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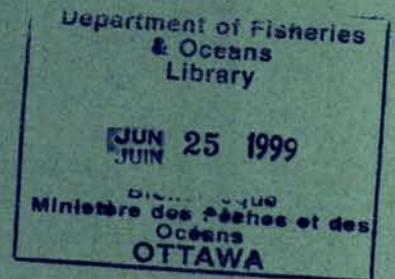


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# Summary of Reported Atlantic Salmon (*Salmo salar*) Catches and Sightings in British Columbia and Adjacent Waters in 1995

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1996

SUMMARY OF REPORTED ATLANTIC SALMON (*Salmo salar*) CATCHES  
AND SIGHTINGS IN BRITISH COLUMBIA AND ADJACENT WATERS IN 1995

by

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ABSTRACT

Thomson, A. J. and S. McKinnell. 1996. Summary of reported Atlantic salmon (*Salmo salar*) catches and sightings in British Columbia and adjacent waters in 1995. Can. Manuscr. Rep. Fish. Aquat. Sci. 2357: 29 p.

A program to monitor the abundance and distribution of Atlantic salmon (*Salmo salar*) in British Columbia was conducted jointly by the Canadian Department of Fisheries and Oceans (D.F.O.) and the British Columbia Ministry of Agriculture, Fisheries and Food in 1995, with the cooperation of the British Columbia Ministry of Environment, Lands and Parks. The study consisted of contacting individuals and agencies involved with salmonid fisheries, research and enhancement as well as all commercial fish buyers, advising them to return or report all Atlantic salmon to D.F.O.. Catches of Atlantic salmon in the Department of Fisheries and Oceans sales slip database were reviewed. Six hundred and forty-eight Atlantic salmon were either returned or reported to D.F.O. from marine fisheries. Eighty-two Atlantic salmon were reported sighted or captured in freshwater. One hundred and sixty-three fish were returned to the Pacific Biological Station for analysis and species verification. Ninety-two percent of the reported Atlantic salmon catch was caught in Johnstone Strait. Twenty-two Atlantic salmon were reported caught in Alaskan commercial fisheries in 1995 and 63 were reported caught in Washington State.

## RÉSUMÉ

Thomson, A. J. and S. McKinnell. 1996. Summary of reported Atlantic salmon (*Salmo salar*) catches and sightings in British Columbia and adjacent waters in 1995. Can. Manuscr. Rep. Fish. Aquat. Sci. 2357: 29 p.

En 1995, il y avait un programme pour étudier l'abondance et la répartition des saumons de l'atlantique (*Salmo salar*) dans les eaux de la Colombie Britannique. L'étude a été conduite conjointement par le ministère fédéral des Pêche et des Océans (MPO) et le ministère de l'Agriculture, de la Pêche et de la Nourriture de la Colombie Britannique, avec la coopération du ministère de l'Environnement, des Terres et Parc de la Colombie Britannique. Pour cette étude, nous nous sommes mis en contact avec des individus et des agences qui s'intéressent à la pêche au saumon, à la recherche ou à l'amélioration du cheptel des saumons, et aussi avec des acheteurs commerciaux des poissons, et leur ont demandé d'envoyer ou de signaler tous les saumons de l'atlantique qu'ils rencontraient au MPO. Aussi, nous avons examiné les renseignements des saumons de l'atlantique dans la base des données du ministère des Pêches et des Océans qui recueille les bordereaux d'achat. Au total cela a fait 648 saumons de l'atlantique rendus ou signalés. 82 ont été trouvés dans l'eau douce. 103 poissons étaient envoyés à la Station de biologie Pacifique ou nous les avons analysés et vérifiés l'espèce. Quatre-vingt-douze pour cent de la prise rapportée des saumons de l'atlantique ont été pêchés dans le détroit de Johnstone. Pendant la même année, on a aussi rapporté que 22 saumons de l'atlantique ont été pris commercialement dans les eaux d'Alaska, et que 63 en ont été capturés par la pêche commerciale dans les eaux de Washington.

## INTRODUCTION

In 1991, a joint federal / provincial program was initiated by the British Columbia Ministry of Agriculture, Fisheries and Food and the Canadian Department of Fisheries and Oceans to monitor the presence of Atlantic salmon (*Salmo salar*) in British Columbia (B.C.) coastal streams. In 1992, an expanded Atlantic Salmon Watch program was launched to monitor commercial and sport catches and observations of Atlantic salmon (Thomson and McKinnell, 1993). In 1993, and 1994, the Atlantic Salmon Watch program was expanded to survey a greater number of fisheries officials and volunteers (Thomson and McKinnell, 1994, 1995). In 1995 the program was conducted in the same manner as in previous years with increased public information and access.

The monitoring program's main objectives are: increasing the general awareness of the presence of Atlantic salmon in B.C. waters, expanding the reporting of Atlantic salmon, maintaining a database of the number of Atlantic salmon reported and/or observed in B.C., and preparing annual reports of catches or sightings of Atlantic salmon. An Atlantic salmon biological database is also maintained.

## METHODS

The program consisted of four main efforts: 1) contacting a large number of individuals working in fisheries related activities to alert them to the monitoring program, 2) collecting and analyzing as many of the captured Atlantic salmon as possible, 3) retrieving catch data from several sources to provide information about the number of Atlantic salmon observed in B.C. in 1995, and 4) maintaining a public access information line for the reporting of Atlantic salmon.

Department of Fisheries and Oceans field offices, hatcheries, and Public Involvement Program Hatcheries, Ministry of Environment, Lands and Parks coastal offices, and all commercial salmon processors were contacted. They were alerted to the presence of Atlantic salmon, provided with the necessary information to identify Atlantic salmon, and requested to provide any information they receive or Atlantic salmon they encounter. This year, in September a full colour poster was produced to better inform the public. A 1-800 toll free reporting line was installed.

In 1995 the Department of Fisheries and Oceans undertook a program to assess Chinook salmon populations in the streams of the west coast of Vancouver Island. Included in their mandate was to also record and report Atlantic salmon. A total of 35 streams or portions thereof were surveyed.

Atlantic salmon sent to the Pacific Biological Station (PBS) were examined to verify species and origin. Sex, fork length, body weight, gonad weight, stomach contents, and a qualitative index of fat content were recorded. Scales were sampled for age and/or scale growth determination. Tissue samples were obtained for genetic analysis. Some fish were also analyzed by the Fish Pathology Program at the Pacific Biological Station.

Fat content of each fish was assessed visually on a qualitative scale from 0 to 4. Zero indicated a dressed or greatly decomposed fish where no fat could be found, 1 indicated trace amounts of fat present, 2 indicated larger amounts of fat on major organs, 3 indicated extensive fat throughout the pyloric caeca, and 4 indicated organs completely encased in fat.

Atlantic salmon catch statistics data for B.C. were obtained from The Department of Fisheries and Oceans sales slip database and the sports creel survey data. Catch data for Washington State were obtained from the Washington State Department of Fisheries. Alaskan catch data is supplied by the Auke Bay Laboratory of the National Marine Fisheries Service and the Alaskan Department of Fish and Game. This report revises some totals previously reported.

## RESULTS AND DISCUSSION

### Escapes of Atlantic salmon

Salmon farmers are required to report escapes of Atlantic salmon to the Department of Fisheries and Oceans. From 1988 to 1994, 85,429 Atlantic salmon escaped from B.C. aquaculture facilities in 14 reported incidents. Of these 63,929 were reported in 1994. In 1995, 12,676 Atlantic salmon were reported escaped in 4 separate incidents, all were from marine net-pen sites on the north-east coast of Vancouver Island. The actual number of escapes is unknown. Reporting escapes is a voluntary condition of license.

On November 3, 1995, a truck carrying Atlantic salmon smolts accidentally spilled approximately 11,000 fish near Conuma Creek. A successful recovery effort was mounted and there was no possibility of the smolts reaching the river.

### Marine Recoveries and Sightings

Within B.C. waters, Atlantic salmon were reported from as far north as Area 3, and as far south as Area 20, (Figures 1 and 2). The number of documented recoveries of Atlantic salmon caught in marine fisheries in 1995 was 648. This total was obtained by summing the reported catches of Atlantic salmon in the D.F.O. sales slip database, the D.F.O. creel survey database and those received by the Atlantic Salmon Watch program (A.S.W.P.). The true number of Atlantic salmon caught exceeds this by some unknown factor. The largest annual catch ( 4,543 Atlantic salmon) was in 1993 (Thomson and McKinnell, 1994).

### Summary of catch and escape data since the inception of the A.S.W.P.

<b>Year</b>	<b>BC Marine</b>	<b>Washington</b>	<b>Alaska</b>	<b>BC Freshwater</b>	<b>B.C. Escapes</b>
<b>1992</b>	349	165	2	48	6044
<b>1993</b>	4543	219	24	23	10000
<b>1994</b>	1037	363	27	50	63929
<b>1995</b>	648	63	22	56	12676

The Department of Fisheries and Oceans sales slip database for commercial fishing vessels lists 241 Atlantic salmon sold. The net fishery opening in Johnstone Strait (Statistical Areas 12 & 13) for week 8-4 (August 21 to August 27) reported the largest catch of Atlantic salmon at 160 pieces for a single area in a single week. Anecdotal information indicates that the Atlantic salmon catches reported in the D.F.O. sales slip database underestimate the true catch.

In Washington State the commercial catch of Atlantic salmon is monitored through the buyer reporting program administered by the Washington State Department of Fisheries. In 1995, the combined recorded catch of Atlantic salmon in Washington State commercial, tribal and test fisheries was 63 fish (Figure 3). The majority of the catch occurred in lower Puget Sound with only 3 fish reported from north of Puget Sound.

The National Marine Fisheries Service, Auke Bay Laboratory and the Alaska Department of Fish and Game record the catches of Atlantic salmon in Alaskan waters. In 1995, 22 fish were reported. The majority of which were captured in the commercial net fisheries of south-east Alaska.

#### Freshwater recoveries and sightings

In 1995, 82 Atlantic salmon were reported caught or sighted in freshwater through the Atlantic Salmon Watch program (Figure 5). This number includes 4 tentative Atlantic salmon, 9 fish that were probably recounts of previously observed fish and 10-12 fish that were caught in late 1994 but not reported until 1995. The number and range of freshwater reports is higher than in previous years.

DFO swim surveys located 22 Atlantic salmon in 102 surveys of 35 stream or river systems, covering a total of 584 km (Bruce Patten, pers. comm.). Of the 22, one was possibly an Atlantic salmon and a further 9 were probably recounts of previously observed fish. Atlantic salmon constituted 0.02 percent of the total number of salmonids observed during the course of this survey.

An erroneous report of a spawning pair of Atlantic salmon in the Coquitlam River was investigated and determined to be a case of misidentification.

#### Biological sampling

One hundred and sixty-three marine recoveries of Atlantic salmon from B.C. fisheries were returned to the Pacific Biological Station for biological sampling (Figure 6). The results of the biological sampling of these Atlantic salmon are summarized in Figures 7 and 8. The detailed data are reported in Table 1. Fork lengths ranged from 516 to 826 mm with a mean of 660.6 mm. Round body weights ranged from 1.92 to 7.32 kg with a mean of 3.76 kg. The mean body weight for 1995 was significantly higher than that found in other years.

Murza and Khristoforov (Murza and Khristoforov, 1991) developed a scale of maturity for Atlantic salmon based on weights and external appearance of gonads. Stages I - III are maturing fish, stage IV is a fully mature fish, and stages V and VI are post reproductive stages. Of 62 males the median gonad weight was 1.5 grams. 10 males were at stage III or higher maturity level. The median gonad weight for 83 females was 8.5 grams, 34 were at maturity level of III(late) or greater.

The median fat content for the B.C. Marine caught fish was 3 (n=146), whereas the median fat content for the Alaskan caught fish was 2 (n=13). A study of B.C. farm-fish at time of harvest confirmed that fat level 4 is the normal level for Atlantic salmon while in net-pens.

Of 146 fish analyzed for stomach contents, 15 fish had herring or other fish remains in their stomachs, 2 contained commercial fish food pellets, 1 had ichthyoplankton and 2 had miscellaneous digested matter. The remaining 126 fish had no identifiable food matter in their stomachs.

