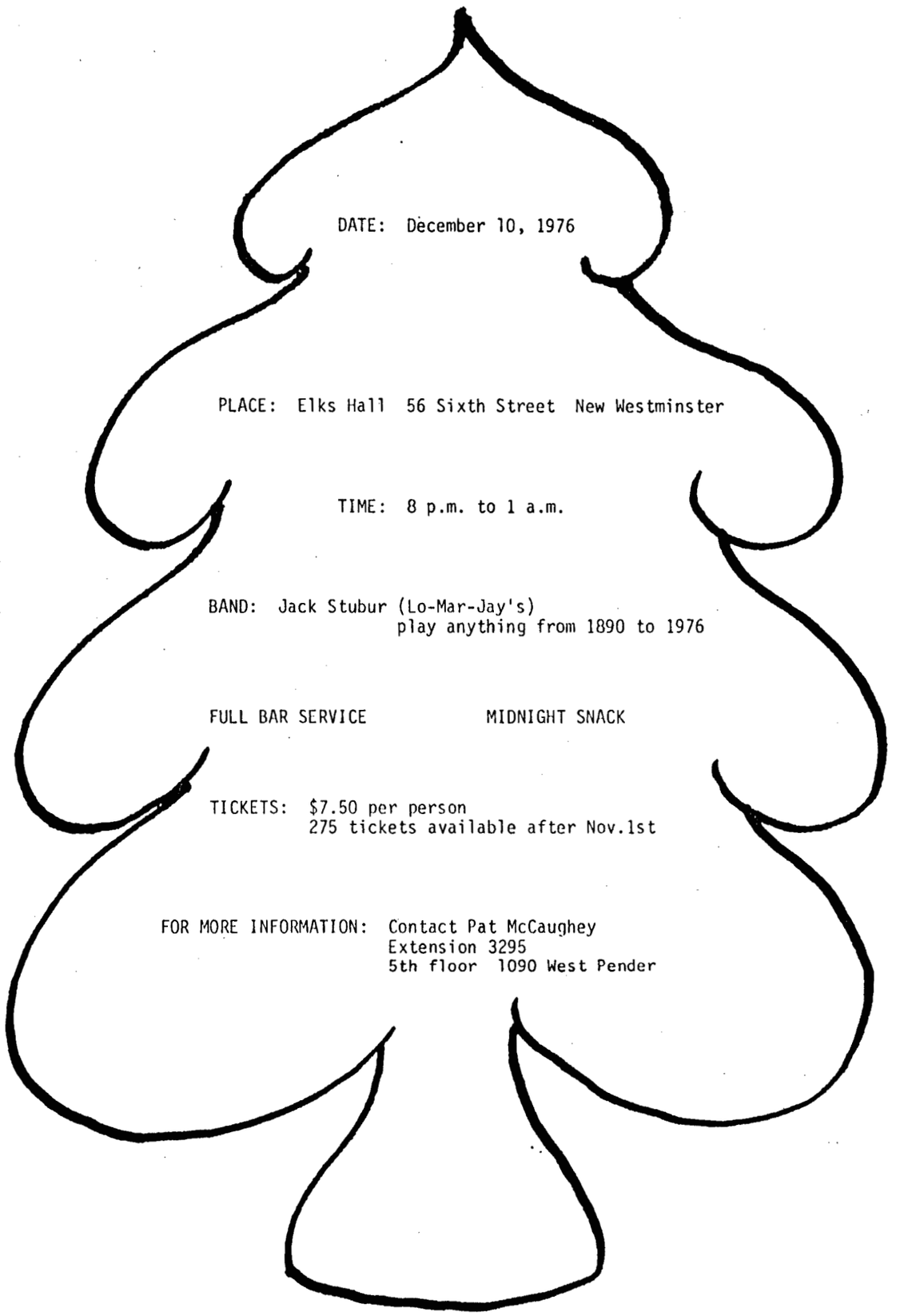
Apparently we are to be informed in the near future about what to do with our old stationery since a new logo is to come into effect.

