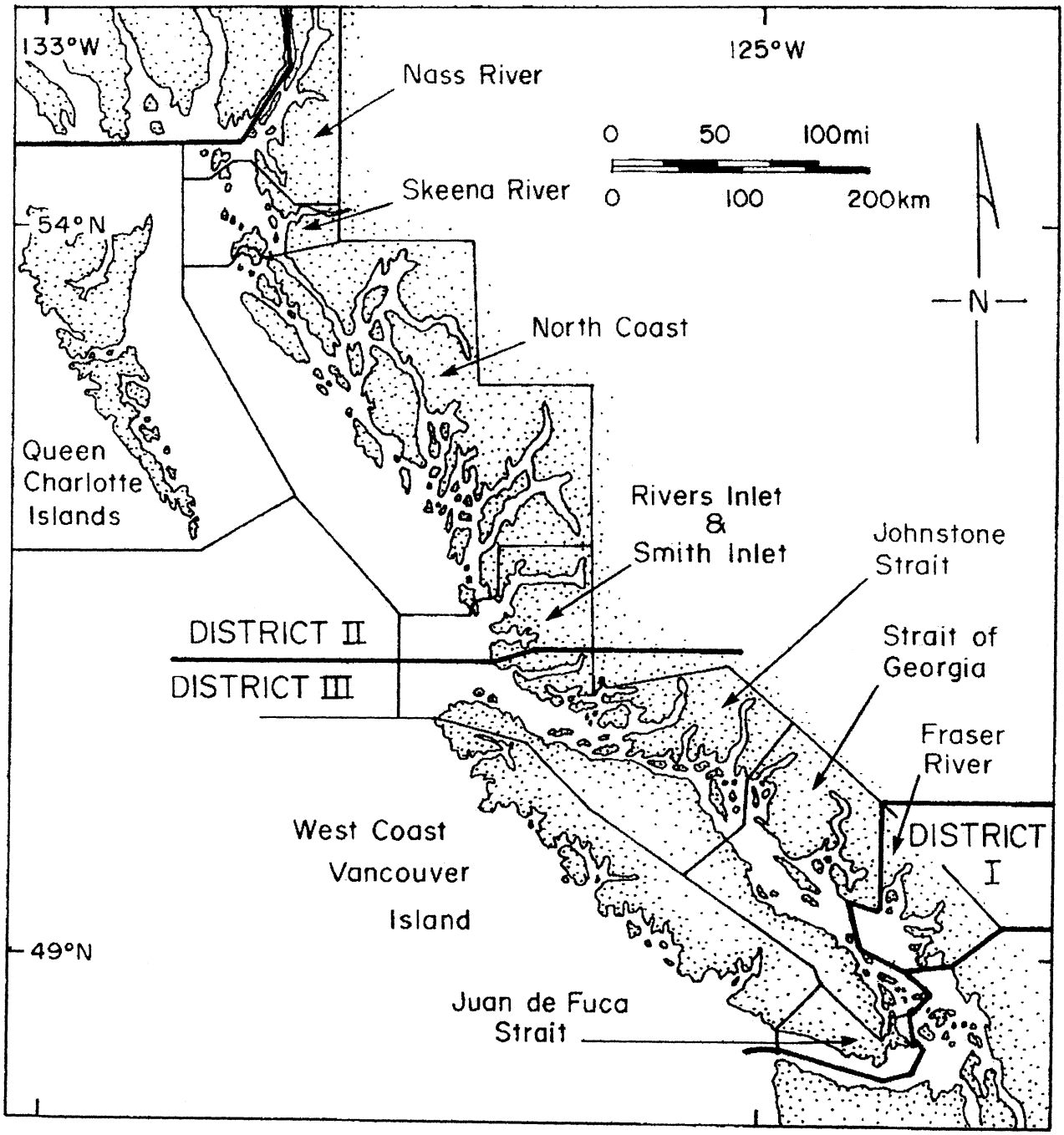


Figure 1. Map showing areas used to present British Columbia salmon catch statistics in this report and seaward boundaries of Districts I, II and III.

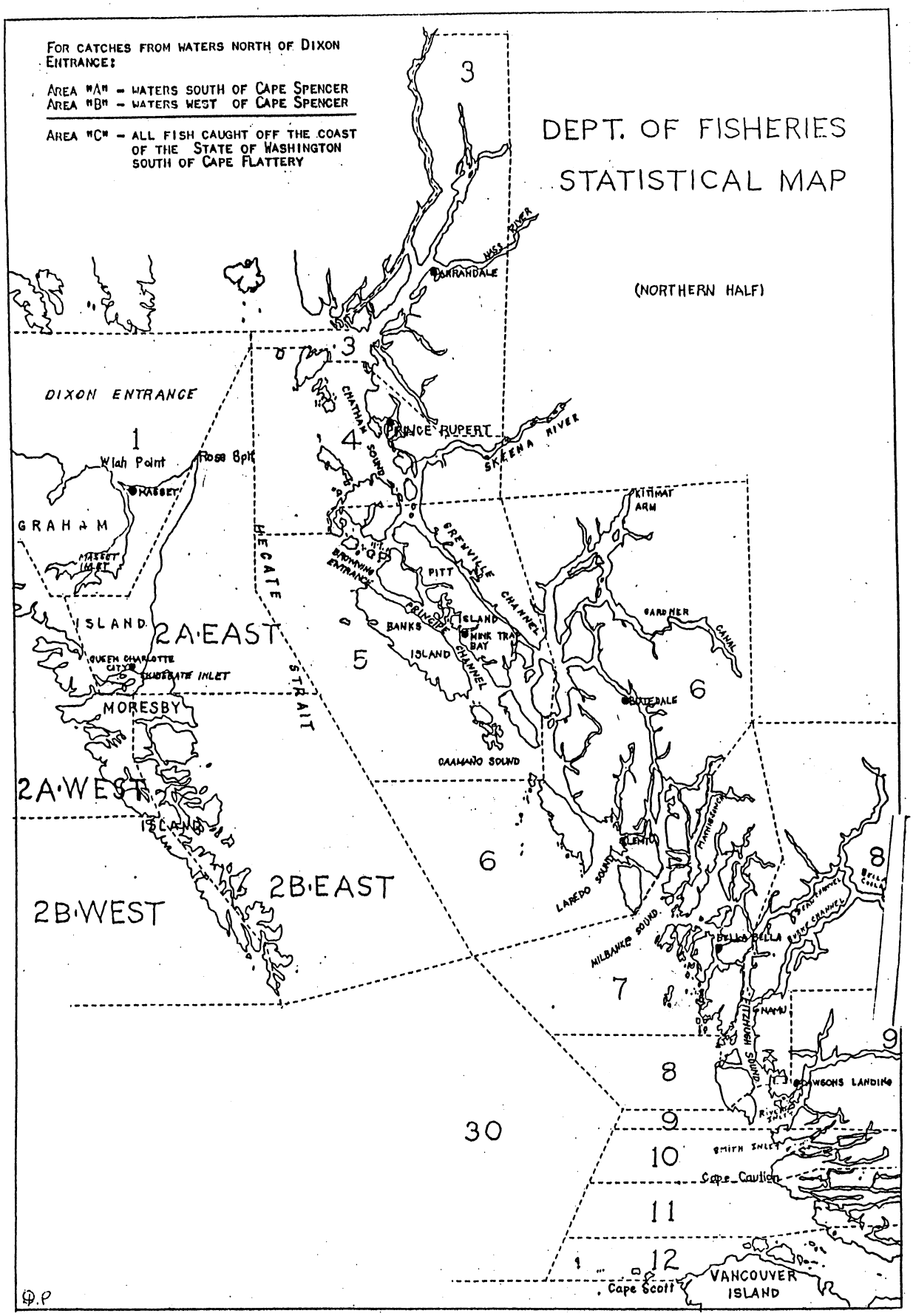


Figure 2. Department of Fisheries statistical area boundaries in 1951 (Anonymous 1951-1996).

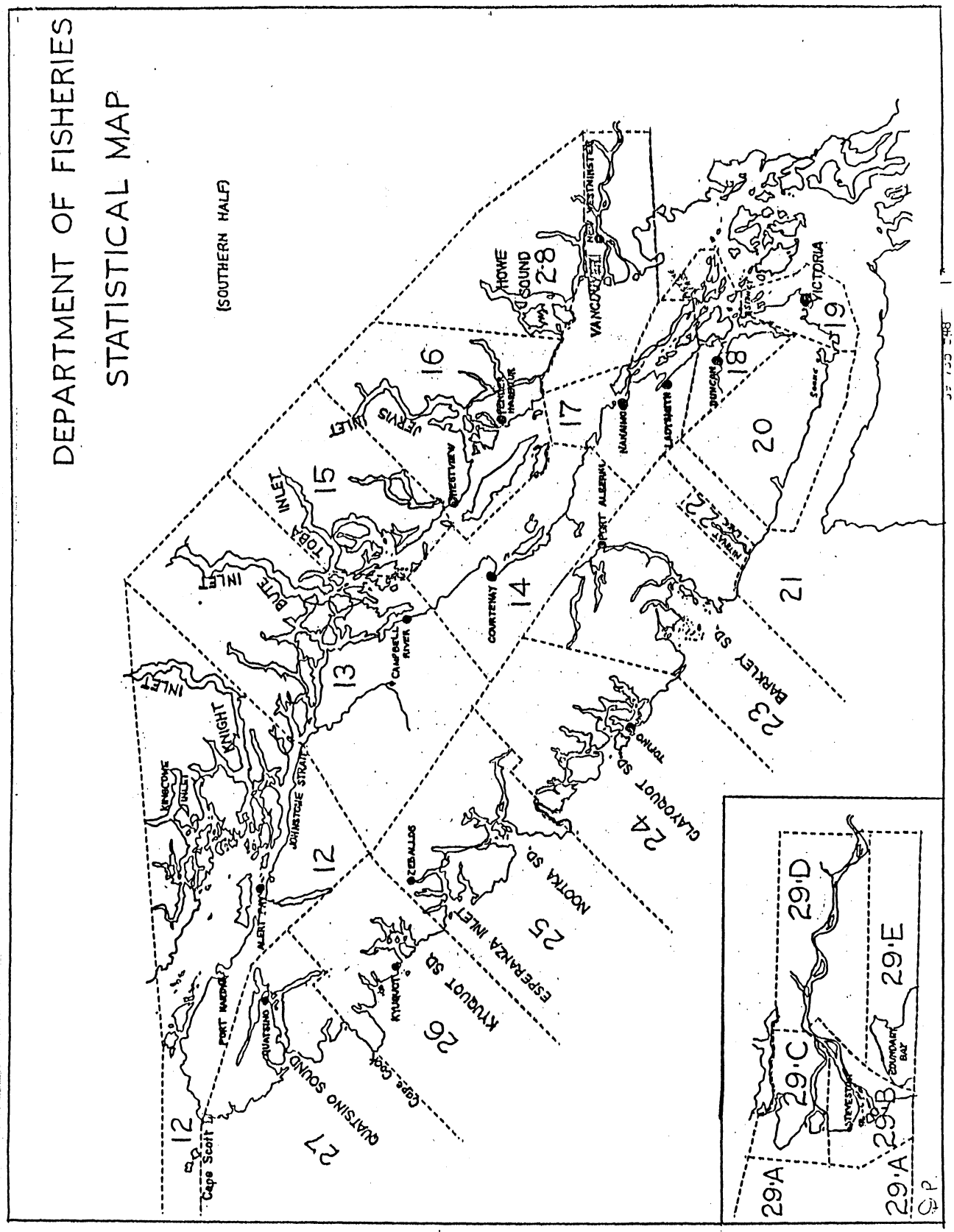
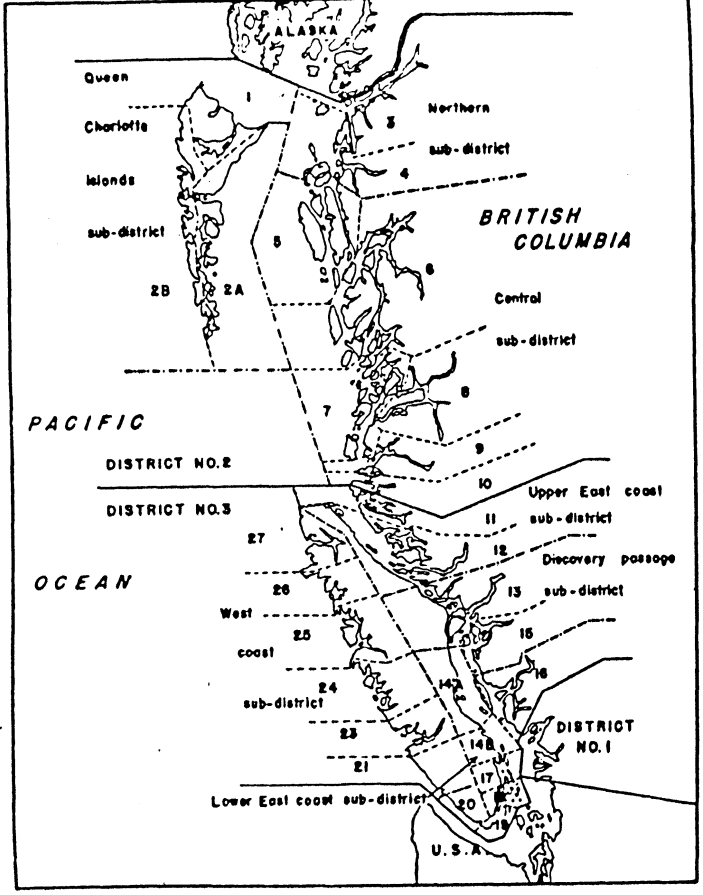


Figure 2. Continued.