Age of the Atlantic salmon based on scale patterns was judged to be difficult to determine. All of the sampled fish had some degree of fin wear, primarily on the dorsal and caudal fins. Fin wear is indicative of net-pen rearing and is an established procedure for the identification of farm raised fish.

Nine freshwater recoveries of Atlantic salmon were returned to the Pacific Biological Station for analysis (Figure 9). The results of the biological sampling of these fish are summarized in Table 2. Three fish (95123, 95117, and 95163) were checked by the Fish Pathology Lab at PBS and determined to be free of bacterial pathogens or unusual parasite loads.

Fork lengths of the Alaskan recoveries ranged from 457 to 823 mm with a mean of 637.1 mm. Round body weights ranged from 0.9 to 6.0 kg with a mean of 3.0 kg. Of 13 males recovered from marine landings the median gonad weight was 1 gram, none were classed as Stage III or higher in maturity. No females were caught in Alaska. Of 12 fish stomachs examined, 11 were empty, and 1 contained a single herring. The results of the biological sampling of these fish are summarized in Table 3. There are no Atlantic salmon aquaculture facilities in Alaska.

## ACKNOWLEDGEMENTS

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Table 1. Biological data of the marine caught Atlantic salmon that were returned to the Pacific Biological Station.

FISHNO	SEX	FLENGTH	WEIGHT	BODY STATE	GONADWT	STOMACH	FAT CONTENT
95001	M	704	4.81	R	24.5	E	3
95002	F	710	4.79	R	17	E	3
95003	F	601	3	R	6	E	4
95004	M	659	3.91	R	1	E	3
95005	F	602	2.83	R	4	E	3
95006	F	590	2.7	R	6	E	3
95007	M	590	2.62	R	1	E	2
95008		741		D			
95009	F	674	3.75	R	8	E	3
95010	F	672	3.93	R	11	E	2
95011	M	591	2.2	R	1	E	2
95012	F	588	2.85	R	20	E	3
95013	F	667	3.83	R	11.5	E	4
95014	F	699	4.64	R	14	E	4
95015	M	720	5.26	R	27.5	E	3
95016	F	655	3.88	R	4.5	E	3
95017	F	705	4.69	R	18.5	E	3
95018	M	704	4.23	R	1	Herring	2
95019	M	577	2.92	R	3	E	4
95020	F	680	4.51	R	12	E	4
95021	M	711	4.53	R	2	E	4
95022	M	704	4.26	R	1	E	2
95023	M	709	4.39	R	1	E	3
95024	M	641	3.16	R	1	FR	2
95025	F	620	2.94	R	6	E	3
95026	F	622	3.24	R	5	FR	3
95027	F	679	3.98	R	10	E	3
95028	M	621	3.56	R	43.5	E	4
95029	F	695	3.55	R	13	E	2
95030	F	642	3.51	R	8	FR	3
95031	F	586	2.86	R	5	E	3
95033	F	650	3.45	R	6	E	3
95034	M	769	5.79	R	1	E	3
95035	F	750	5.49	R	9	E	3
95036	F	746	4.75	R	11.5	E	3
95037	F	727	4.35	R	11	E	3
95038	F	760	5.99	R	11.5	E	3
95039	F	617	3.1	R	300.5	E	2
95040	M	678	3.35	R	1.5	E	2
95041	F	606	2.59	R	6.5	E	4
95042	M	696	4.05	R	12	E	3
95043	M	735	4.63	R	5	E	3
95044	F	657	2.91	R	5.5	E	4
95045	F	583	2.44	R	68.5	E	2
95046	M	532	1.98	R	101	E	4
95047	F	608	3.06	R	10.5	E	4
95048	M	610	2.58	R	1	BLOOD	3
95049	F	675	4.08	R	7	E	3
95050	F	595	2.98	R	9	E	3
95051	F	717	4.67	R	11.5	E	4
95052	F	644	3.6	R	8.5	E	3
95053	M	748	5.07	R	12	E	3

FISHNO	SEX	FLENGTH	WEIGHT	BODY STATE	GONADWT	STOMACH	FAT CONTENT
95054	M	570	2.26	R	1	E	3
95055	F	567	2.53	R	7	E	4
95056	M	710		D			
95057	M	648	3.32	R	1	E	3
95058	F	654	3.6	R	8.5	FR	3
95059	F	632	3.55	R	11	E	3
95060	F	591	2.55	R	8	Herring	2
95061	F	690	4.44	R	10	E	4
95062	F	606	2.6	R	4.5	E	3
95063	M	635	3.43	R	1.5	E	2
95064	M	650	3.15	R	1.5	E	3
95065	M	630	3.34	R	2	Herring	2
95066	F	654	4.06	R	10.5	Herring	3
95067	M	621	2.95	R	1.5	E	4
95068	F	592	2.57	R	7	E	3
95069	F	629	3.66	R	7.5	E	3
95070	F	617	3.18	R	6	E	4
95071	M	598	2.98	R	1.5	E	3
95072	M	680	4.48	R	2	E	4
95073	M	516	5.07	R	1.5	E	3
95074	M	690	4.46	R	1.5	E	3
95075	F	712	5.15	R	10	E	3
95076	F	722	5.26	R	11	E	3
95077	F	745	5.27	R	11.5	E	4
95078	M	621	2.72	R	1.5	Herring	2
95079	F	578	2.51	R	5	Herring	4
95080	M	649	3.35	R	1.5	E	2
95081	F	745	5.94	R	18	E	4
95082	F	632	3.23	R	33	E	2
95083	M	638	2.99	R	1.5	E	3
95084	F	688	3.67	R	10.5	E	3
95085	M	662	3.62	R	18	E	3
95086	F	630	3.38	R	10	Herring	3
95087	F	634	3.75	R	7.5	E	4
95088	F	720	5.04	R	10	E	4
95089	F	680	3.94	R	8	E	4
95090	F	630	3.35	R	7	GM	4
95091	F	657	3.68	R	8	E	4
95092	F	730	5.13	R	9	E	4
95093	M	628	2.76	R	1	E	3
95094	M	649	3.84	R	1.5	E	3
95095	F	549	2.35	R	4	E	3
95096	M	745	5.71	R	1.5	E	3
95097	F	613	3	R	5	E	3
95098	M	716	4.25	R	1	E	2
95099	M	540	2.18	R	1	E	4
95100	F	700	4.02	R	9	E	4
95101	F	570	2.13	R	9	E	2
95102		612	2.64	R			0
95103	F	690	4.03	R	12	E	4
95104	F	638	3.37	R	9	E	4
95105	M	706	5.11	R	1.5	Herring	4
95106	M	622	3.27	R	1	E	2
95107	M	594	2.94	R	1	E	3
95108	F	680	4.01	R	7.5	E	3

FISHNO	SEX	FLENGTH	WEIGHT	BODY STATE	GONADWT	STOMACH	FAT CONTENT
95109	F	545	1.92	R	143	E	2
95110	F	629	3.46	R	6	E	3
95111	M	629	3.1	R	1.5	E	2
95112	F	640	3.75	R	7	E	2
95113	F	672	3.93	R	8	E	4
95114	M	639	3.27	R	1.5	E	2
95115	F	625	3.93	R	259.5	FF	2
95116	F	716	2.92	R	5	IP	2
95118	M	794	5.39	R	6	E	3
95119	M	680	3.34	R	5	E	4
95120	M	671	3.49	R	4	FR	3
95121	M	611	2.7	R	2	E	2
95122	M	665	3.1	R	108.5	E	2
95124	M	699	4.08	R	2	E	2
95126	M	786	4.94	R	328.5	E	2
95127	F	556	2.1	R	3	E	3
95128	M	782	5.56	D			0
95129	F	659	3.67	R	9	E	3
95130	F	680	4.14	R	12	E	3
95131	F	626	3	R	7	E	3
95132	M	656	5.69	R	5	E	4
95133	F	628	3.28	R	5.5	FR	3
95134	M	698	4.06	R	137.5	E	2
95135	F	650	3.88	R	8.5	E	3
95136	F	560	2.63	R	3	E	3
95137	F	672	4.59	R	7.5	E	4
95138	M	684	3.35	R	3	E	2
95139	F	650	3.64	R	10	E	2
95140	M	637	5.34	R	4.5	E	3
95145	F	680	4.93	R	13.5	E	3
95146	M	730	4.72	R	2.5	E	3
95147		632	2.91	D			
95148	M	788	6.06	D			
95149	M	760	4.96	D			
95150	F	764	5.05	R	11	E	3
95151	F	704	4.14	R	7.5	E	3
95152	M	826	7.32	R	9.5	E	4
95153	F	640	3.29	R	8	E	3
95154	M	660	4.34	R	4.5	E	4
95155	F	520	2.9	R	4	E	2
95156	M	650	3.17	R	2	E	3
95157	M	700	4.04	R	1.5	FF	3
95158	M	824	4.18	D			
95159	M	712	5.37	R	6	E	3
95160	M	692	4.11	R	1.5	E	3
95161	M	687	4.94	R	2.5	Herring	3
95162	F			R		E	

**LEGEND**

**Body State**

R = Round or Whole Fish  
D = Dressed Fish

**Stomach**

E = Empty  
FF = Commercial Fish Food Pellets  
FF = Indistinguishable Fish Remains  
GM = Indiscernible Digested Material  
IP = Ichthyoplankton

Table 2: Biological data for Atlantic salmon caught in freshwater in British Columbia in 1995.

FISHNO	SEX	FLENGTH	WEIGHT	BODY STATE	GONADWT	STOMACH CONTENTS	LOCATION	FAT
95032	F	582	2.09	R	7	E	FRASER R.	2
95117	M	562		D			SCOTT COVE CR.	
95123	M	559	2.08	R	24	E	MOYEHA R.	1
95125				HEAD			G. CENTRAL LK.	
95141	F	736	4.5	R	12	E	KOKISH R.	4
95142	F	806	7.29	R	26	E	QUATSE R.	4
95143	M	680	4.41	R	3.5	E	QUATSE R.	4
95144	M	881	6.46	R	408.5	E	QUATSE R.	2
95163	M	764	4.478	R	14	E	SALMON R.	3

**LEGEND**

**Body State**

R = Round or Whole Fish

D = Dressed Fish

HEAD= Head Only

**Stomach**

E = Empty

Table 3: Biological data for Atlantic salmon caught in coastal Alaskan waters in 1995.

<b>FISHNO</b>	<b>SEX</b>	<b>FLNGTH</b>	<b>WEIGHT</b>	<b>BODYSTATE</b>	<b>GONADWT</b>	<b>STOMACH</b>	<b>FAT</b>
95164	0	675	2.9	D			0
95165	M	653	3.4	R	1	E	3
95166	M	603	2.3	R	1	NA	2
95167	M	541	1.6	R	1	E	2
95168	0	688		D			0
95169	M	688	4.3	R	5.3	E	2
95170	M	753	5.5	R	1	E	3
95171	M	554	1.6	R	1.5	E	2
95172	M	598	2.1	R	1	E	2
95173	M	661	3.3	R	2	E	3
95174	0	712		D			0
95175	M	617	2.6	R	1	E	1
95176	M	468	0.9	R	1	E	1
95177	M	559	1.3	R	1	HERRING	1
95178	M	823	6	R	2.6	E	3
95179	M	780	4.1	R	7.2	E	1