QUINSAM RIVER OPENING





1976 Christmas Party



DATE: December 10, 1976

PLACE: Elks Hall 56 Sixth Street New Westminster

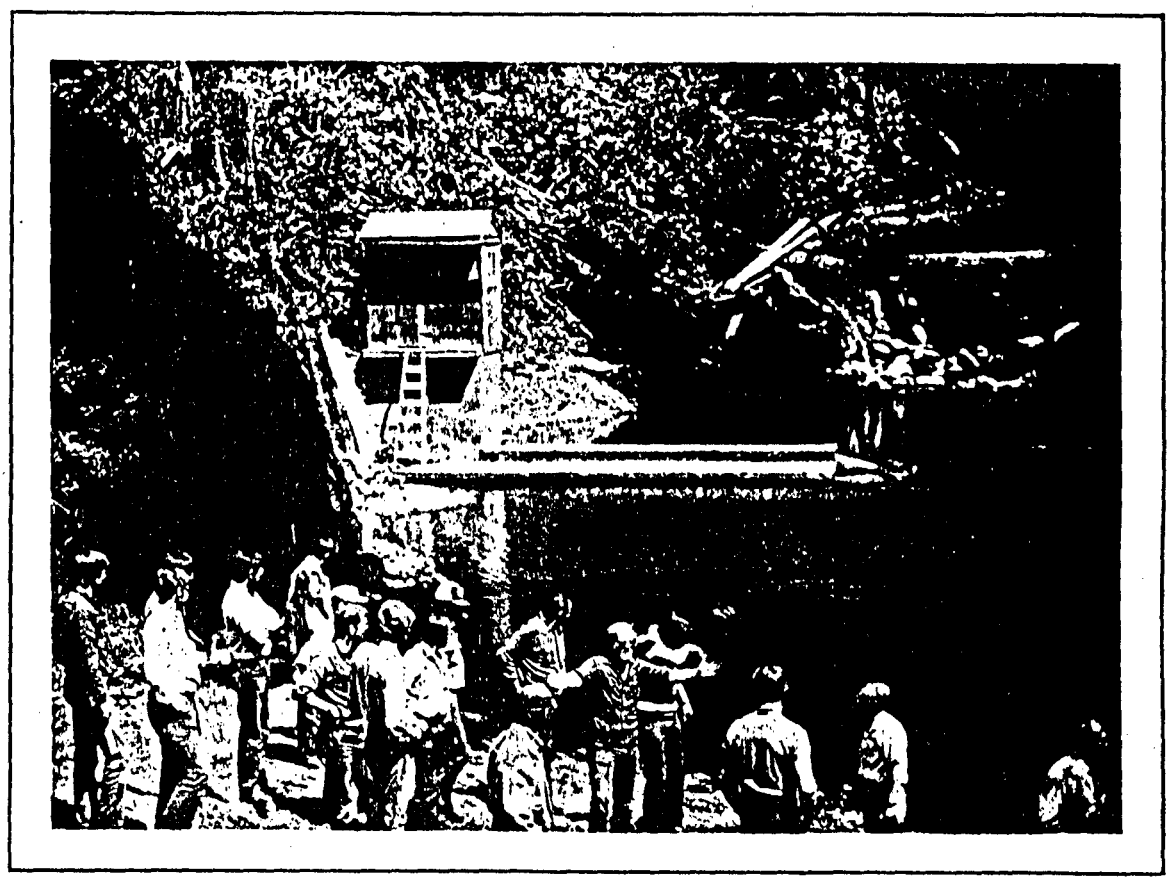
TIME: 8 p.m. to 1 a.m.

BAND: Jack Stubur (Lo-Mar-Jay's)
play anything from 1890 to 1976

FULL BAR SERVICE MIDNIGHT SNACK

TICKETS: $7.50 per person
275 tickets available after Nov.1st

FOR MORE INFORMATION: Contact Pat McCaughey
Extension 3295
5th floor 1090 West Pender



Forestry/Fisheries Technology Program

The Forestry/Fisheries Technology Program this past June 7 - 11 was a highly intensified 4 1/2 days stressing the more practical side of log/fish problems as they relate to fisheries management. To best present the more practical problems and solutions, both the Provincial Forest Service and the B.C. Forest Industry were invited to attend and present their views, interpretations, and methods on a variety of topics. Such topics included Effects of Logging, Stream Ecology, Life History of Salmonids, Silviculture, Stumpage, Royalty Charges, Forest Tenure, Referrals, Cutting Plans, Roads, Soils, Timber Extraction, Log Transport and Storage Practices and Rehabilitation.