Quota Sub-districts	Areas
Northern	3, 4
Central	6 (in part), 7 (in part)
Upper East Coast	12 (in part)
Quathiaski	13 (in part)
Lower East Coast	14A, 14B, 16, 17, 18, 19, 20
West Coast	23, 24, 25, 26, 27
Quatsino	27

Area No.	Common Fishing Grounds
1	North Coast Queen Charlotte Islands
2A	East Coast Queen Charlotte Islands Lagoon Inlet Sewell Inlet Selwyn Inlet Dana Inlet Richardson Inlet Atli Inlet Bigsby Inlet Darwin Sound Skaat Harbour Burnaby Strait Huston Inlet etc.
2B	West Coast Queen Charlotte Islands Inskip Channel Moore Channel Louscoone Inlet etc.
3	Portland Inlet Wales Passage Union Bay Khutzemateen Inlet Wark Channel etc.
4	Pearl Harbour Tuck Inlet Prince Rupert Harbour Butler Cove Jap Inlet etc.
5	Kitkatlah Inlet Hevenor Inlet Principe Channel Union Passage etc.
6	Surf Inlet Helmcken Inlet Kent Inlet Laredo Inlet Aaltanhash Inlet Thistle Passage Meyers Passage Klemtu Passage etc.
7	Bella Bella Lama Passage Gunboat Passage Kwakshua Passage Safety Cove Fish Egg Inlet etc.

Area No.	Common Fishing Grounds
8	Cousins Inlet Bella Coola Kwatna Inlet etc.
9	Rivers Inlet Drainey Inlet Moses Inlet etc.
10	Smith Inlet Takush Harbour etc.
11	Nugent Sound Seymour Inlet etc.
12	Grappler Sound Belleisle Sound Kingcome Inlet Clio Channel Bones Bay Serpentine Pass Knight Inlet (Head) etc.
13	Granite Bay Okisollo Channel Deepwater Bay etc.
15	Teakerne Arm Okeover Arm etc.
14A	Deep Bay Baynes Sound etc.
14B	Nanoose Bay Entrance Island Northumberland Channel etc.
16	Jervis Inlet Sechelt Inlet etc.
17	Dodd Narrows Gabriola Pass Porlier Pass Stuart Channel Pylades Channel Trincomali Channel Walker Rock etc.

Area No.	Common Fishing Grounds
18	Swanson Channel Satellite Channel etc.
19	Victoria Area etc.
20	Sooke etc.
23	Barkley Sound Trevor Channel Junction Passage Banfield Inlet Rainy Bay Imperial Eagle (Middle) Channel Uchucklesit Harbour Sechart Channel Effingham Inlet etc.
24	Clayoquot Sound Refuge Cove Shelter Arm Sydney Inlet Hesquiat Harbour etc.
25	Nootka Sound Kings Pass Herring Bay Ewin Creek Tahsis Inlet Esperanza Inlet Nuchatlitz Inlet Queens Cove etc.
26	Kyuquot Sound Amai (Deep) Inlet Nicolaye Channel Crowther Channel Malksope Inlet Ououkinsh Inlet Nasparti Inlet etc.
27	Quatsino Sound Klaskish Inlet Klaskino Inlet Neroutsos Inlet Drake Island Quatsino Narrows Forward Inlet etc.

Figure 3. Map of British Columbia statistical areas in use prior to 1951 from Burton (1949).

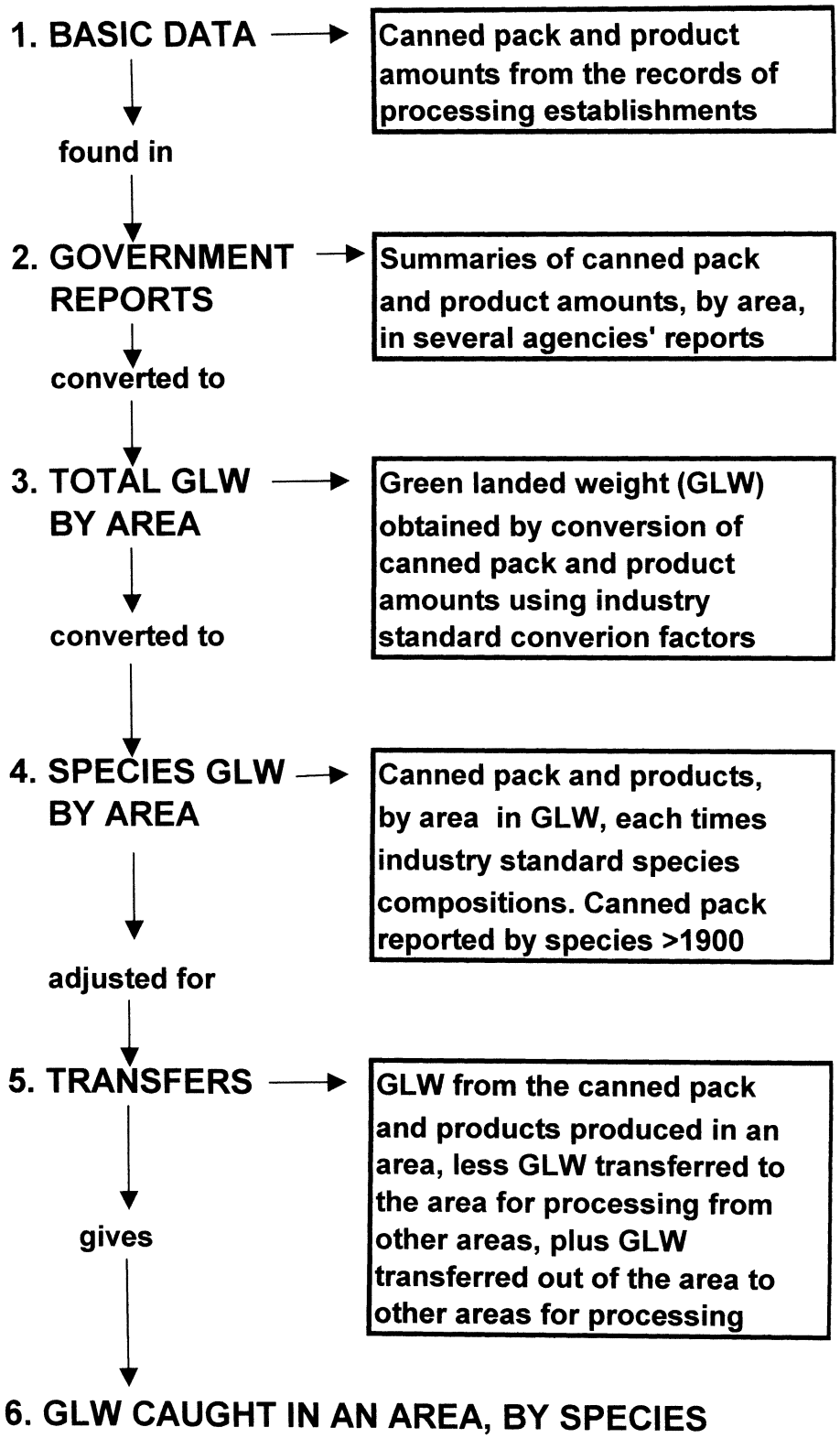


Figure 4. General approach to estimation of the landed weight of the pre-1951 commercial catches, by area, for salmon in British Columbia.

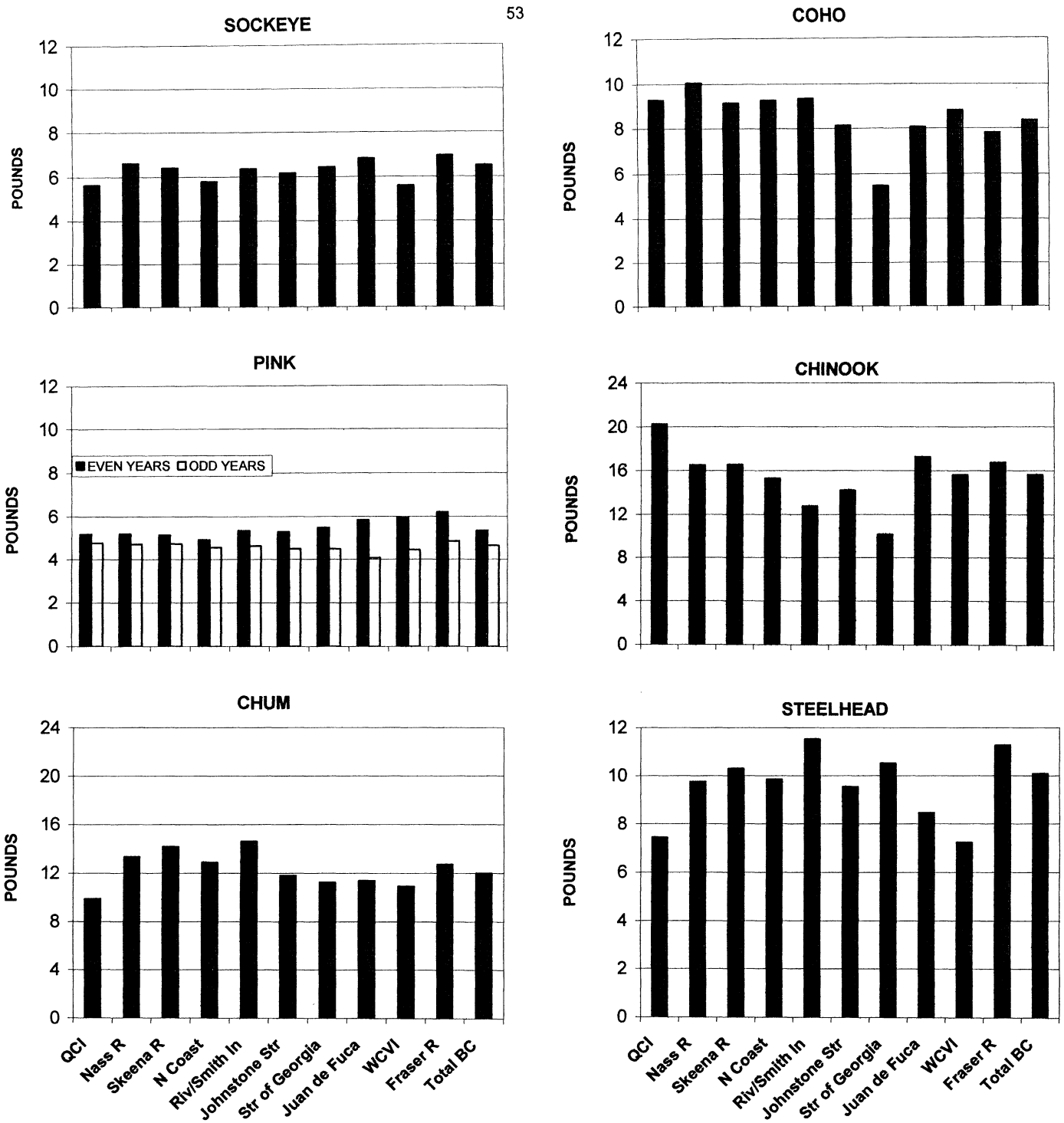


Figure 5. Average round weight of salmon caught in the British Columbia commercial fishery, for each of the ten areas used in this report, 1951-1954.