**LEGEND**

**Body State**

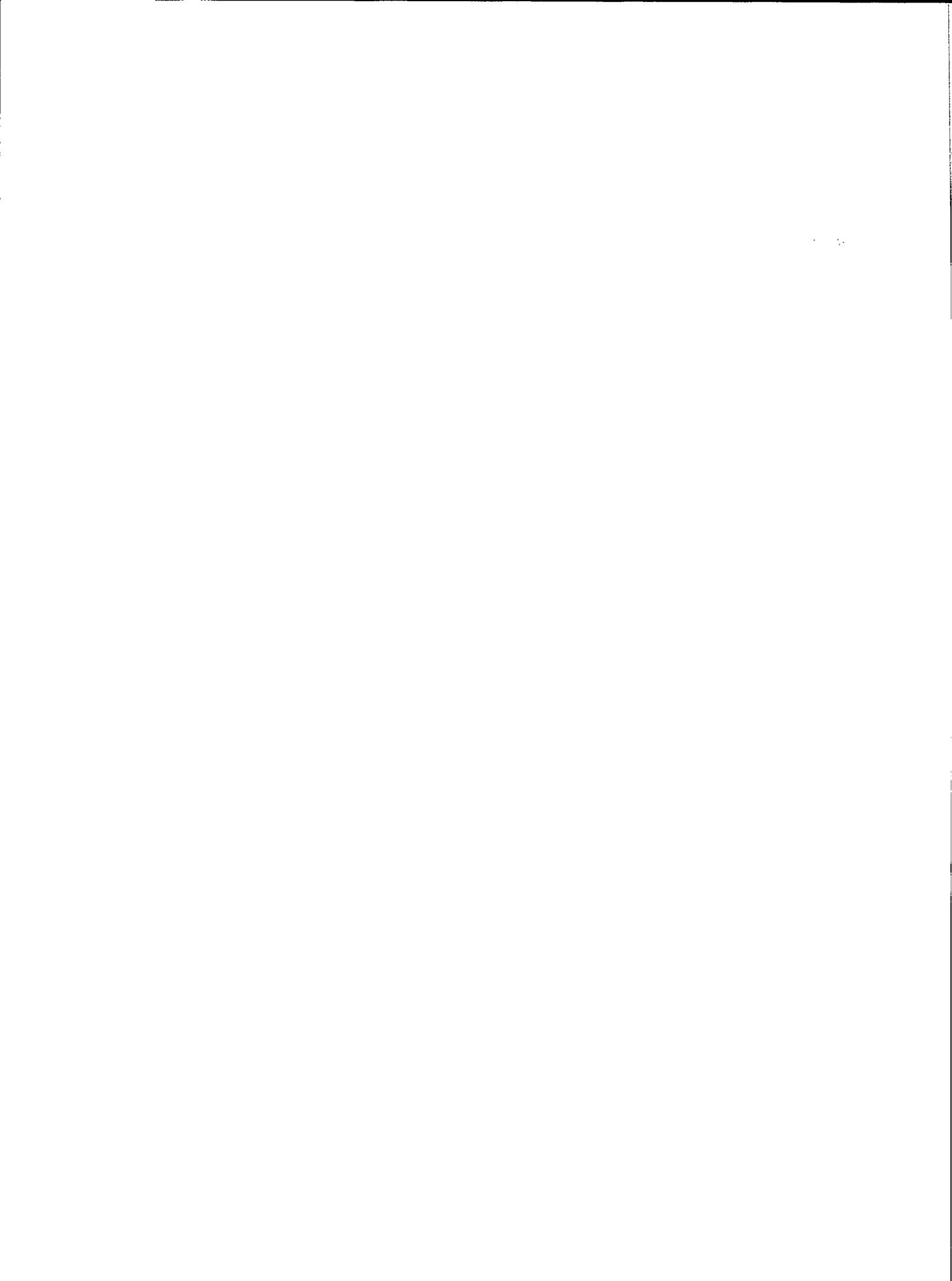
R = Round or Whole Fish

D = Dressed Fish

**Stomach**

E = Empty

NA = Not Observed



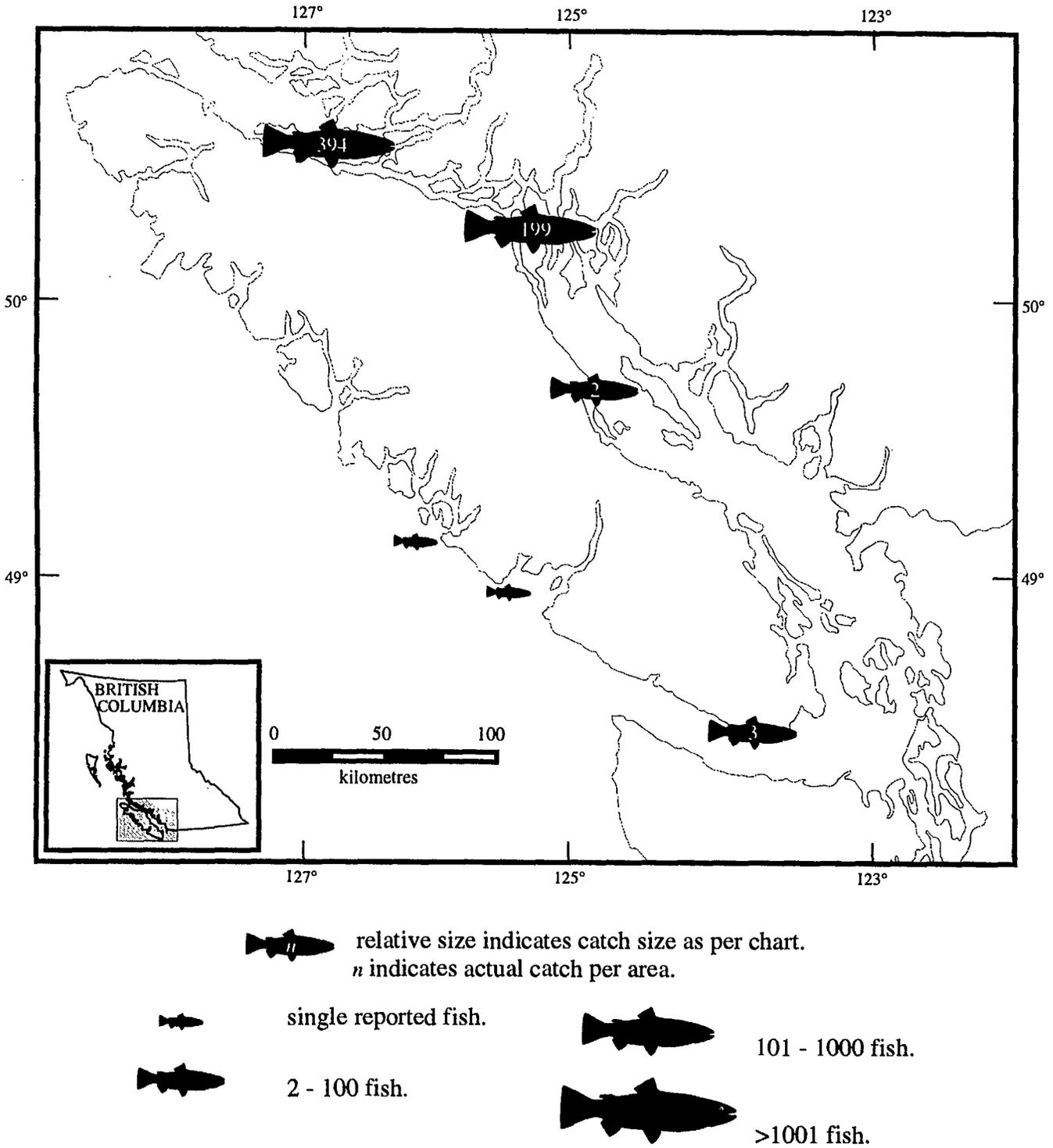
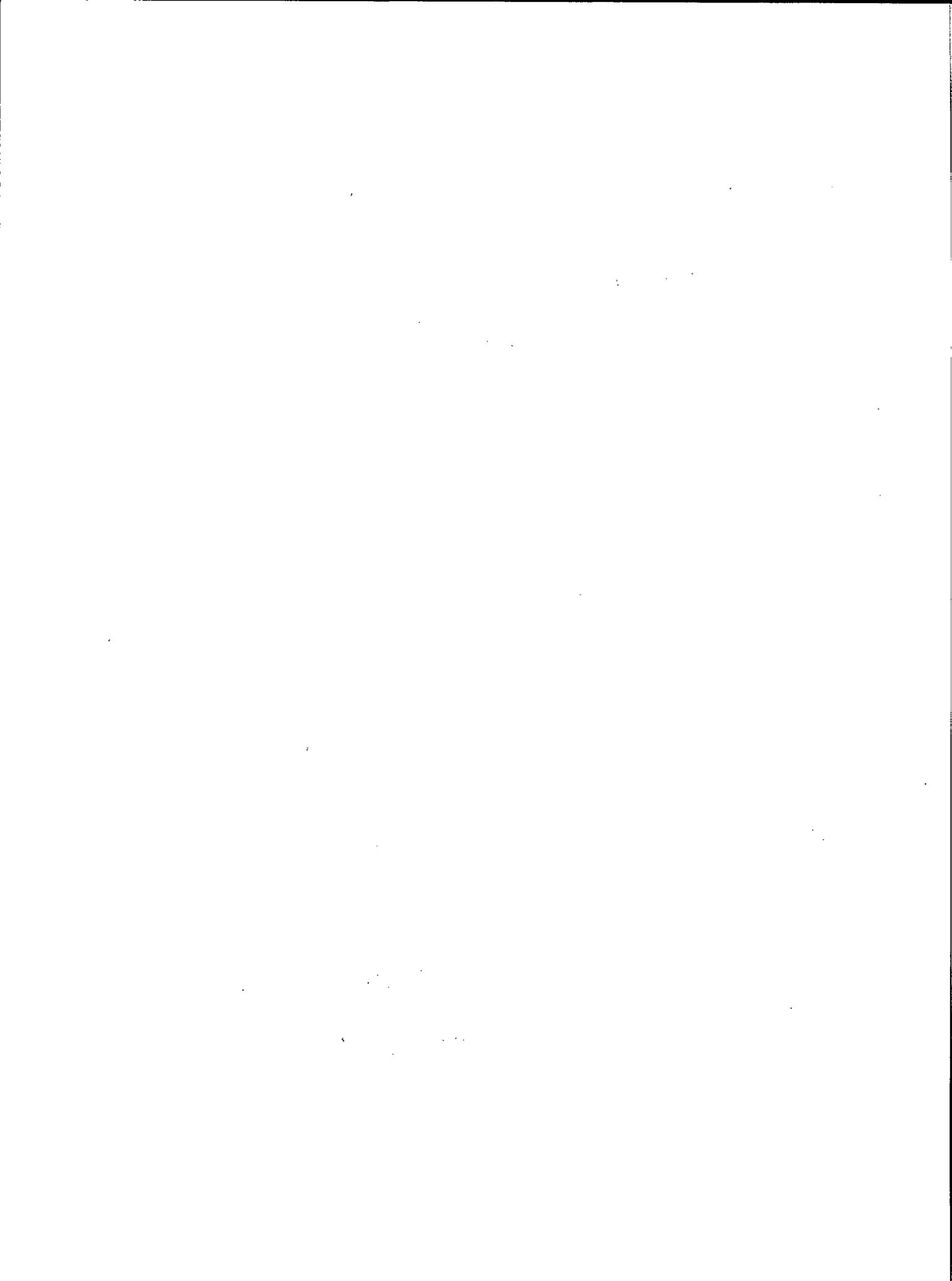


Figure 1. Atlantic salmon reported from marine waters in Southern British Columbia in 1995 by D.F.O. statistical area. Data compiled from Sales slip database and Atlantic Salmon Watch program.