To best illustrate the topics covered, a tour of our Carnation Creek project on the West coast of Vancouver Island was arranged. Although time consuming to get to, it is hoped that the tour may be remembered as the Carnation Creek study becomes more and more important as time goes on. Many thanks should go to Mr. Bud Graham who arranged the speakers and spent a lot of time helping organize the course.

The open forum design of the program and unstructured casualness of the presentations produced the desired inter-change and dialogue (although a little slow in the beginning) which provided an educational experience for all those concerned. Our officers were quick to question costs, methods and philosophies of both the Provincial and Industry people as well as our own representatives, and in addition, explain their problems and discuss common solutions.

Again as last year, the Provincial Wildlife Branch was invited to attend, and sent 3 Conservation Officers and 2 Habitat Protection technicians. Their attendance added greatly to the interaction and discussions, not only with the speakers, but among the officers from both agencies.

The entire program was held at the Tally Ho Travel Lodge, Nanaimo, which facilitated group interaction during the evenings following the formal presentations during the day.

The course provided a sounding board for the officers' complaints and an opportunity to gain ideas and insights to their problems, not only from the speakers provided, but from other attending officers. Perhaps this form of communication/interaction is the real "meat" of any training or development program. It presents the opportunity to exchange ideas and test theories on other officers of varying experiences, or who have the same problems but different methods in dealing with them.

Perhaps just as important, is the inclusion of the Provincial Officers, who bring different attitudes, backgrounds, experiences, and additional varied concerns to the discussions. In meeting and talking with each other, the officers of both agencies obtain another point of view and learn where each can be of help to the other. In these times of budget constraints and a "more with less" philosophy, such exchange is extremely beneficial and promotes a "team like" atmosphere.

UNDER DOG

The Dog Days of Summer may be gone, but the Dogfish Evenings of Fall are something else again!

On October 28th, a reception was held at the Vancouver Test Kitchen, to assess the edibility of the lowly dogfish (Squalus acanthus), and to promote a new cook book dedicated to the same. This fish, once loved for its liver, had fallen from grace with the synthesis of Vitamin A, and, except for foreign buyers, was not especially appreciated by anyone except horticulturalists, who loved to spread it around.

To mark the publishing of the cook book, called (what else?) "The Dogfish Cook Book", by R. Mohney (Gray's Pub. Ltd.), several representatives from local book stores, the media, the fishing industry, and F & MS (D.O.E.) were invited to partake of the goodies cooked up by the author and Yours Truly. Such delights as Potato-Fish Chowder, Fish'n'Chips, Flake Creole, Cherry Tomato Hors d'oeuvres, and Poisson Royale (Dogfish Salad; or "a fish, by any other name, will taste as good .....") were served. In fairness, these dishes were amply assisted by generous libations provided by Andrés, with their new varietal wines. (Some preferred the Richelieu; others liked the Similakameen, but I digress.)

There were no deprecatory remarks heard about the fish, other than those when we ran out of our supplies for a few of the dishes. It seems that the dogfish deserves a place on our platters.

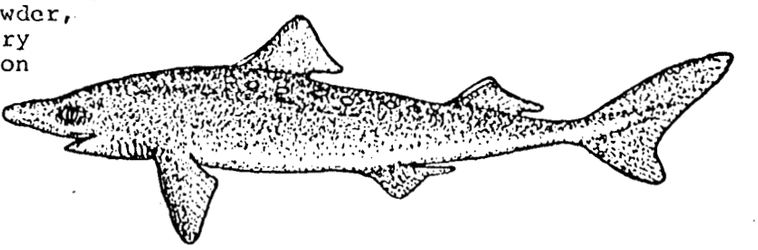
Previous attempts to market dogfish in North America have been met with dismal results. The main reason for this is the characteristic odour (and flavour) of ammonia, from urea present in the flesh. Dogfish have a primitive metabolism. Without kidneys, body wastes are excreted via the blood stream. When the fish are killed, they must be gutted and bled immediately to expel as much of the nitrogenous wastes from the body as possible. The fish may be cooked after being frozen, or cooked fresh. However, a certain amount of the body wastes are absorbed by the flesh, and these must be countered with an acidic solution (since the ammonia body wastes are in the form of a base - that's just for those of us who struggled through grade 9 Chemistry to understand).