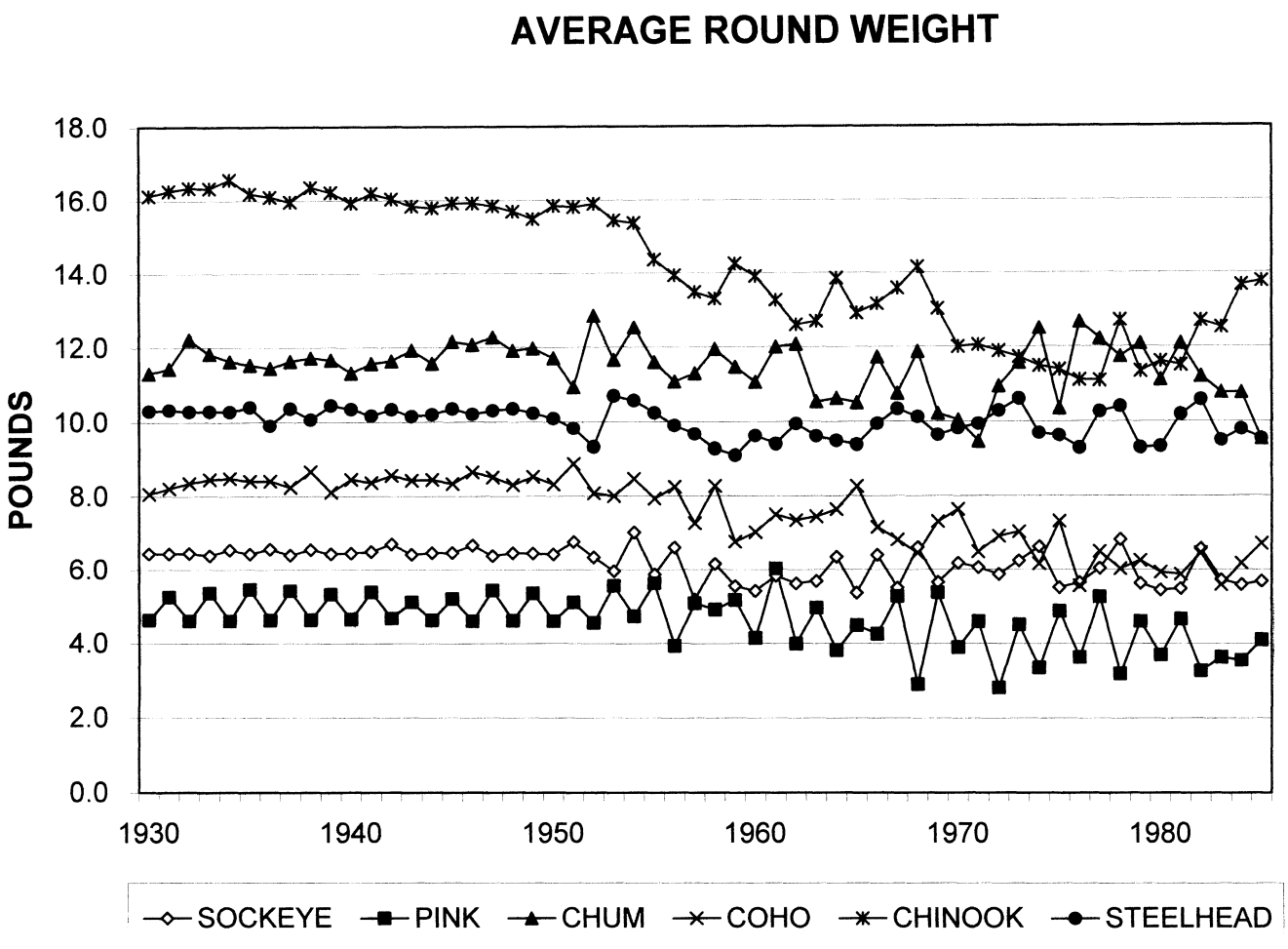


Figure 6. Average round weight (pounds) of salmon species in the British Columbia commercial catch. Average weights prior to 1951 were based on the 1951-1954 average weights for the ten areas in this report, weighted by the annual catch in each area to obtain a province-wide average weight for each species prior to 1951.

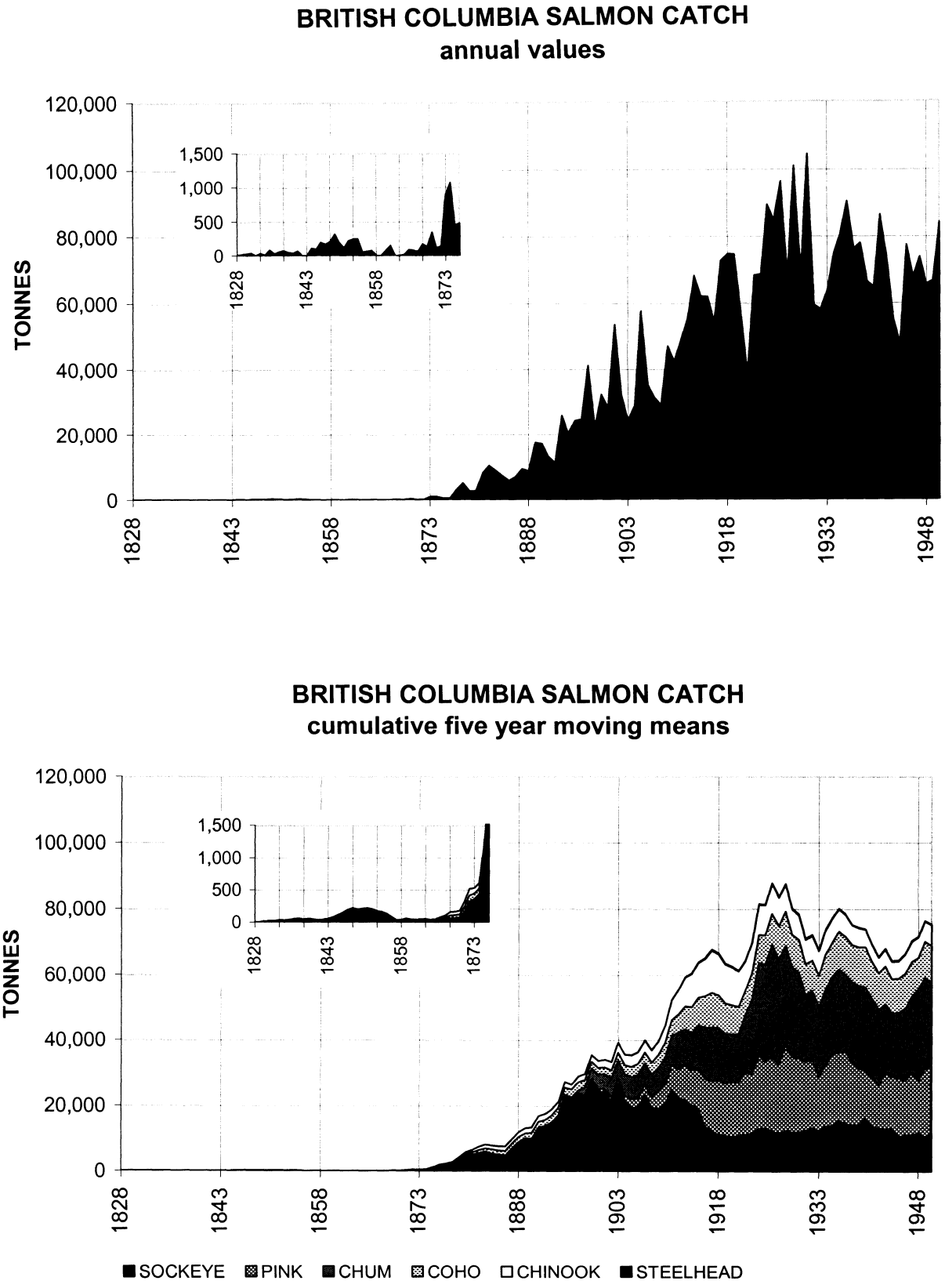


Figure 7. Annual total British Columbia catch of salmon in tonnes, 1828 to 1950 in the top graph, and cumulated by species and presented as five year moving averages, centred on the third year in the lower graph (steelhead indistinguishable). Insert graphs show early years.

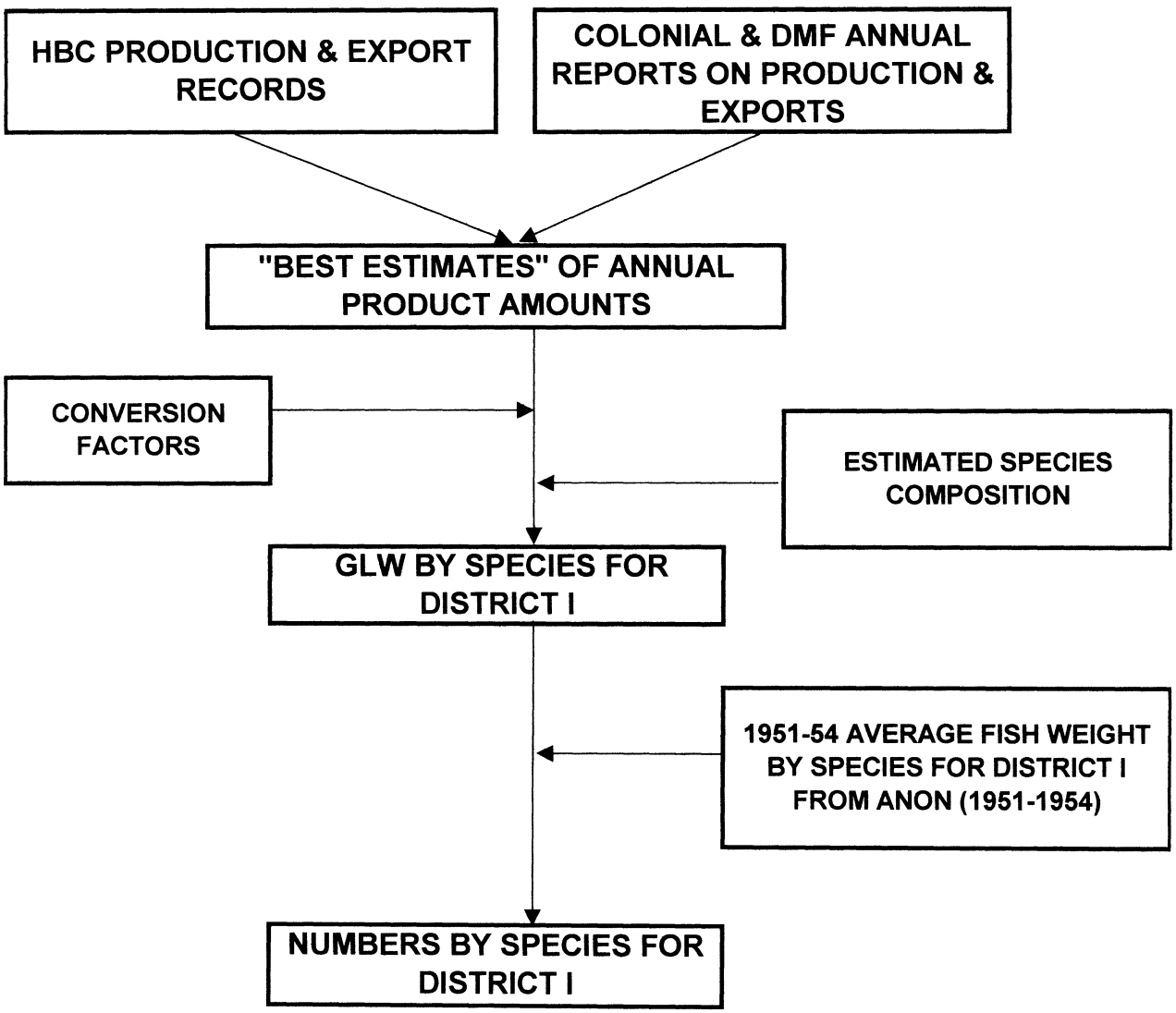


Figure 8. Flow chart of analyses for estimation of GLW and numbers of salmon caught in District I (Fraser River), 1828-1875.