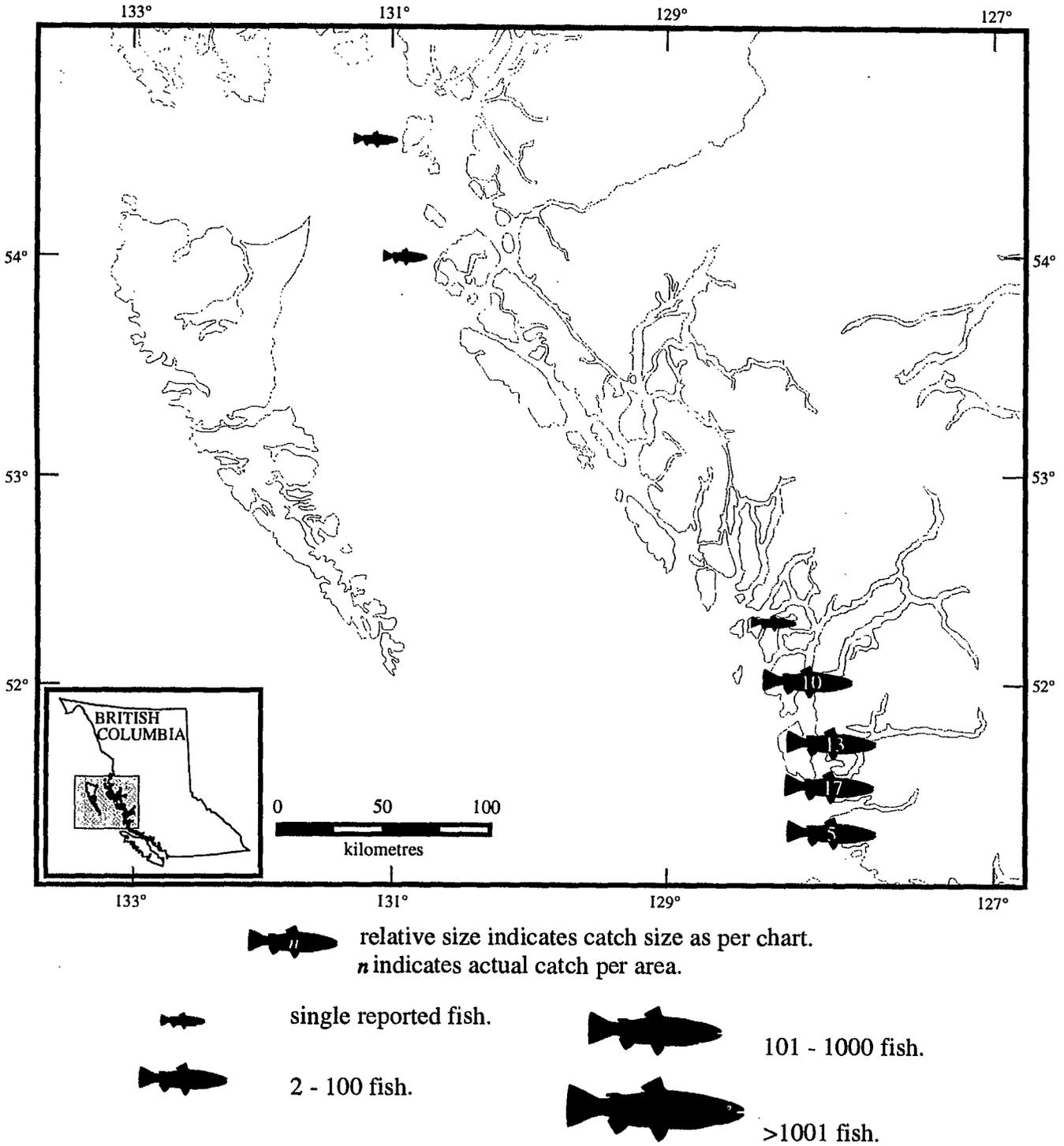
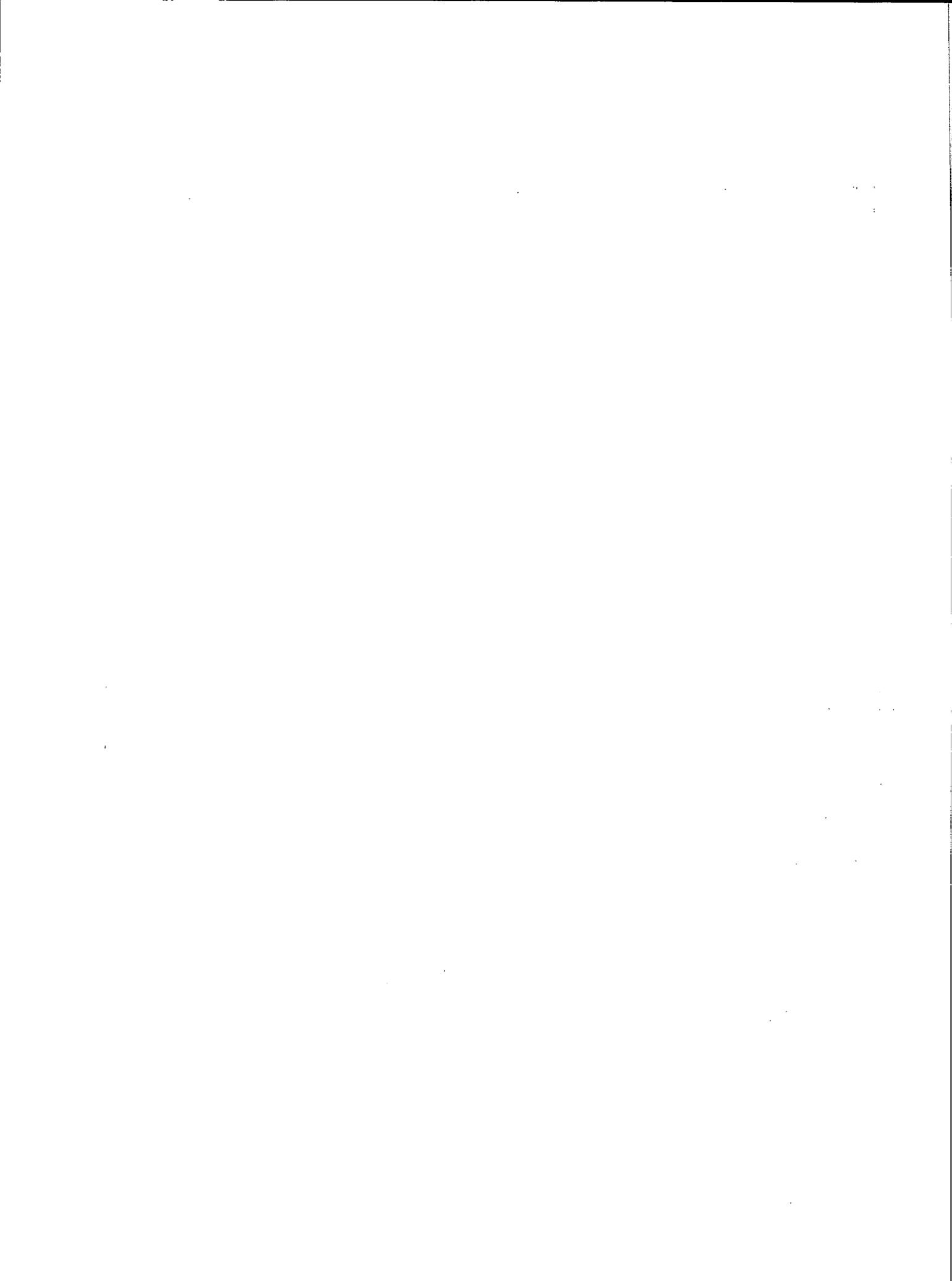


Figure 2. Atlantic salmon reported from marine waters in Northern British Columbia in 1995 by D.F.O. statistical area. Data compiled from Sales slip database and Atlantic Salmon Watch program.



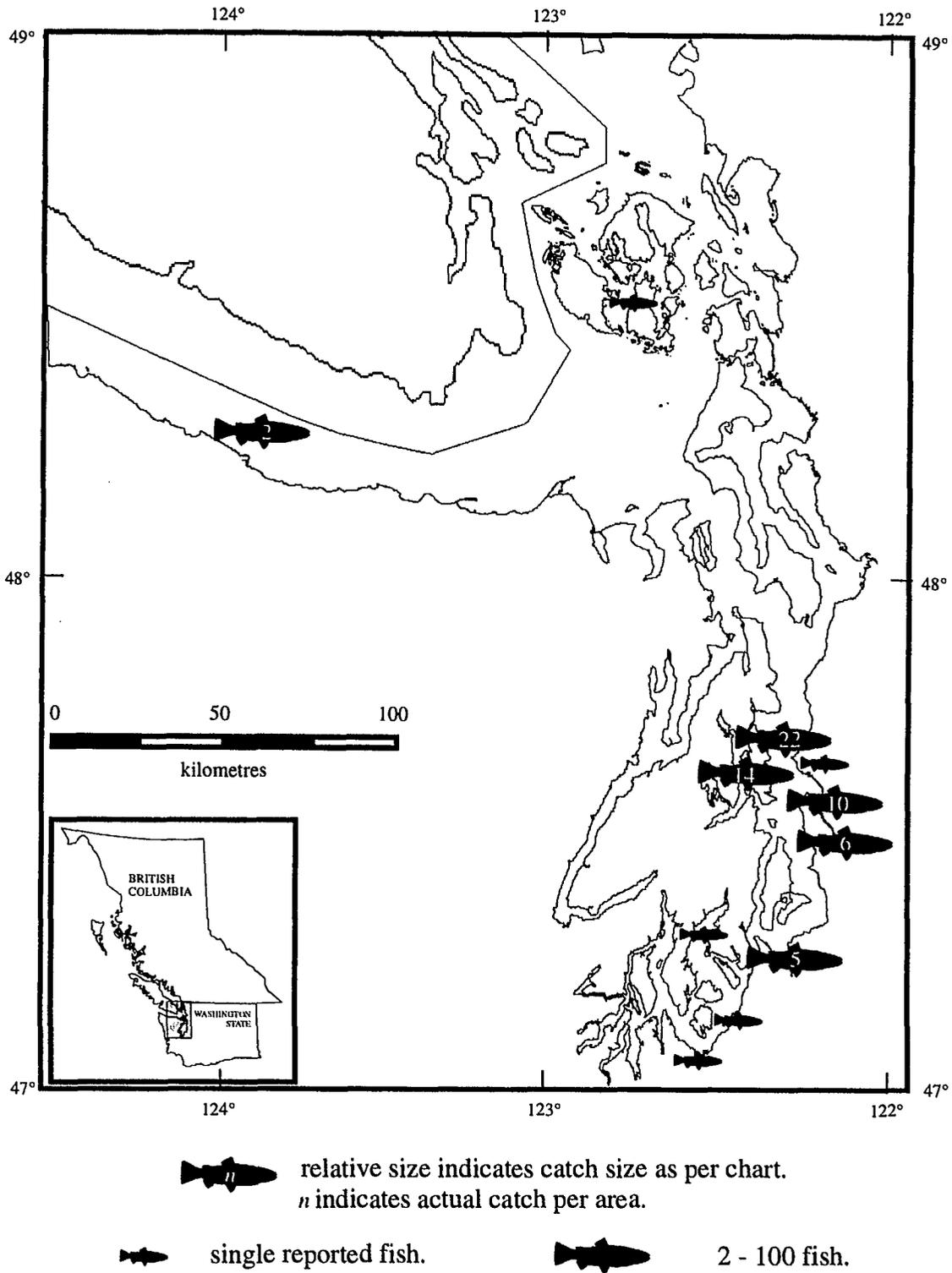
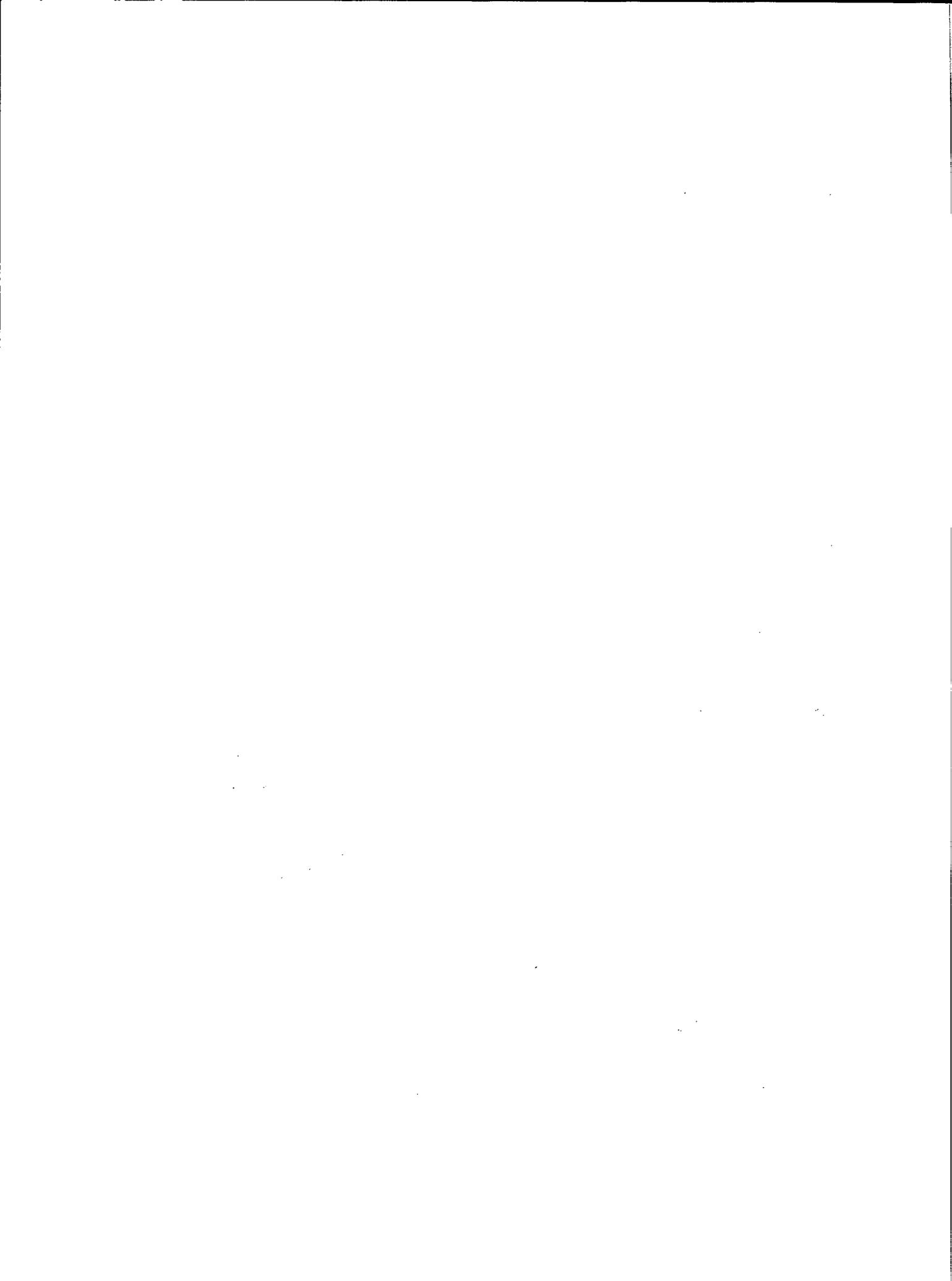