MOHNEY'S SECRET: Soak dogfish fillets in a mildly acidic solution, for at least 5 hours, or preferably overnight. Use a mild-flavoured acid, such as lemon juice, or cider, rice or wine vinegar, or orange juice, etc. In a shallow dish, add just enough water to cover the fillets. Add ½ tablespoon lemon juice, or 1 tablespoon cider vinegar (etc) per pound of fish. This does not leave a tart flavour in the fish. (For orange juice, use 2 tablespoons per pound of fish.)

From there on, it's easy. You will have a firm, flaky, white fillet with no bones to bother you (very thoughtful of them, to be sure). Handle the fillets as you would any other white fish fillet, and substitute them in any recipe for same known to man, and fisherman alike.

Incidentally, detailed instructions on how to catch dogfish, and clean them, are given in the book. It's still early enough to put it on your letter to Santa Claus .....

One further economy. If you have the whole corpus delecti, besides using the trimmings in your compost heap, try stretching and drying the rough skin, using protective gloves. It makes a good sand-paper.



Probably the single most objectionable factor concerning dogfish is the name. We need something with a bit more "ambiance". Several alternatives have been suggested in the past. "Call 'em as you see 'em" won't work. After "Jaws", not many will thrill to the fishmonger's call of "SHARK!". We could "go native" with the term "Kahado", but the neophytes would never know if that was a fish, or a native greeting (sounds like Klahow'ya). The British call it "huss", others have used "flake"; "red-dog"; "rock salmon" (that's a no-no); "gray fish" (not true at all); and "hake". When all else fails, try another language, one with built-in "savoir -faire" (see what I mean?), like French. How about these terms: "Rousette"; "Poisson"; or "Chien de Mer"?

Personally, I like the term "hake". It is short, easy to pronounce and remember, and sounds like a fish. Maybe somebody out there has a better suggestion? The fishing industry in B.C. would welcome any honest ideas.

All things considered, Dogfish Evenings of Fall are not a bad thing. Would that there be more of them, so all could see what we've been missing!

Donna Aldous,
Consumer Consultant.

THE Sounder
Letters to the Editor

Kate:

Judging by some of the comments that I have received, people enjoyed the memorabilia, so here are a few that I missed.

Remember ---

Cow catchers -- Hard times parties -- When Lord Tweedsmuir was John Buchan -- Woodward's Gripe Water -- Kresoline lamps -- Bathing suits with skirts -- Sailor suits -- Wrong-way Corrigan -- King George V -- Amelia Earhart -- Sir Malcolm Campbell -- Wiley Post -- Wet tea leaves strewn on the floor before sweeping -- Everybody using white or black elastic to hold socks up -- Those useful steel springs (bones) that could be removed from old corsets -- Charlie Chan -- Ethel M Dell novels -- The Essex Super Six -- Bruno Hauptman -- A red triangle on a car bumper indicated four-wheel brakes -- Policemen using hand operated "Stop-Go" signs -- Drivers removing and patching their own tires -- Gasoline pumps that looked like aviaries on fat pedestals -- The tanks were at the top and were hand filled -- Magazine articles that described how plastics would cut household costs -- The New Deal -- The Just Society -- Charles Atlas -- Major Bowes -- Kay Kaiser -- There were good guys and bad guys and no psychologists to make excuses for either of them -- Walter Winchell -- Kelly giving the news from Vancouver -- Anyone who worked in a bank was "someone" and bank managers were god -- Alley Oop -- 2 oz. chocolate bars at 5 cents each -- Endless, isn't it? I promise there will be no more.