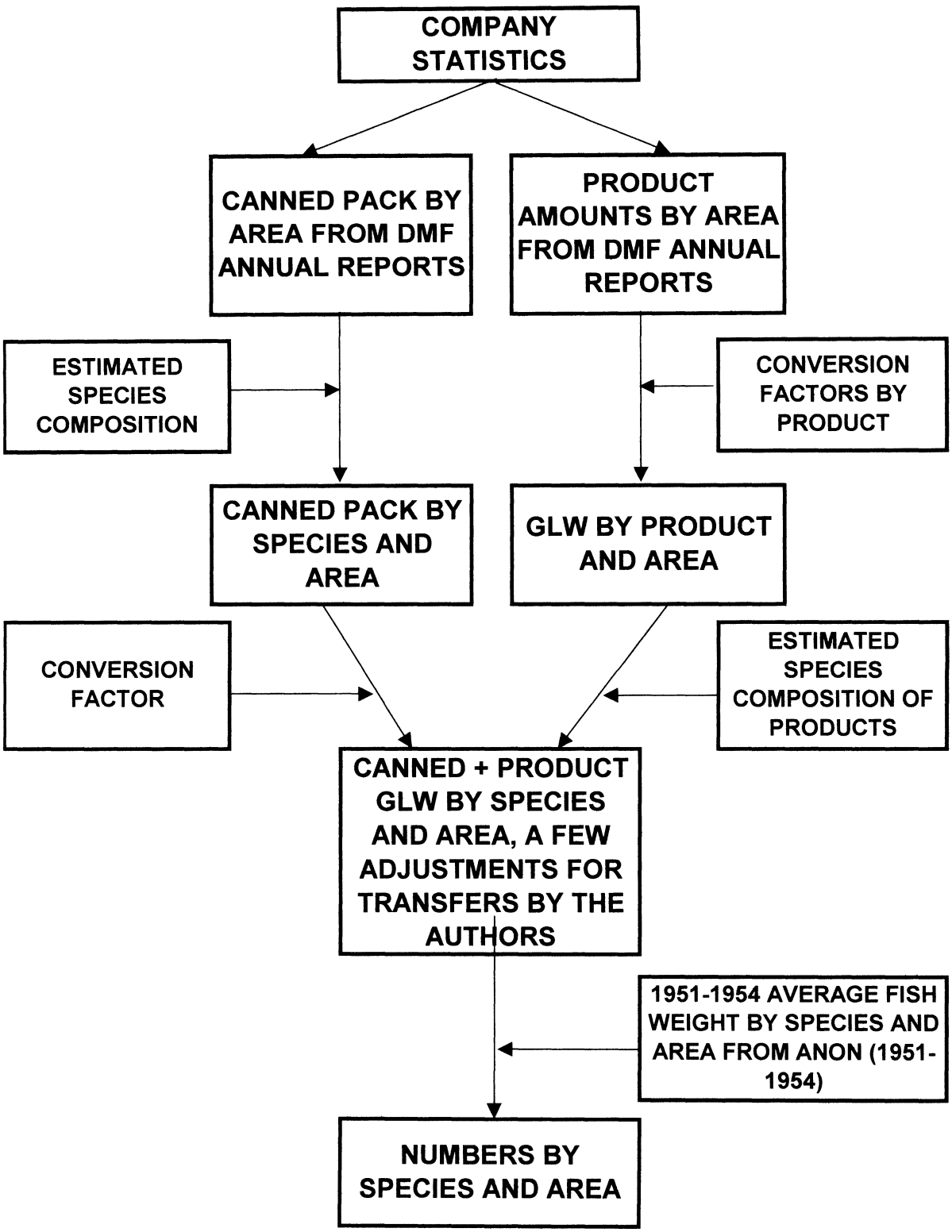


Figure 9. Flow chart of analyses for estimation of GLW and numbers of salmon caught in Districts I-III, 1876-1900.

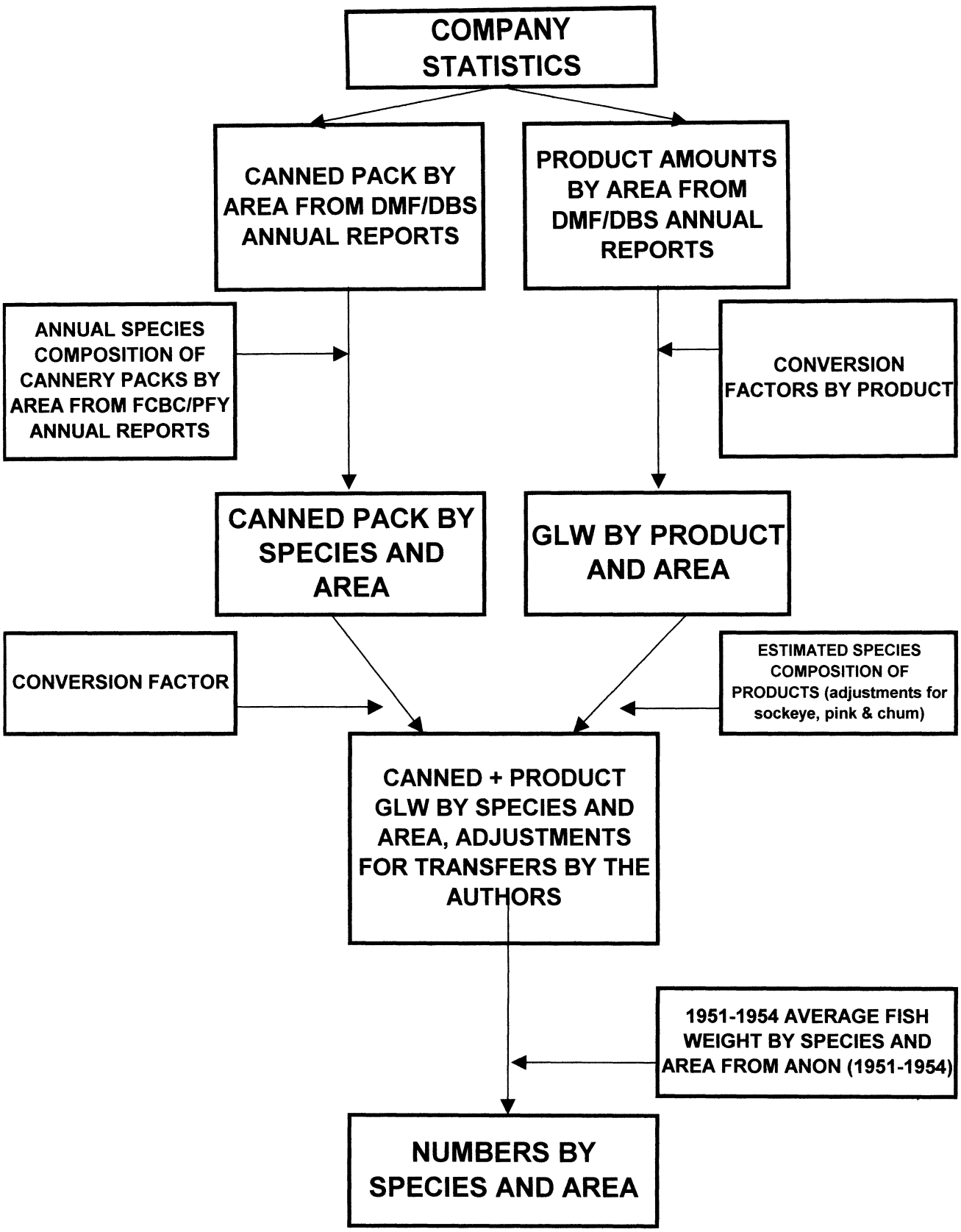


Figure 10. Flow chart of analyses for estimation of GLW and numbers of salmon caught in Districts I-III, 1901-1922.

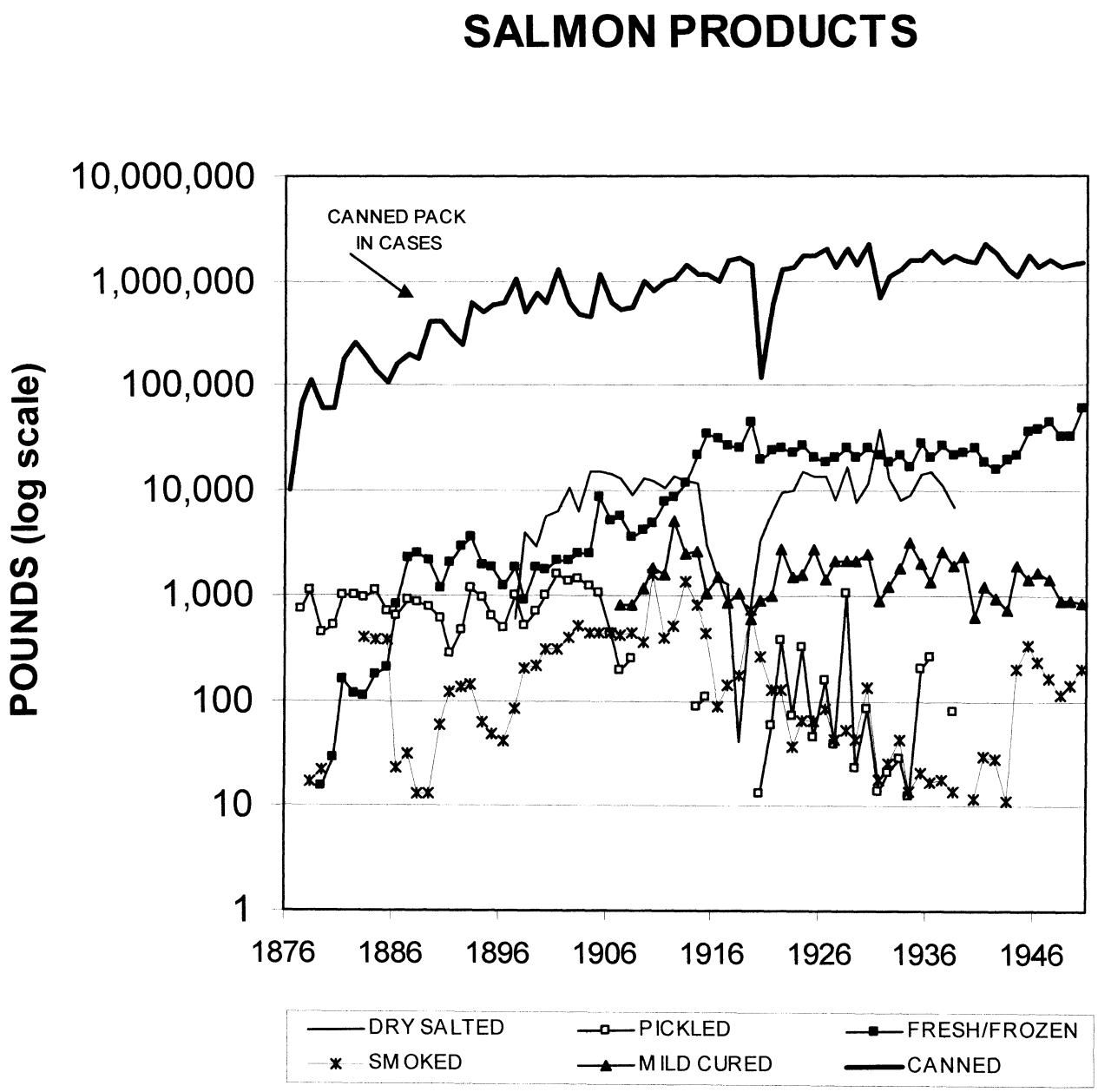


Figure 11. Trends in the production of salmon products and canned salmon between 1876 and 1950 (data from Anonymous 1917-1950 and Anonymous 1958).