Figure 3: Catch of Atlantic salmon in Washington State in 1995, by catch region.



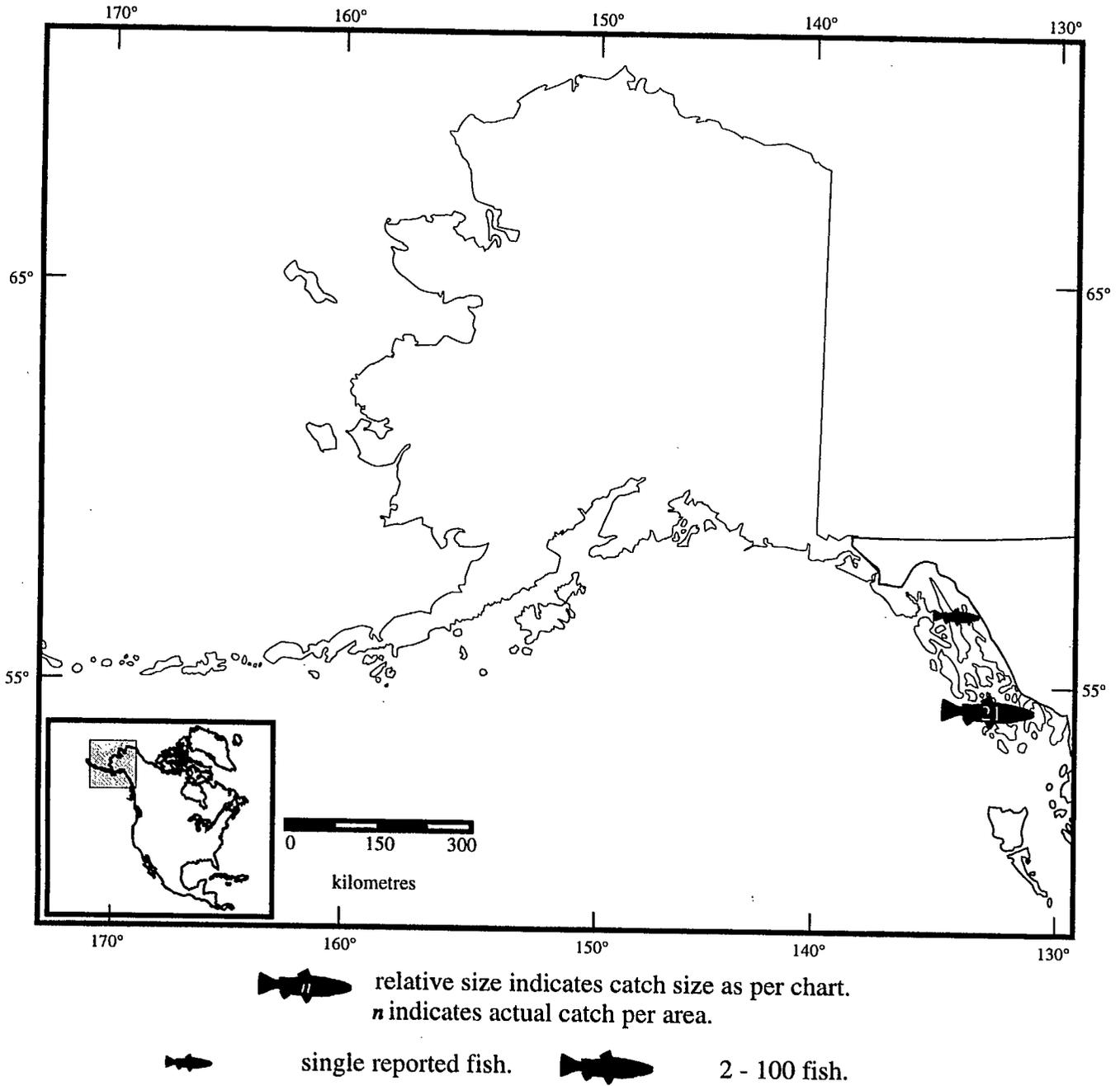
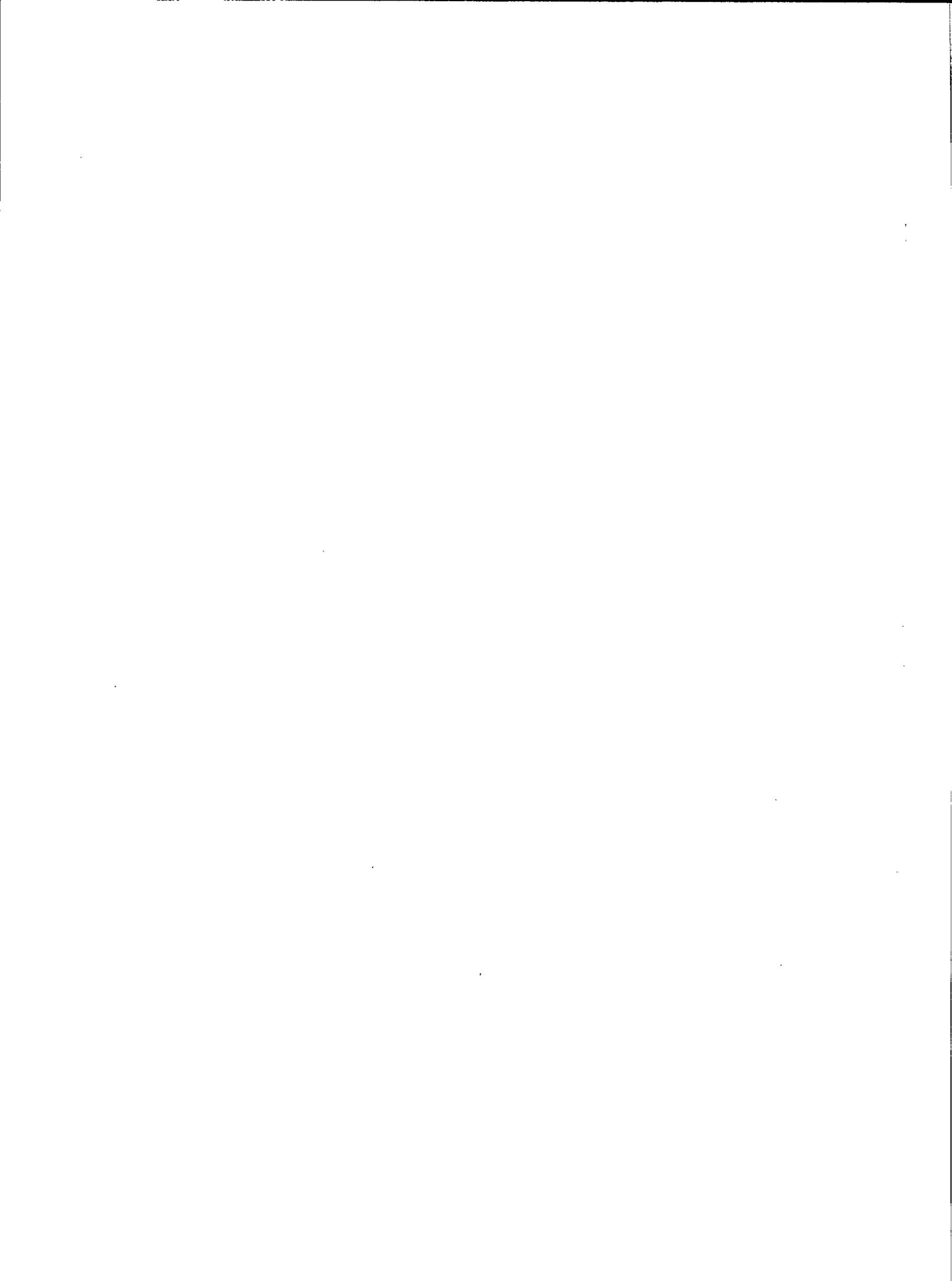


Figure 4. Atlantic salmon catch in Alaskan waters in 1995.