John Robinson

Dear Editor:

This letter is, for a change, not a whining letter about how hard done by Fishery Officers are - but rather a letter of praise for the assistance in enforcement of the surfline in Area 27. The vessels concerned and all the officers and men on board these vessels should be complimented on the long and hard work they did while in this area. As this area's enforcement problem occurs during the night hours, the officers and men on the Headquarters vessels had to use rubber rafts to go on board the violators at all hours of the night, in all weather conditions. Then, when the illegal gillnets were abandoned and the crews had to hand haul, untangle and wash and restore the nets, this was almost above the call of duty.

Therefore, without anymore fanfair, I thank with all my heart the officers and men of the Headquarters vessels that patrolled Area 27 this season for all the hard efforts to keep the Service's head high, and for showing the industry that when we have the go-ahead we can perform all duties asked of us.

Yours truly,

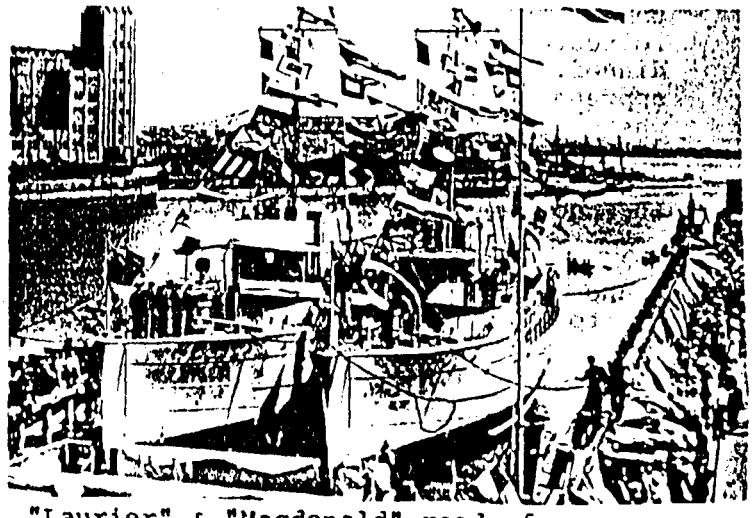
Brian A. Richman,
Fishery Officer,
Port Hardy.

Two of our patrol fleet celebrate their 40th birthday this year.

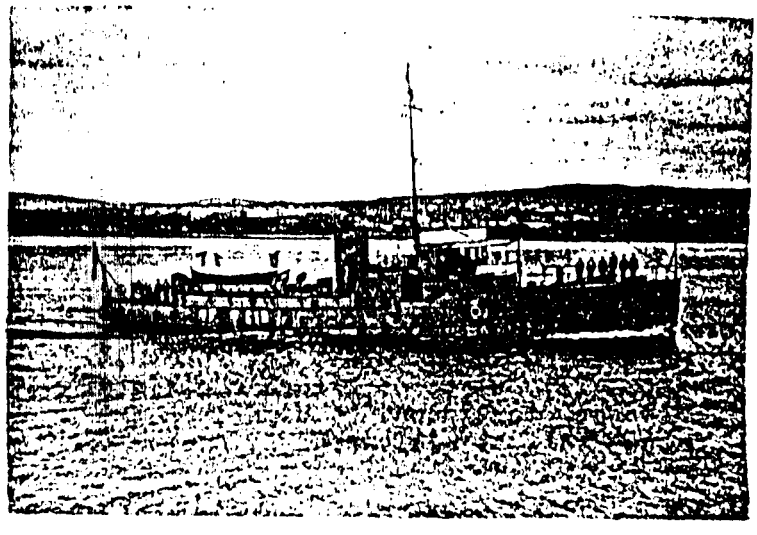
The RCMP cruisers "Macdonald" (FPC "Howay") and "Laurier" were launched at Quebec City on August 20th, 1936. These two vessels were especially designed and built for the marine section of the RCMP. The "Laurier" was christented by Madame Lapointe, wife of Ernest Lapointe, Minister of Justice, the "Macdonald" by Lady Macbrien, wife of RCMP Commissioner Sir J.H. Macbrien.

In 1939 they both started service with the Canadian Navy; the "Laurier" working the east coast and the "Macdonald" out of Esquimalt.