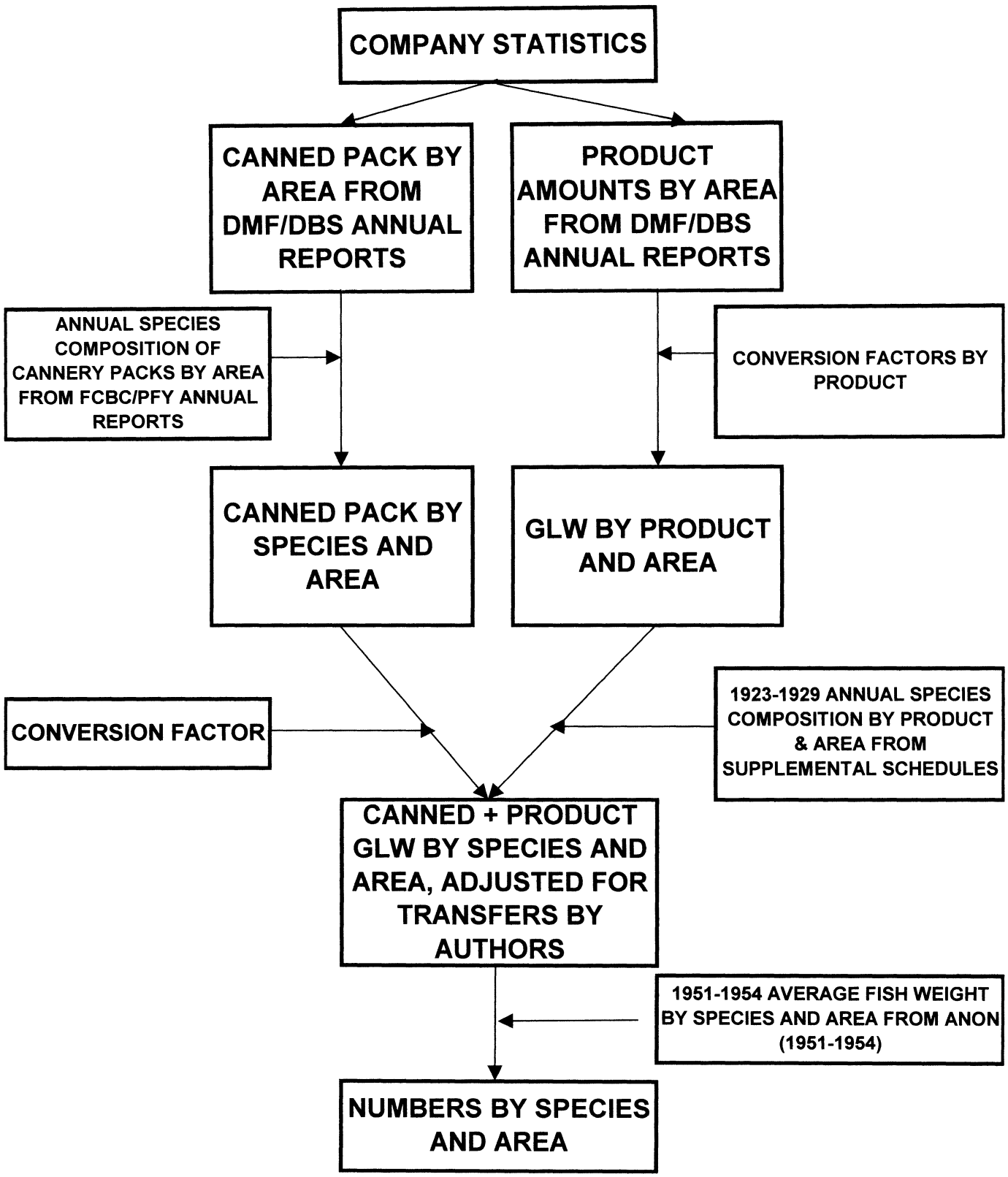


Figure 12. Flow chart of analyses for estimation of GLW and numbers of salmon caught in Districts I-III, 1923-1929, and District I, 1930-1932.

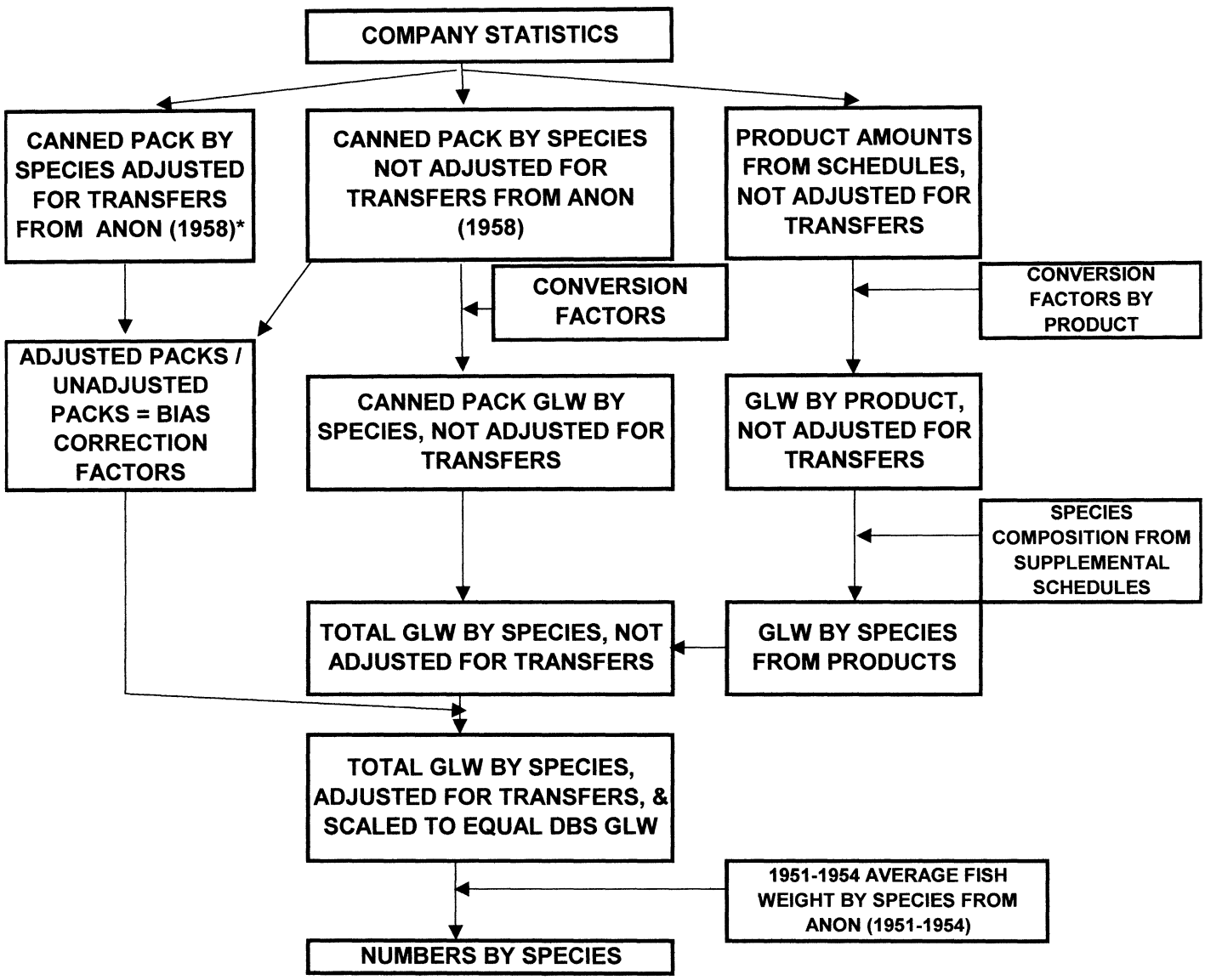


Figure 13. Flow chart of analyses for estimation of GLW and numbers of salmon caught in District I, 1933-1944. *1993 canned pack from Rounsefell and Kelez (1983).

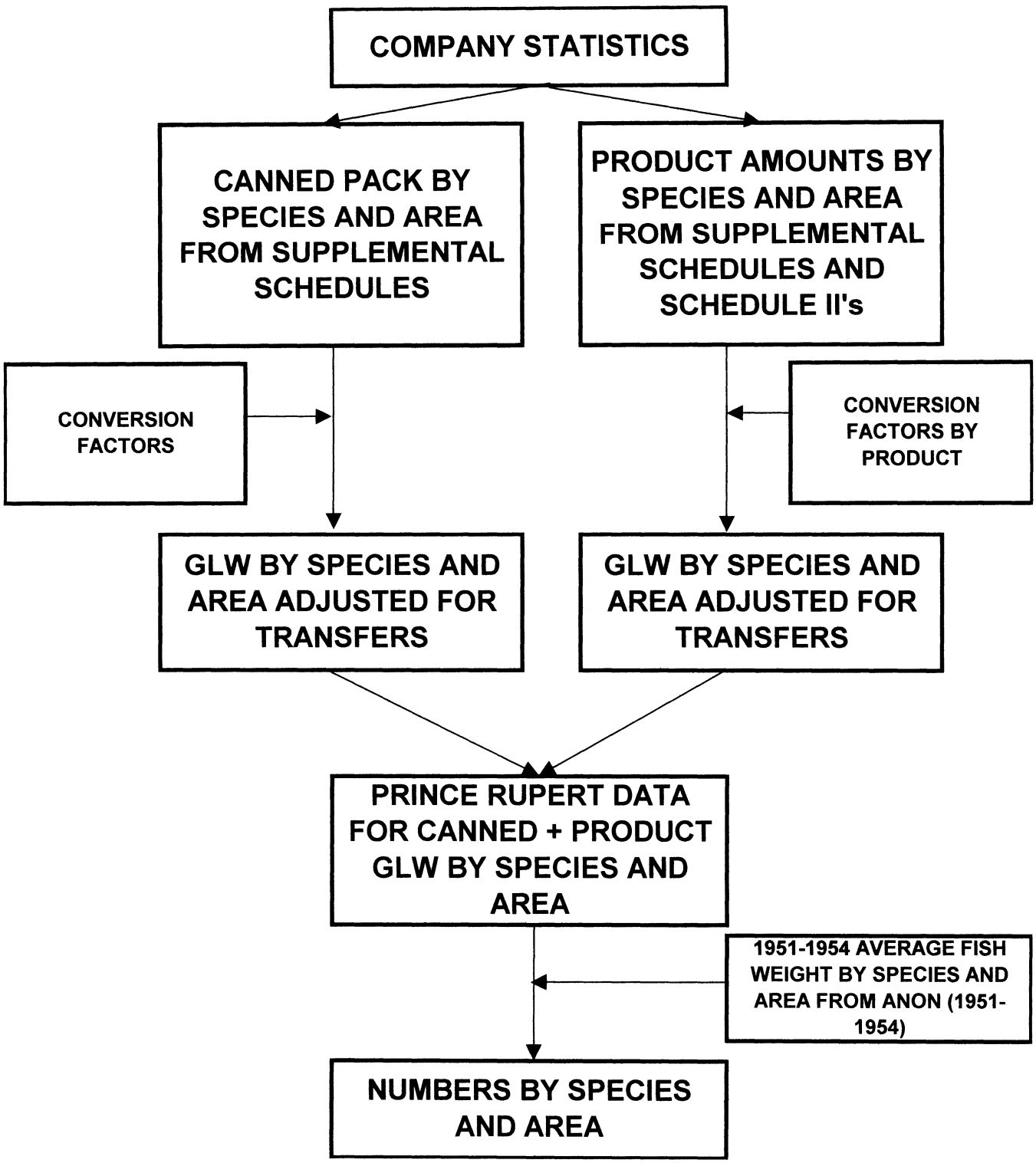


Figure 14. Flow chart of analyses for estimation of GLW and numbers of salmon caught in District II, 1930-1944.