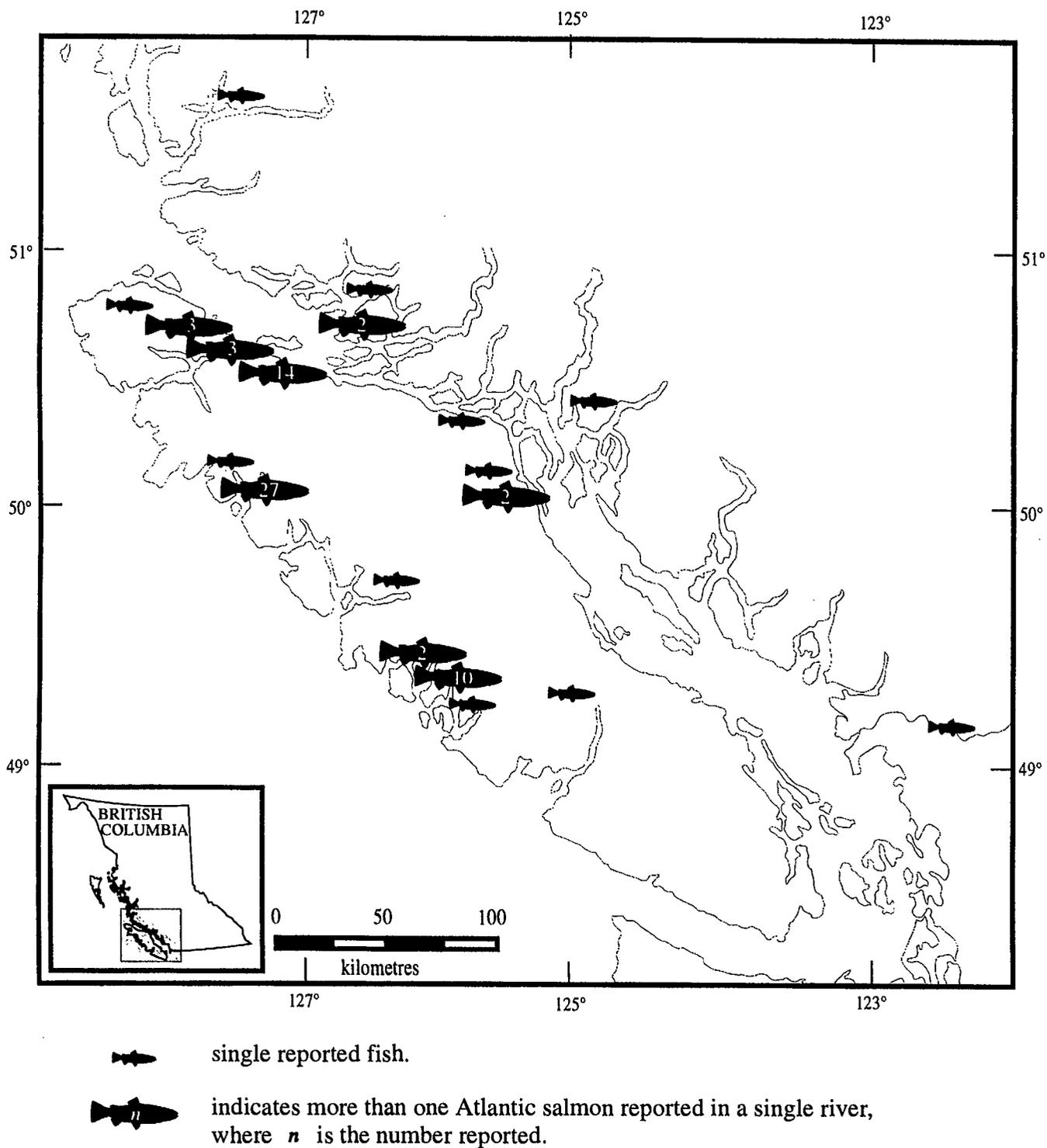
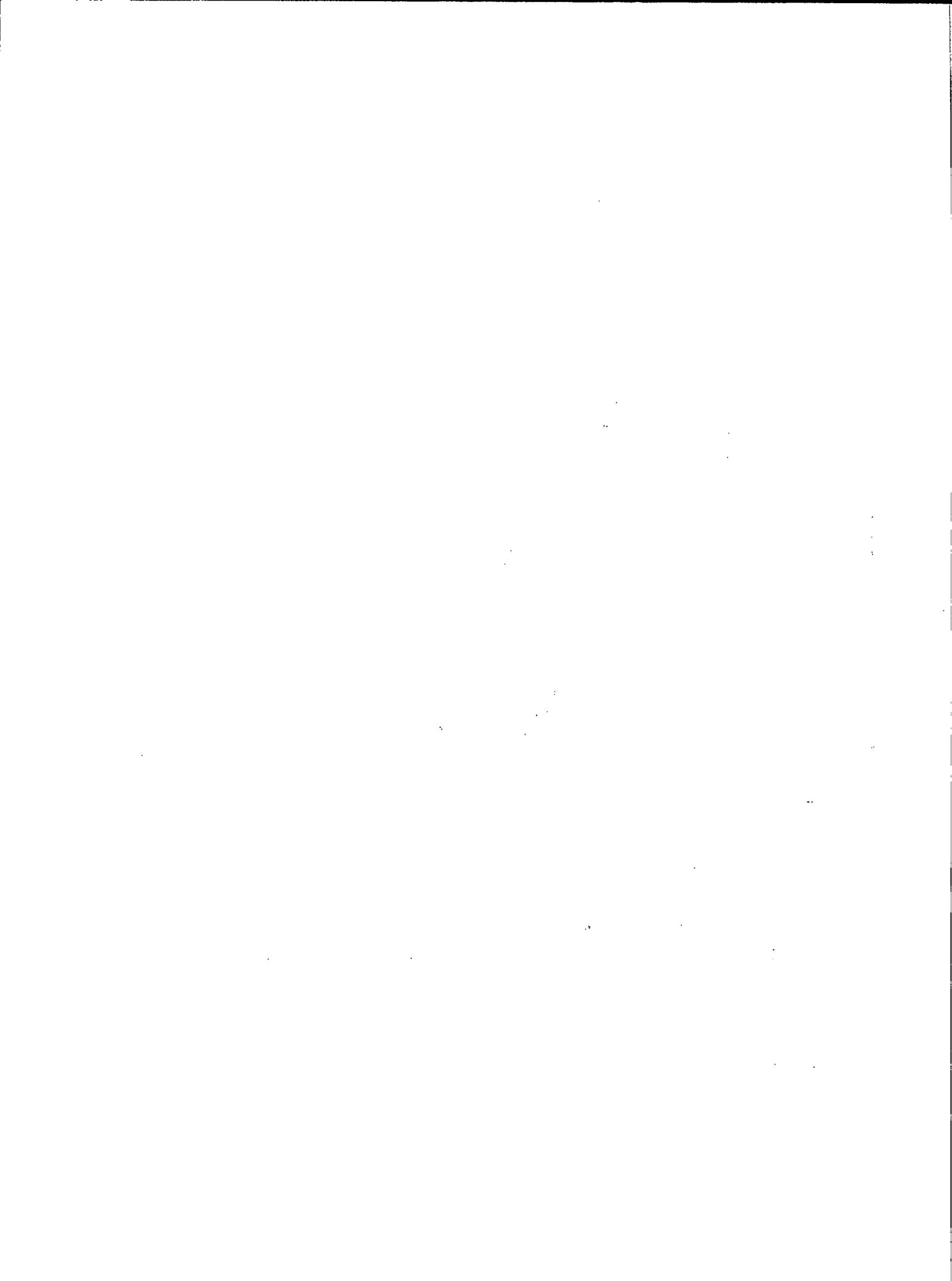
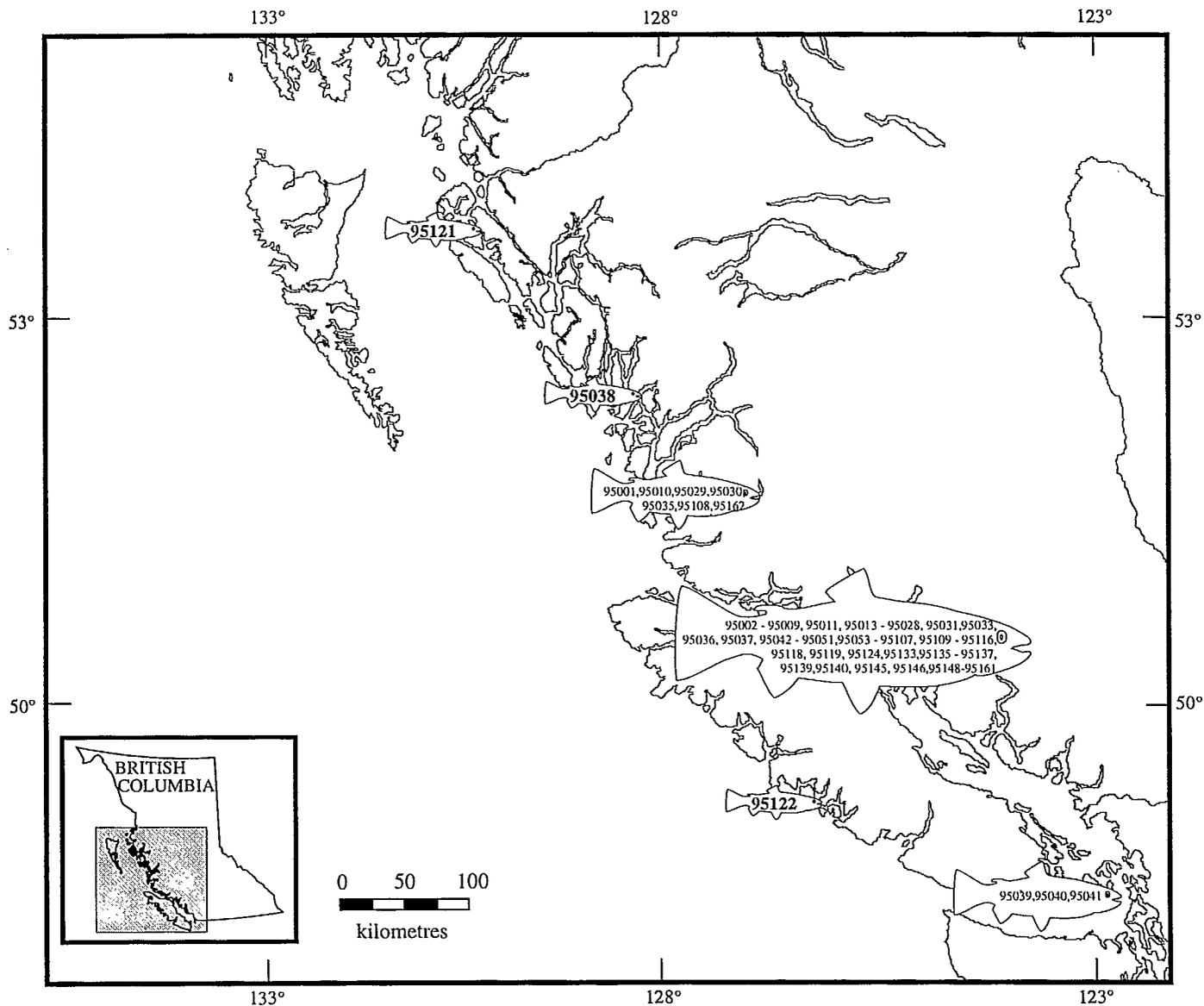


Figure 5. Atlantic salmon reported from freshwater sites in British Columbia in 1995. Includes fish recovered and shown in Figure 9.