In 1946 Capt. Lor Shephard brought the "Laurier" around to B.C. from Quebec. The "Macdonald" became "Howay" and they both became Fisheries patrol boats - fine ships with certain majestic qualities that Fisheries can be proud of.



"Laurier" & "Macdonald" ready for launching



"Laurier" just before journey westward

One Flew Over the Central Coast

One thing that biologists, engineers, technicians and fishery officers have in common is the occassional requirement that they be in several places at once. The solution to this dilemma usually involves a bumpy ride in a small plane. What follows is an account of a recent flight from Bella Coola to Dawsons Landing which Tony Domes and I shared.

When we got off the Mallard at Bella Coola the weather was turning foul. The ceiling was dropping fast and the winds were gusting to forty knots up North Bentinck arm. We raced down to the Wilderness airlines float-plane dock, where the pilot had a Cessna 185 warmed up and ready to go (not a moment too soon, as it turned out, because dusk was rapidly approaching).

We threw our gear onboard and clambered into our seats as the pilot eased the plane out into the river - which was in full flood at the time. As soon as we got a good gust of wind he gunned the motor and we hopped out of the water like a startled duck. He didn't ease up on the throttle until we shot over the trees at the bottom and off the river.

In a few seconds we had climbed to several hundred feet and the wind was slamming the little plane around unmercifully. At that point, I began to regret any choice of oyster stew at dinner. Leo, the pilot, looked apprehensively down south Bentinck, where the wind was howling southeast and the clouds were right down to the deck. He suggested that a detour was in order. I quickly concurred.

We headed down to the Quatna and found a hole in the clouds, so it was off to Dawsons Landing. As we passed over the seine fleet, which was peacefully working the herring opening in Quatnal, I looked down and thought "You lucky devils" (or something along those lines).

A stiff westerly was blowing up Rivers Inlet, so when we came over the pass at Sandell Bay it felt like we'd just slammed into a Mack truck. After a few minutes of bouncing around we could see the lights on the float at Dawsons Landing. To quote Dan George: "My heart soared like an eagle".

Once around the bay to check for floating debris, then we touched down and taxied towards the airplane dock. Needless to say, I threw my gear into the dock with a great deal of relief. The next day I went around to Smith's Inlet - by boat. I've got 20 or 30 more flights to do before the field season winds down. I hope that the above flight will prove to be the worst of them.

Russ Hilland.

Spurious Emissions

Randy Webb, F. O. from Rivers Inlet, and Bob Lajoie, Kitimat, will spend the winter attached to the Enforcement Unit in Vancouver. Under the guidance of senior officers they will be involved in investigative work.

* * * * * * * * * *

Norm Lemmen has left Powell River for the Queen Charlotte Islands to take over the D.C.O. position.

* * * * * * * * * *

Margaret Hamilton has moved from the Vancouver Lab to Bill Scholey's outfit as financial officer.

* * * * * * * * * *

Mas Yamamoto has left the Technological Station on leave of absence and is trying his hand in business - starting at the top -as President of Kappa Industries and Stu Roach has taken over as division chief of process technology.

* * * * * * * * * *

It's December again - and mass retirement time. The classes of '47 and '48 are well represented. The following men are leaving by the end of December with possibly a few more who, at this date, were uncommitted. R.G. (Bob) McIndoe, Harry Grainger, Lloyd Gudewill and Joe D'Andrea, all after 29 years of government service; J.W. Connor, after 28 years; G.A.C. Wilson, after 26 years; D.E. McIntyre, after 21 years, A.L. Swim, after 16 years and A.L. Hilland, after 14 years.

* * * * * * * * * *

More changes at Personnel: Joan Drummond has replaced Gwen Nadiger as pay and benefits clerk; Irene Chapman has left to go to Manpower - Immigration; Pay - Benefits supervisor position at P.B.S., Nanaimo has just been filled by Barbara Forbes and P.B.S. Nanaimo's new personnel clerk is Joan Sutherland.

* * * * * * * * * *

Margaret Ho has moved from the Inspection Lab to the Research Lab as a food technologist.

THE Sounder

Kate Glover,
Editor
1090 W. Pender St.,
Vancouver 1, B. C.

Opinions expressed herein do not necessarily reflect Fisheries Service policy.

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