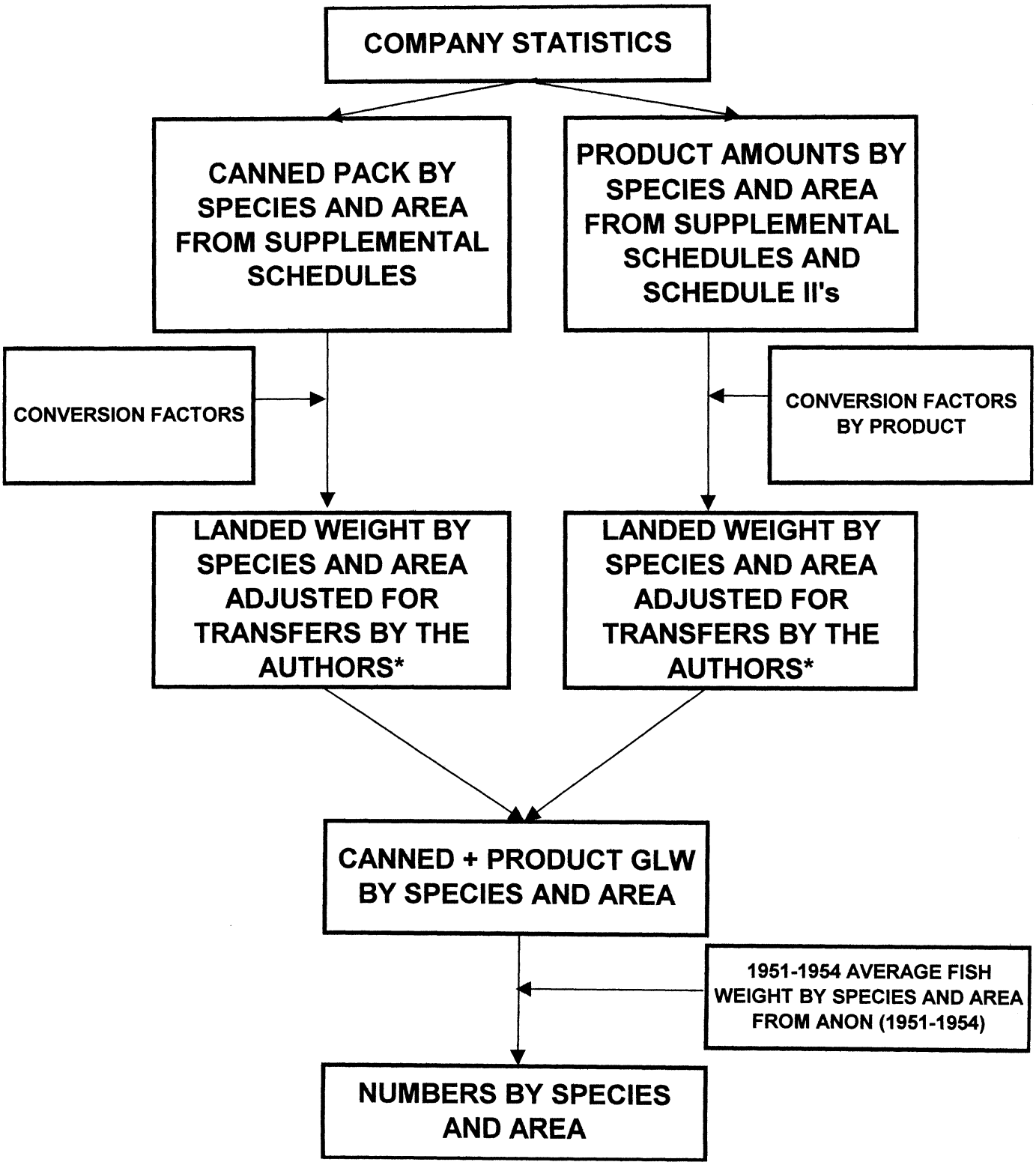


Figure 15. Flow chart of analyses for estimation of GLW and numbers of salmon caught in District III, 1930-1944. *Adjusted for transfers by the authors from 1930 to 1932; DMF adjusted for transfers from 1933 onward.

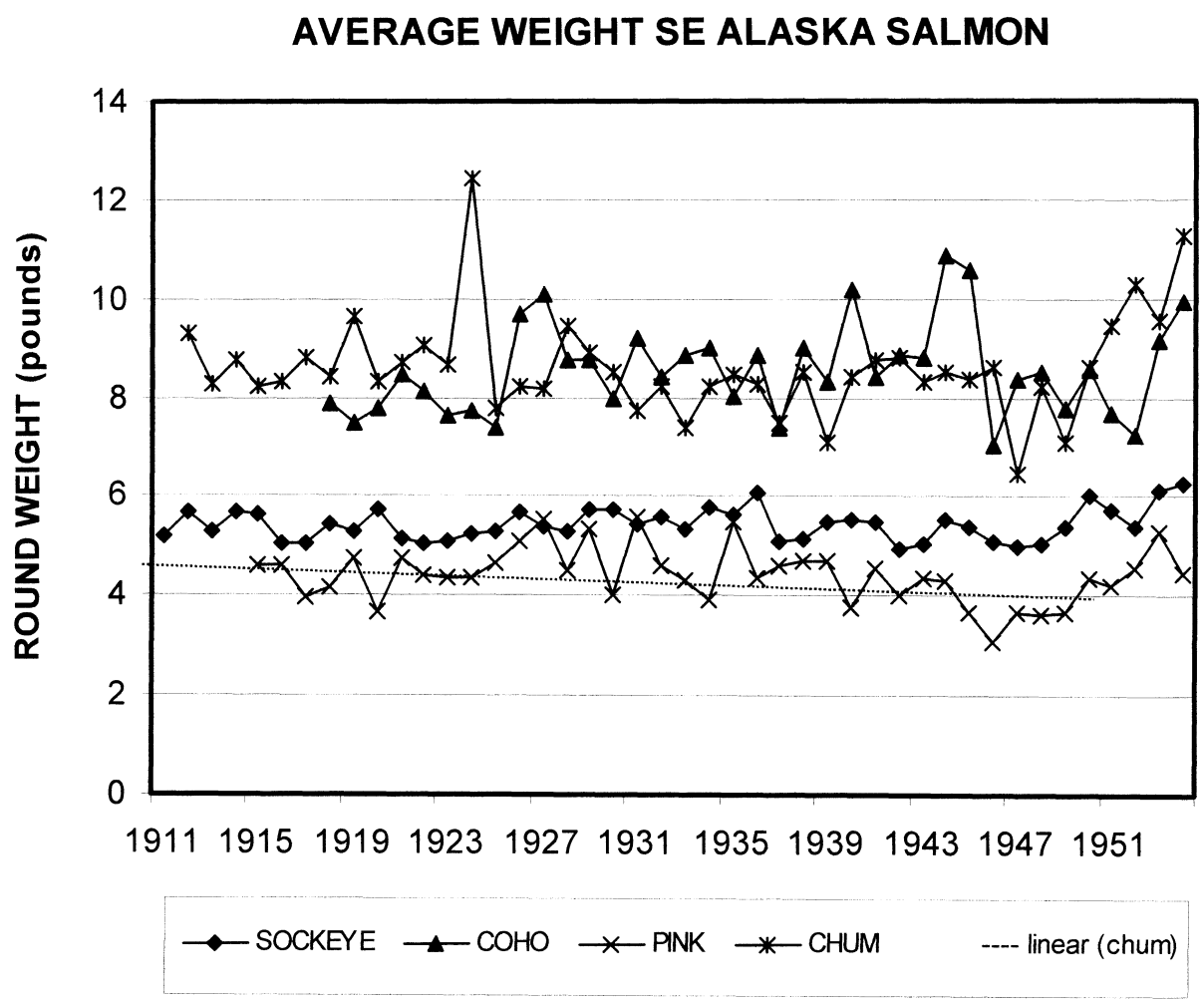


Figure 16. Average round weight of sockeye, coho, pink and chum in Southeast Alaska commercial fisheries, 1910-1954, from Marshall and Quinn (1988). A linear regression line was fitted to the chum data series ($p<0.05$).

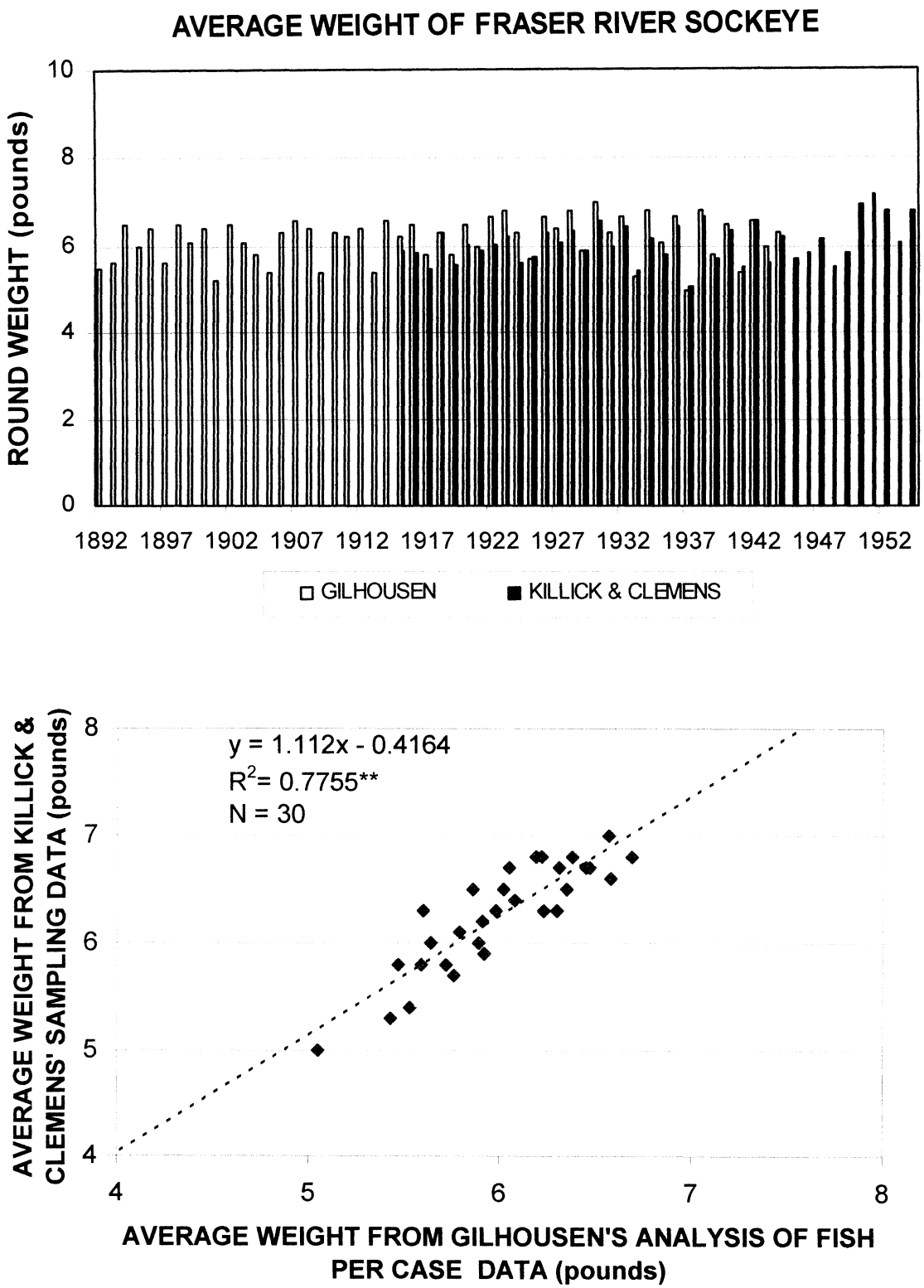


Figure 17. Average round weight of Fraser River sockeye in commercial fisheries, 1892 to 1944, from Gilhousen (1992) and 1915 to 1954 from Killick and Clemens (1963). Regression relationship between average weights from the two data sets for the overlap period in the lower panel. ** = $P < 0.01$.