CORRECTED FIGURE 6

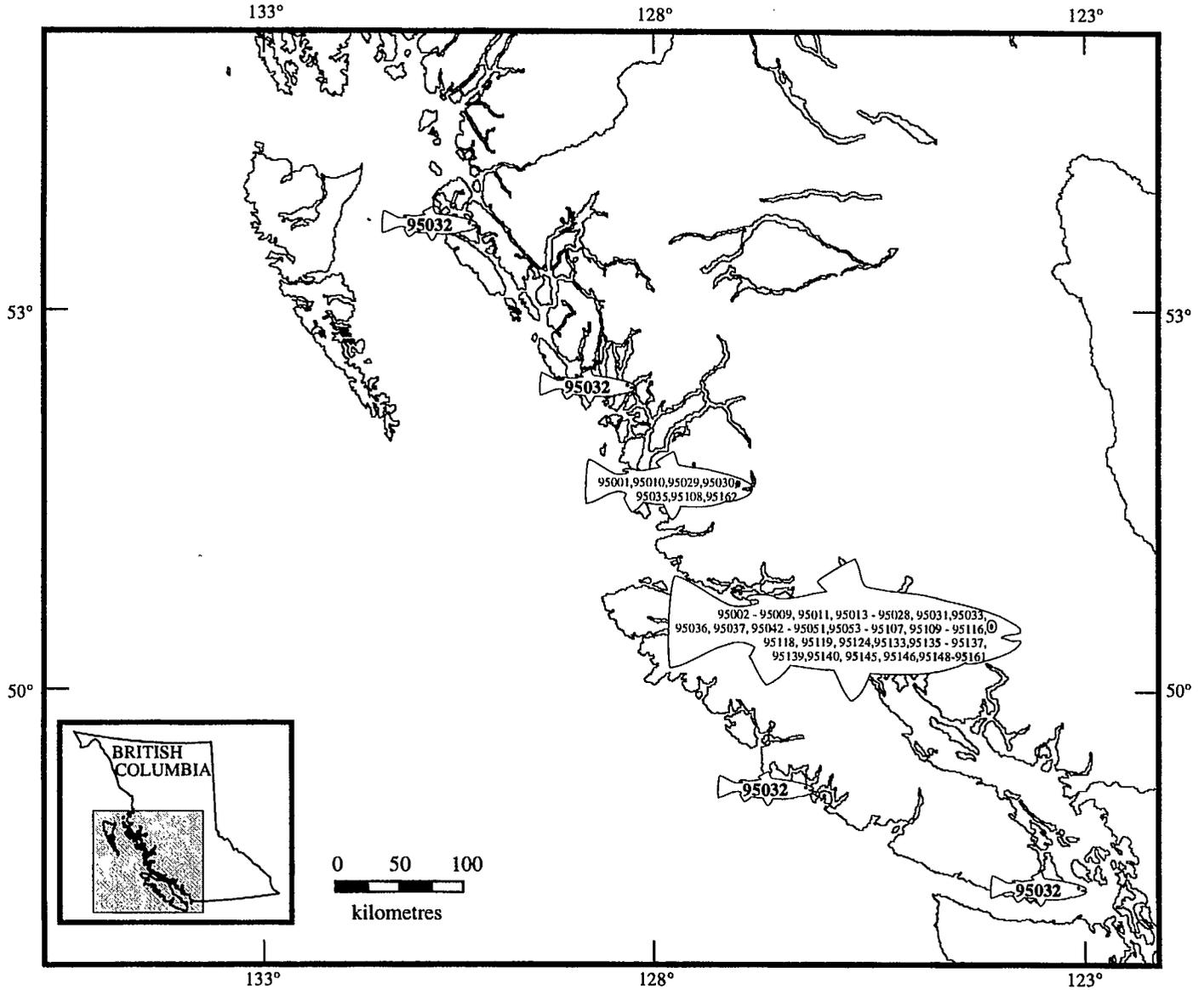
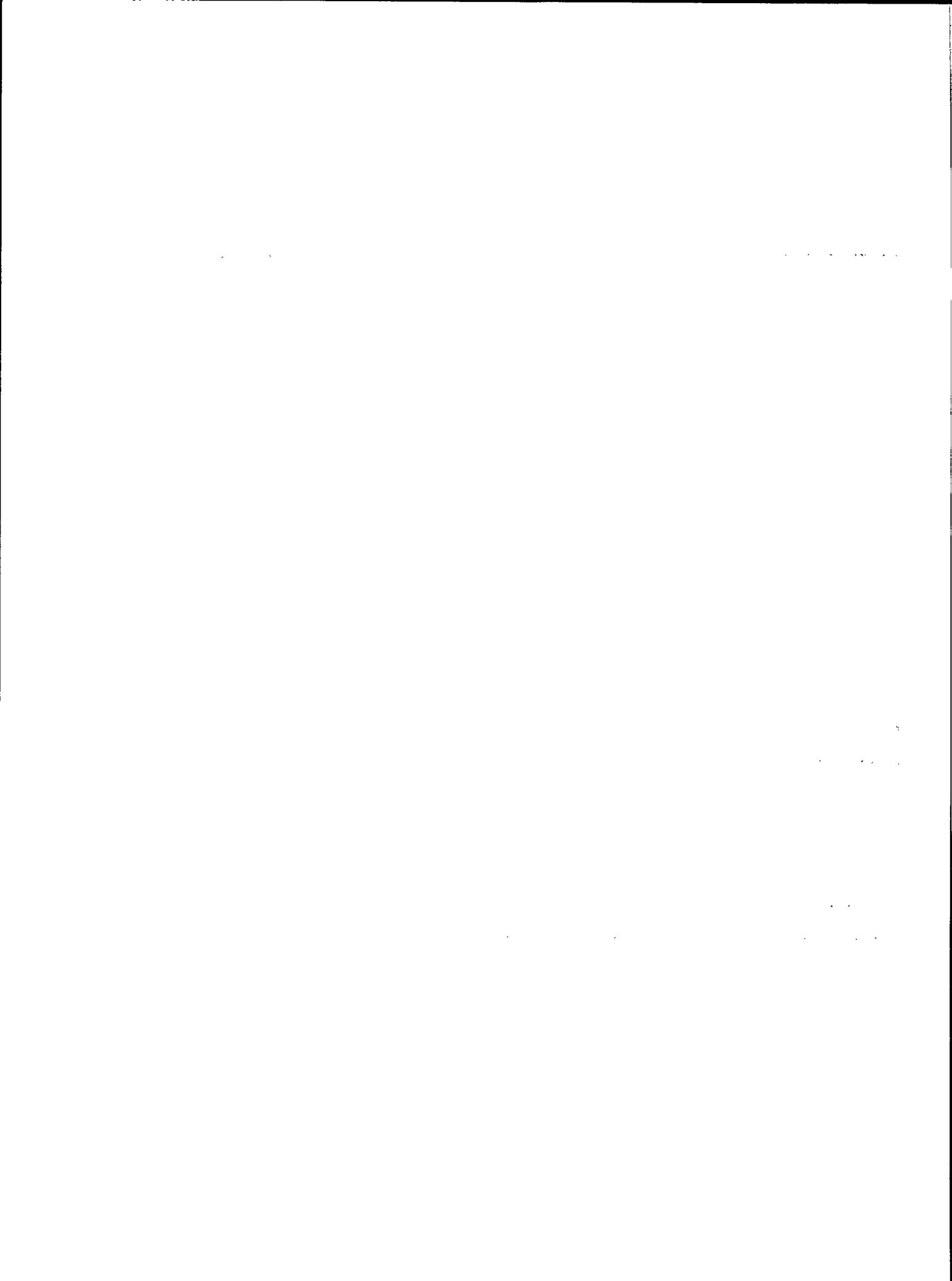


Figure 6. Atlantic salmon recovered from marine sites in British Columbia in 1995. Identified by Fish Number as listed in Table 1. Locations are by statistical area and not meant to be precise catch locations.



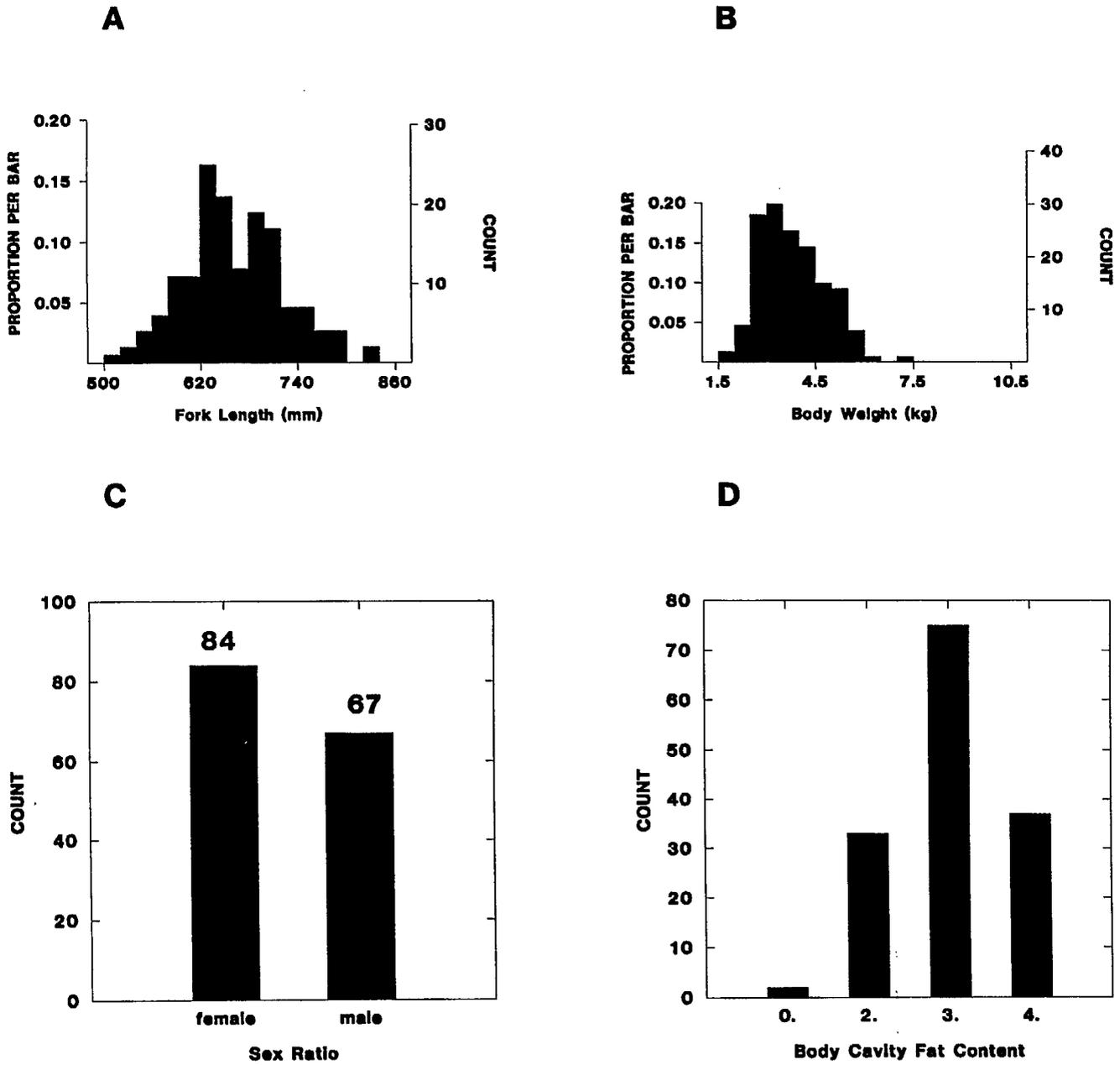
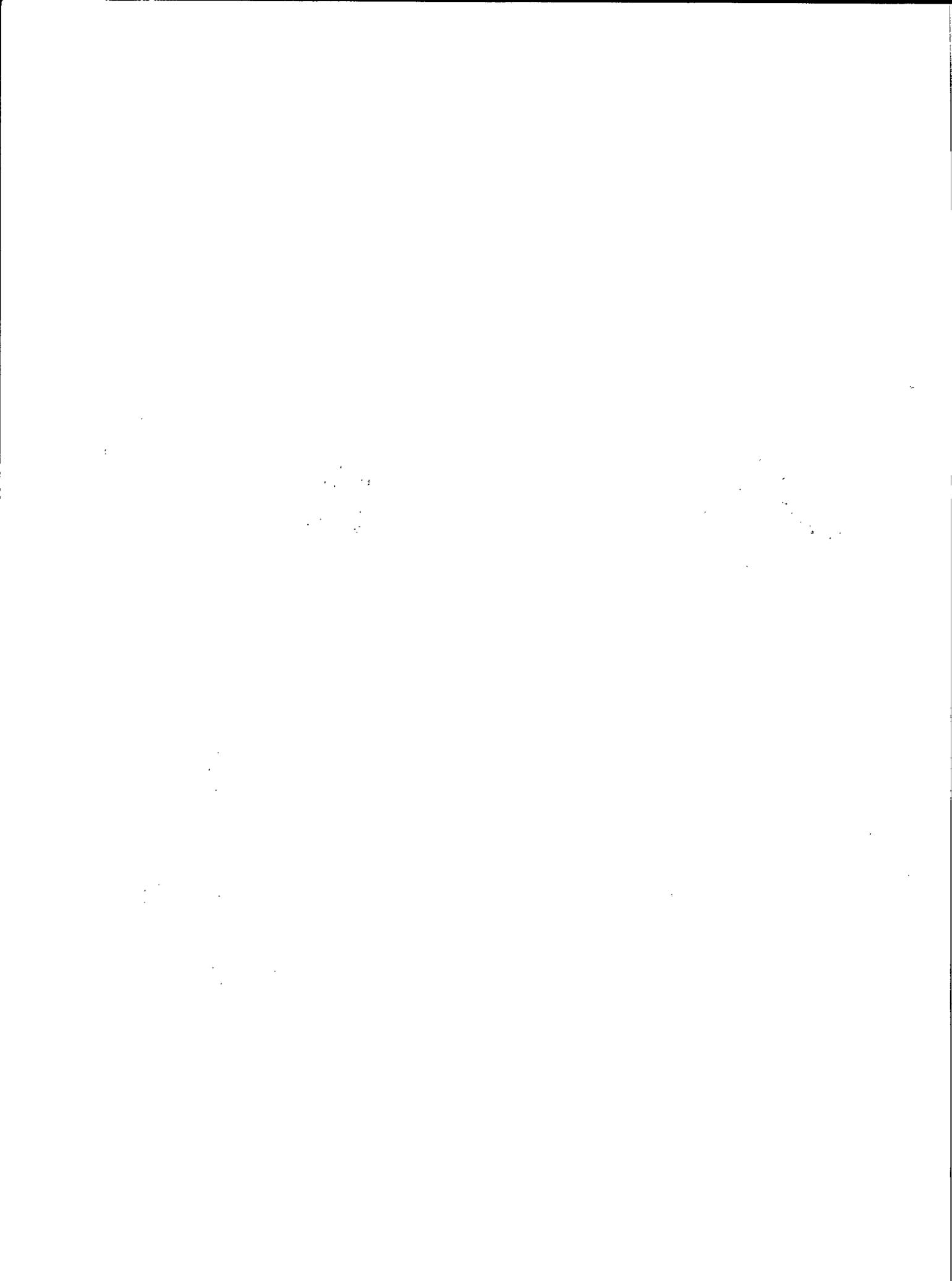


Figure 7. Biological data obtained from returned B.C. marine caught Atlantic salmon; (A) fork lengths (n=153), (B) body weights (n=151), (C) Sex ratio. (n=151), (D) Fat content (n=146).



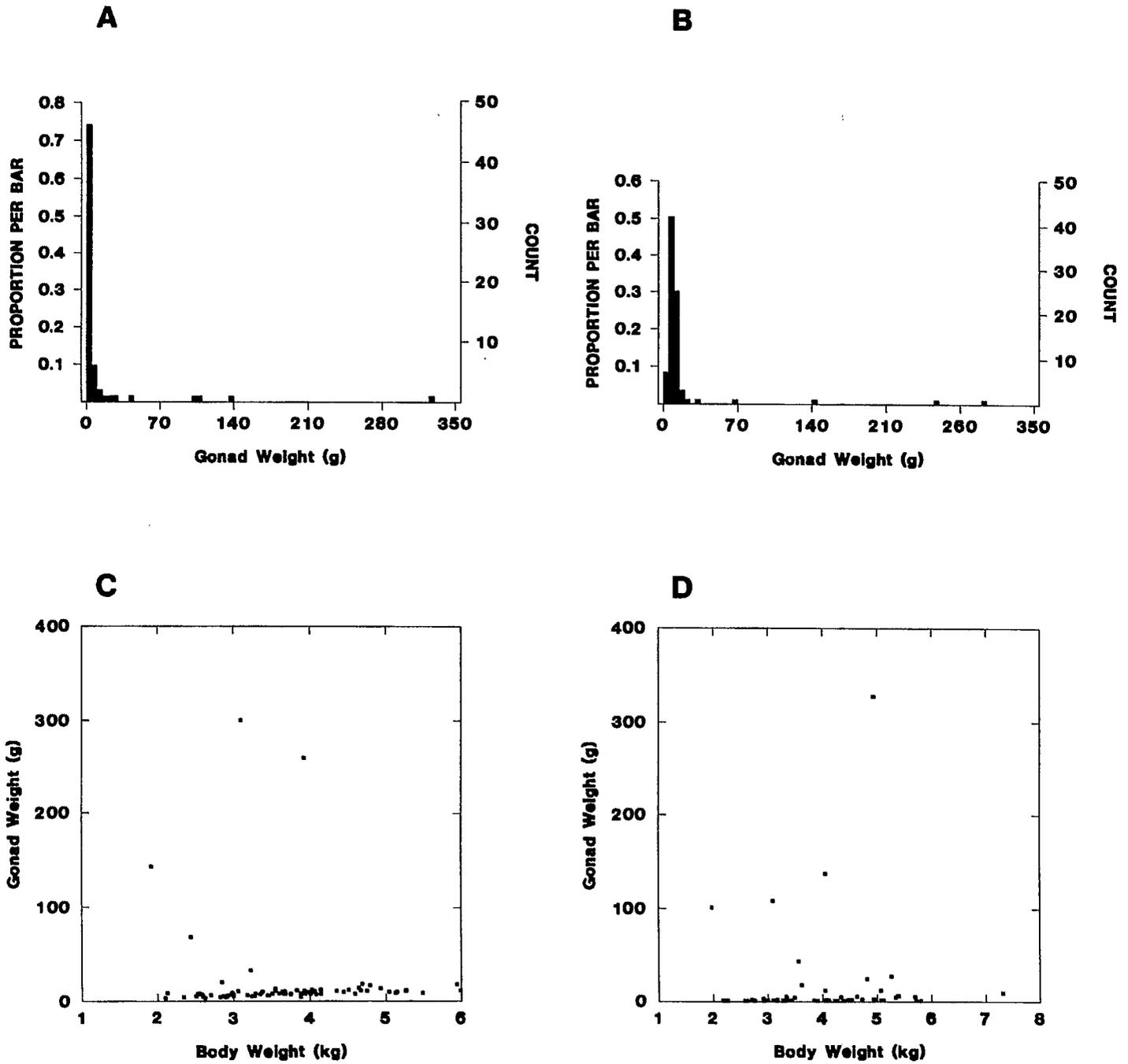
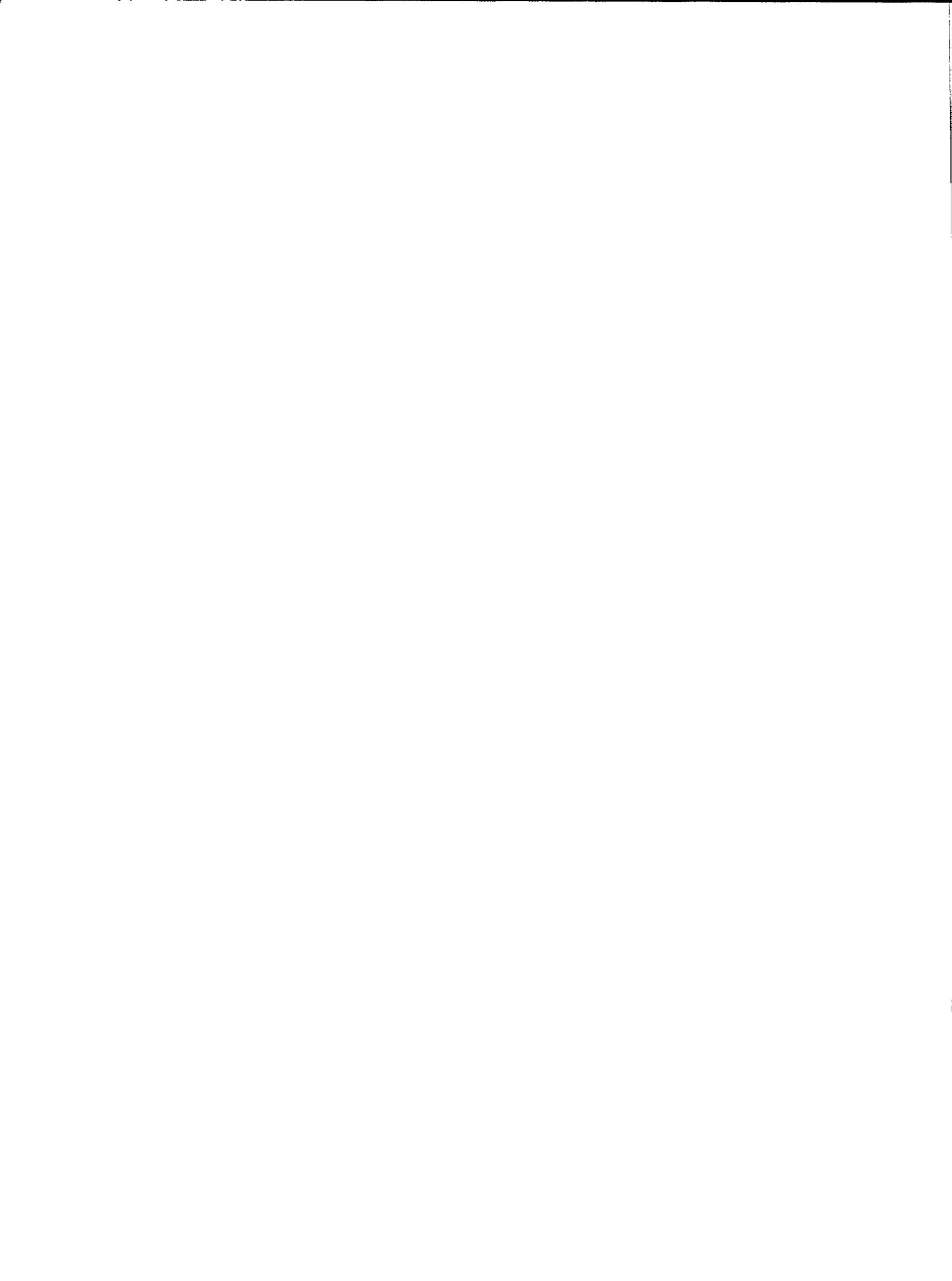
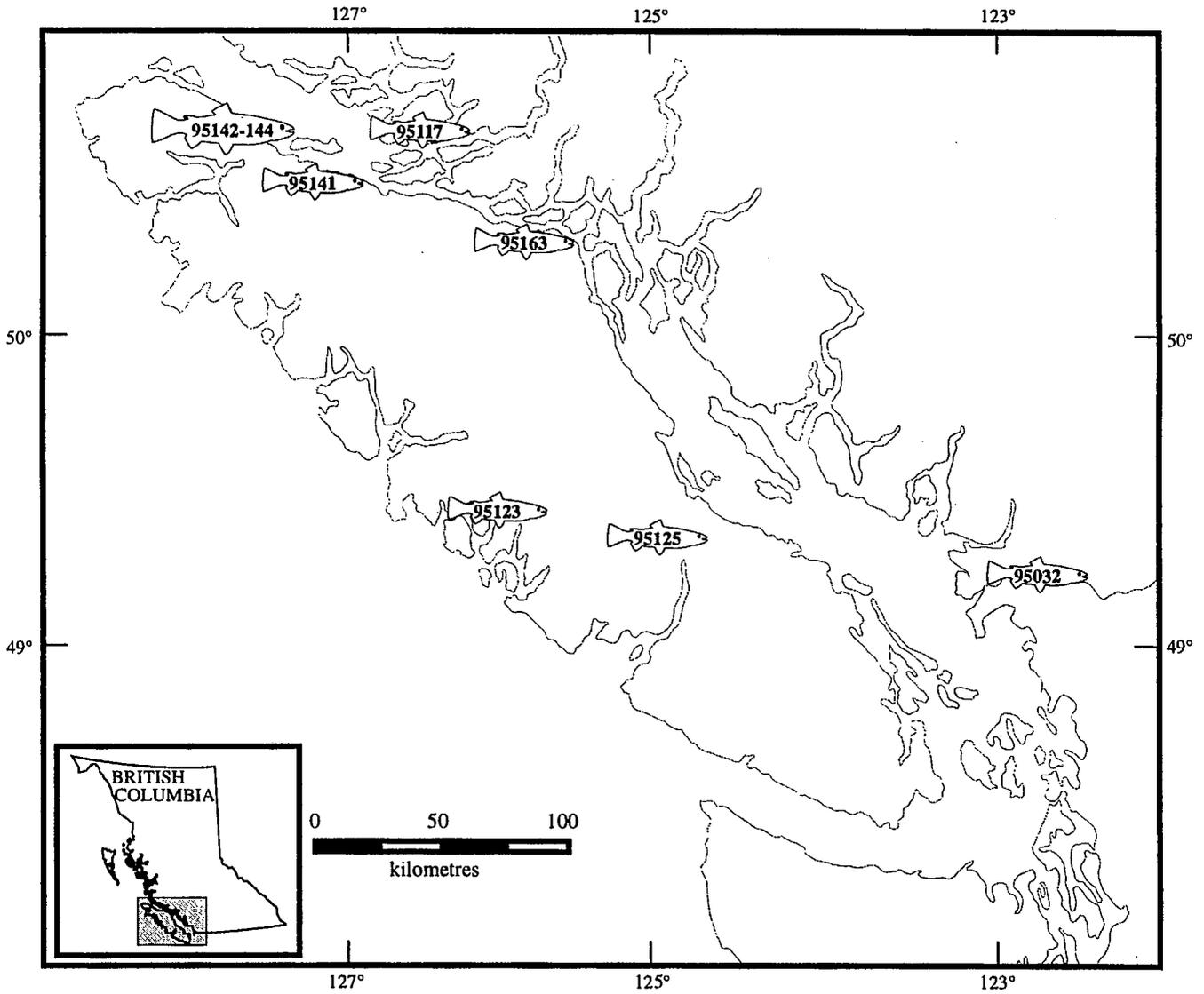


Figure 8. Biological data obtained from returned B.C. marine caught Atlantic salmon; (A) Male gonad weights (n=62), (B) Female gonad weights (n=83), (C) Male gonad weight by body weight (n=62), (D) Female gonad weight by body weight (n=83).





 recovered fish by system and assigned Fish No's.

Figure 9 Atlantic salmon recovered from freshwater sites in British Columbia in 1995. Recovered fish identified by Fish Number as listed in Table 2.

SH 223 F55 no.2357 c.1

Thomson, A.J.

Summary of reported

Atlantic salmon (Salmo...

197611 12046551 c.1