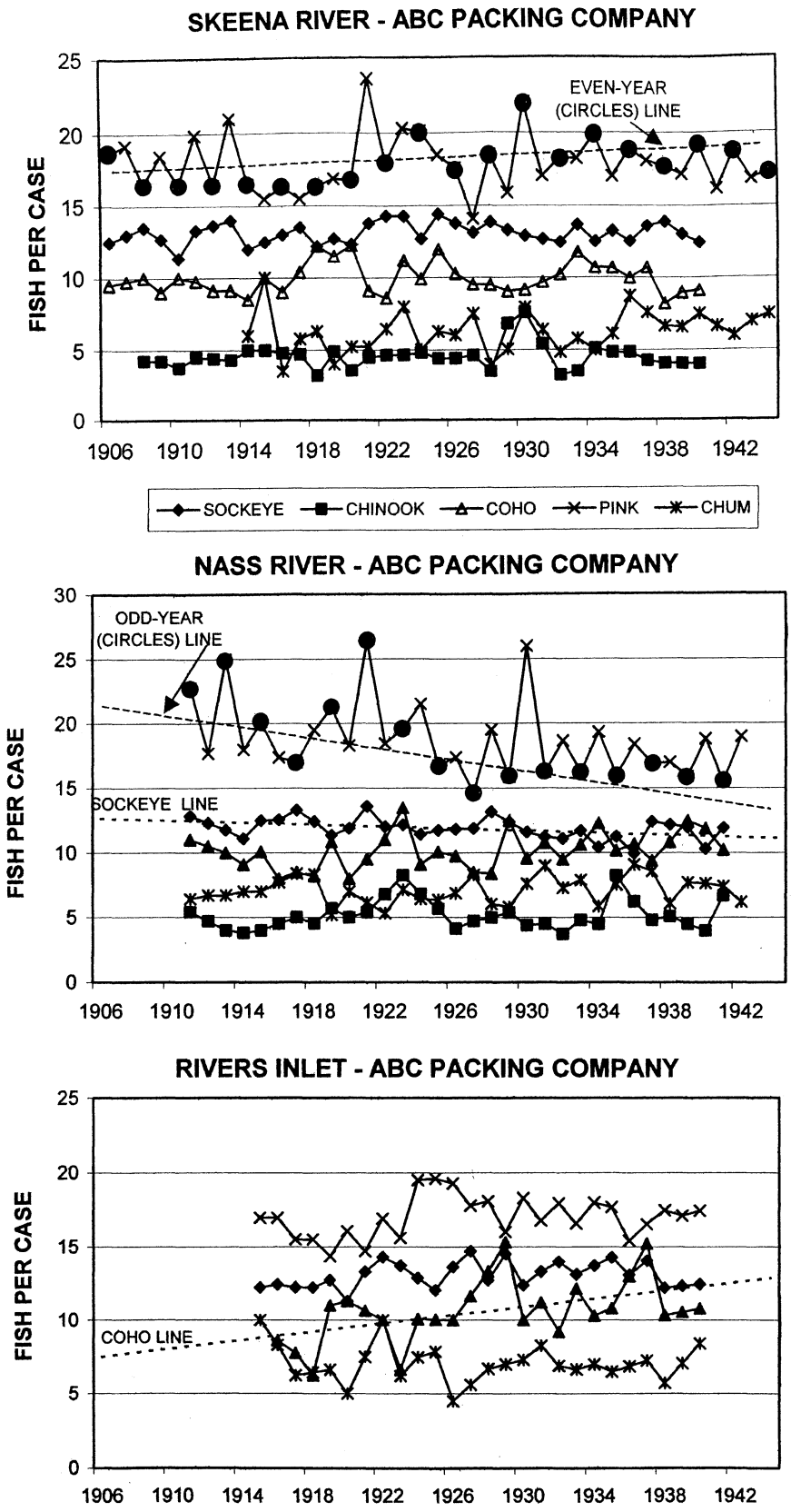


Figure 18. Average numbers of sockeye, chinook, coho, pink and chum that were required to produce a case of canned salmon, 1906-1944. Data from David Welch, DFO Nanaimo (pers comm.). Linear regression lines fitted where regressions were statistically significant. For pink salmon, these are the Skeena River even-year data series and the Nass River odd-year data series. The data points in these two series are the solid circles.

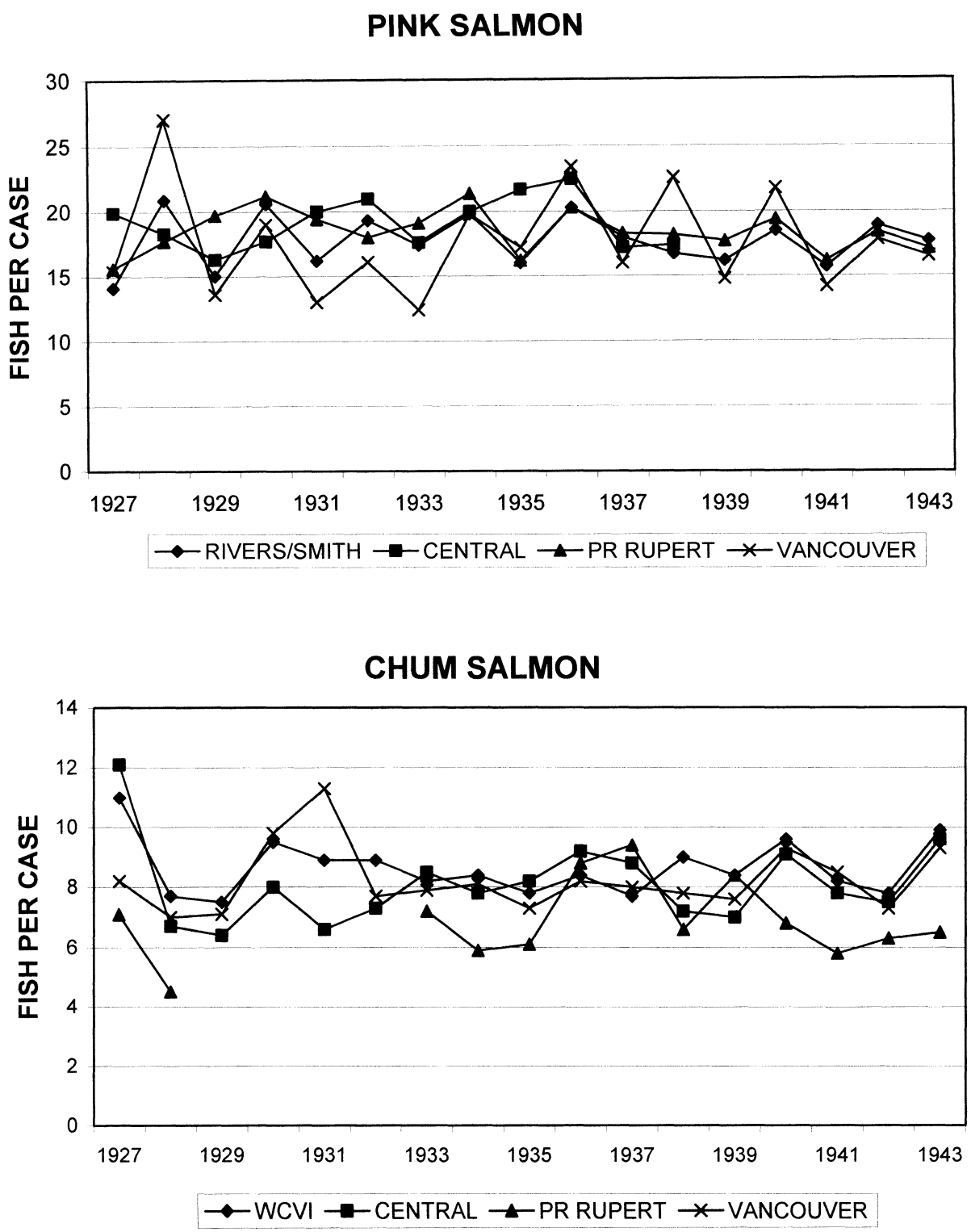


Figure 19. Average numbers of pink and chum that were required to produce a case of canned salmon, 1927-1943, from Hoar (1951).

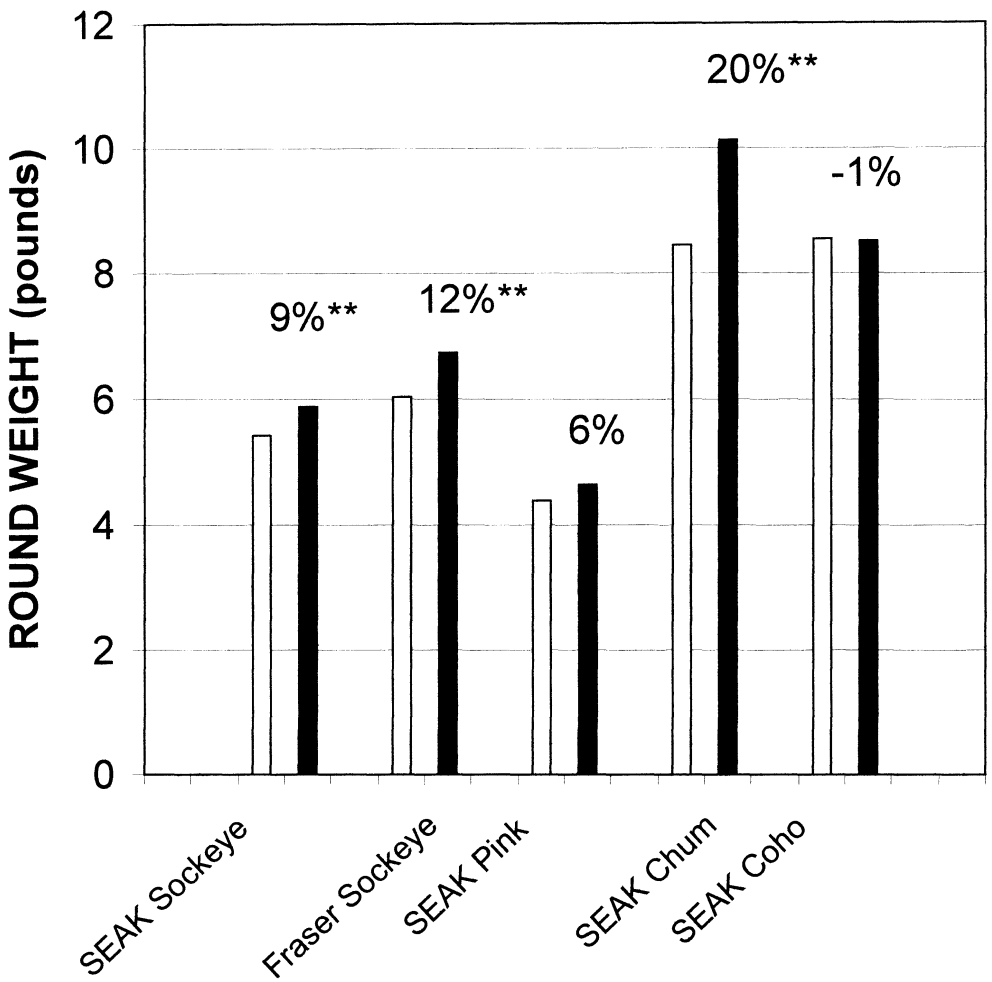


Figure 20. Comparison of average round weight between years prior to 1951 (white bars) and 1951-1954 (black bars). Percentage difference between 1951-54 and <1951 shown above bars. ** = P<0.01.

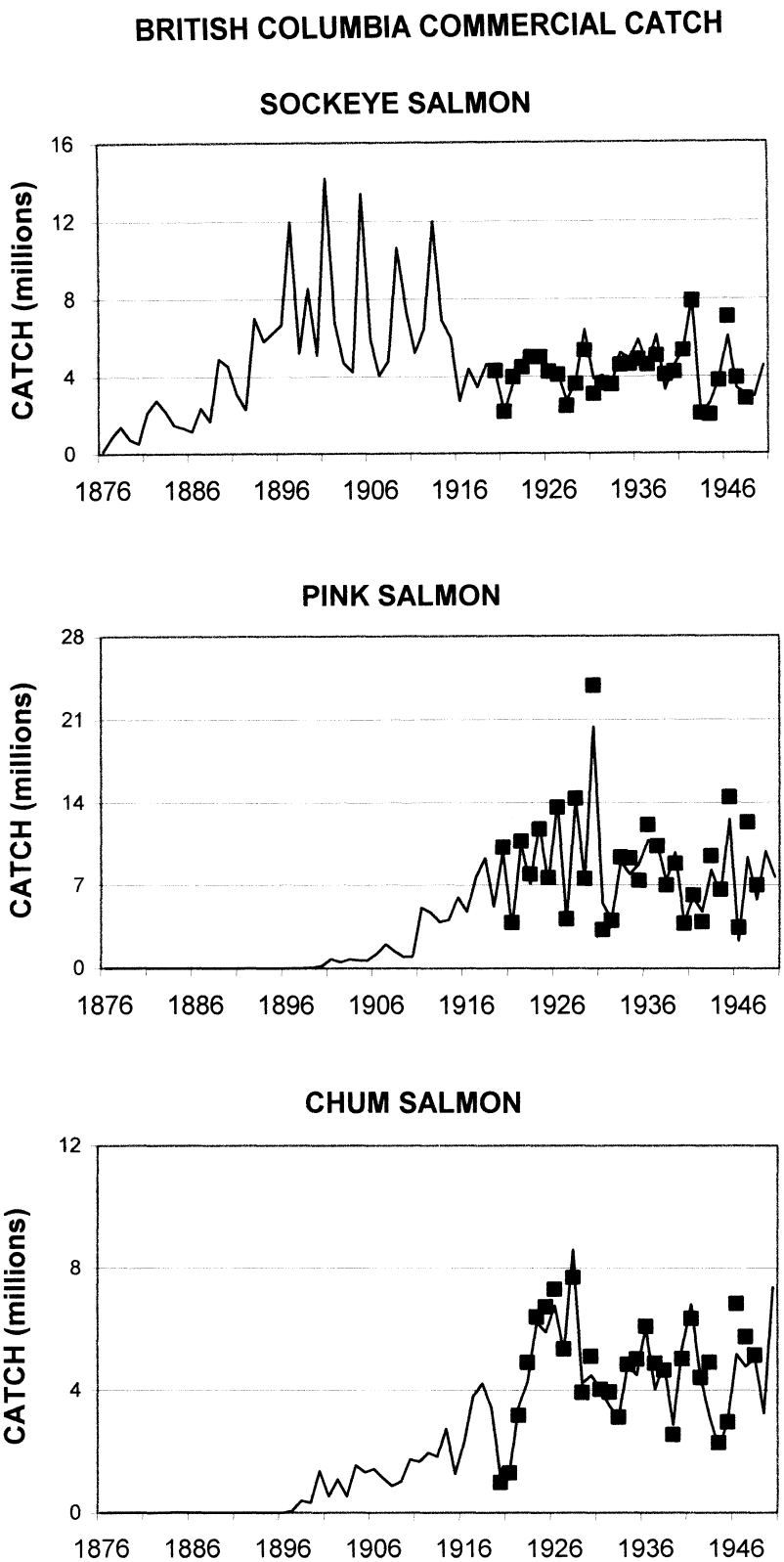


Figure 21. British Columbia commercial sockeye, pink and chum catch-in-numbers from this report (solid line) and from DMF Annual Reports (solid squares).

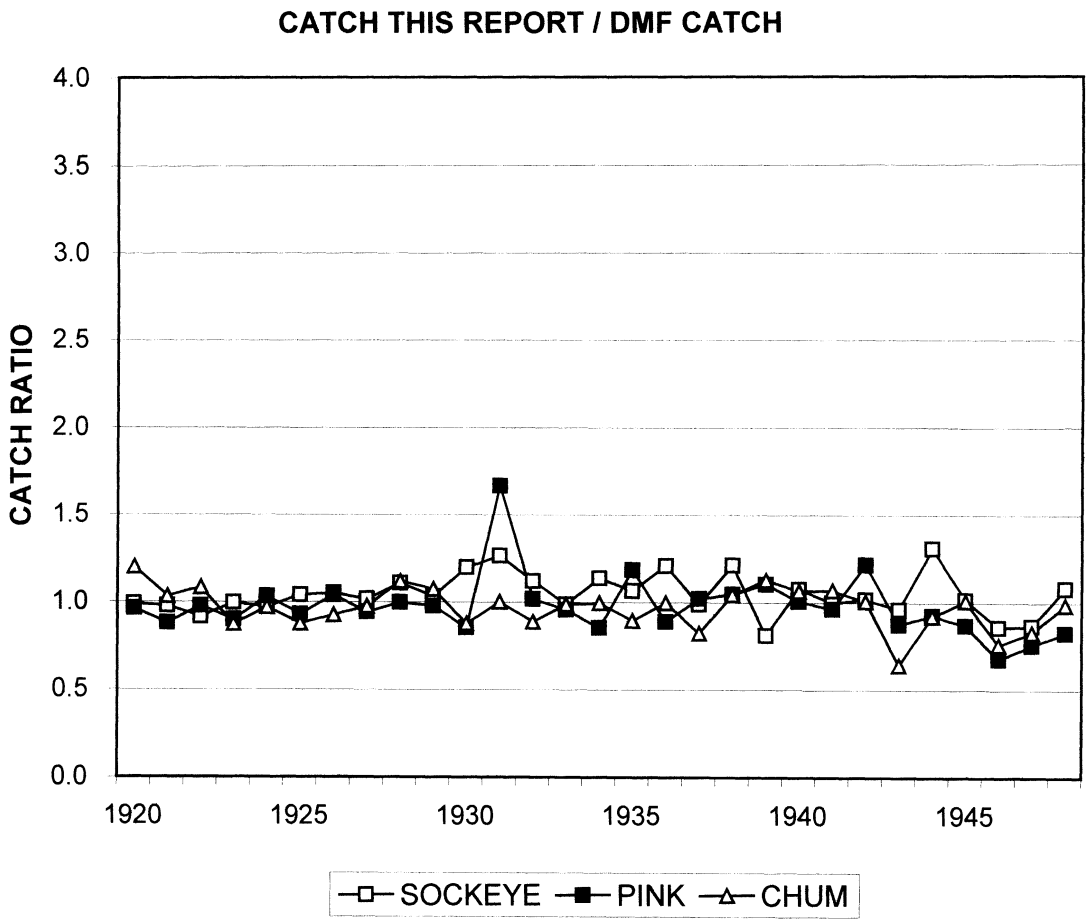
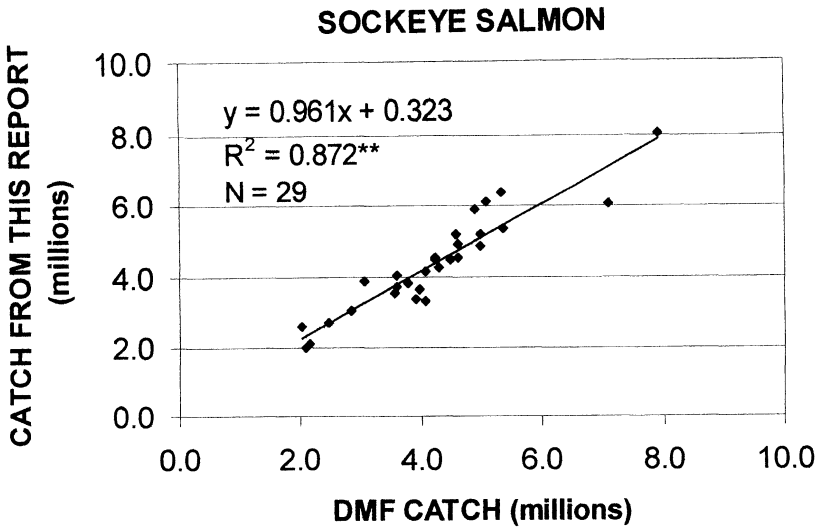
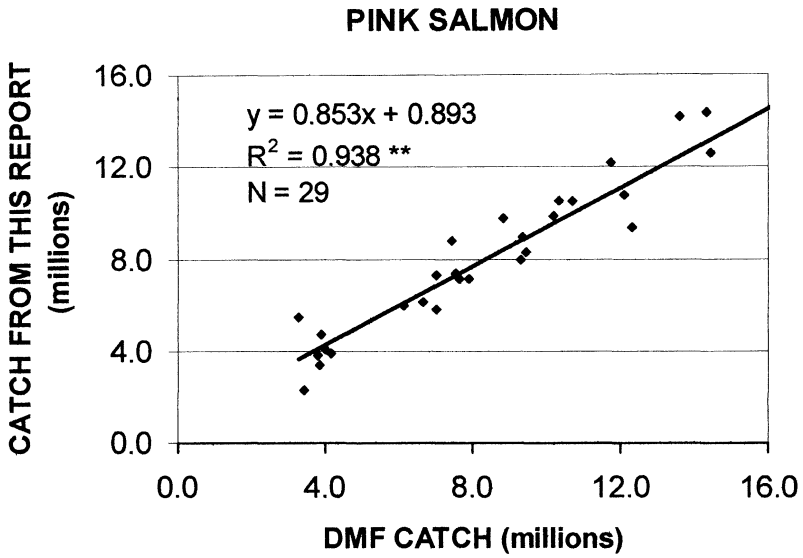


Figure 22. British Columbia sockeye, pink and chum catch estimates from this report divided by catches from DMF Annual Reports.





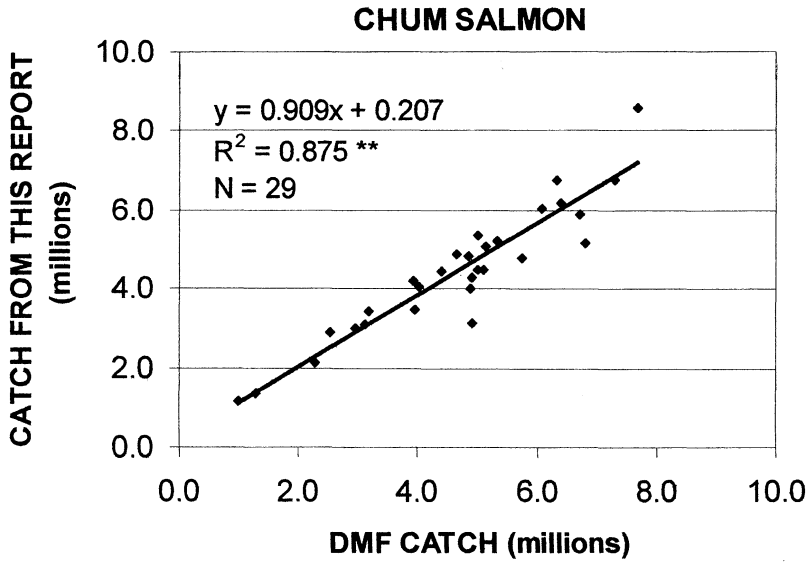


Figure 23. Linear regressions of catch-in-numbers from DMF Annual Reports on catch-in-numbers from this report, for sockeye, pink and chum, 1920 to1948. Goodness of fit, R (** $p<0.01$), and sample size, N, are shown for each regression.

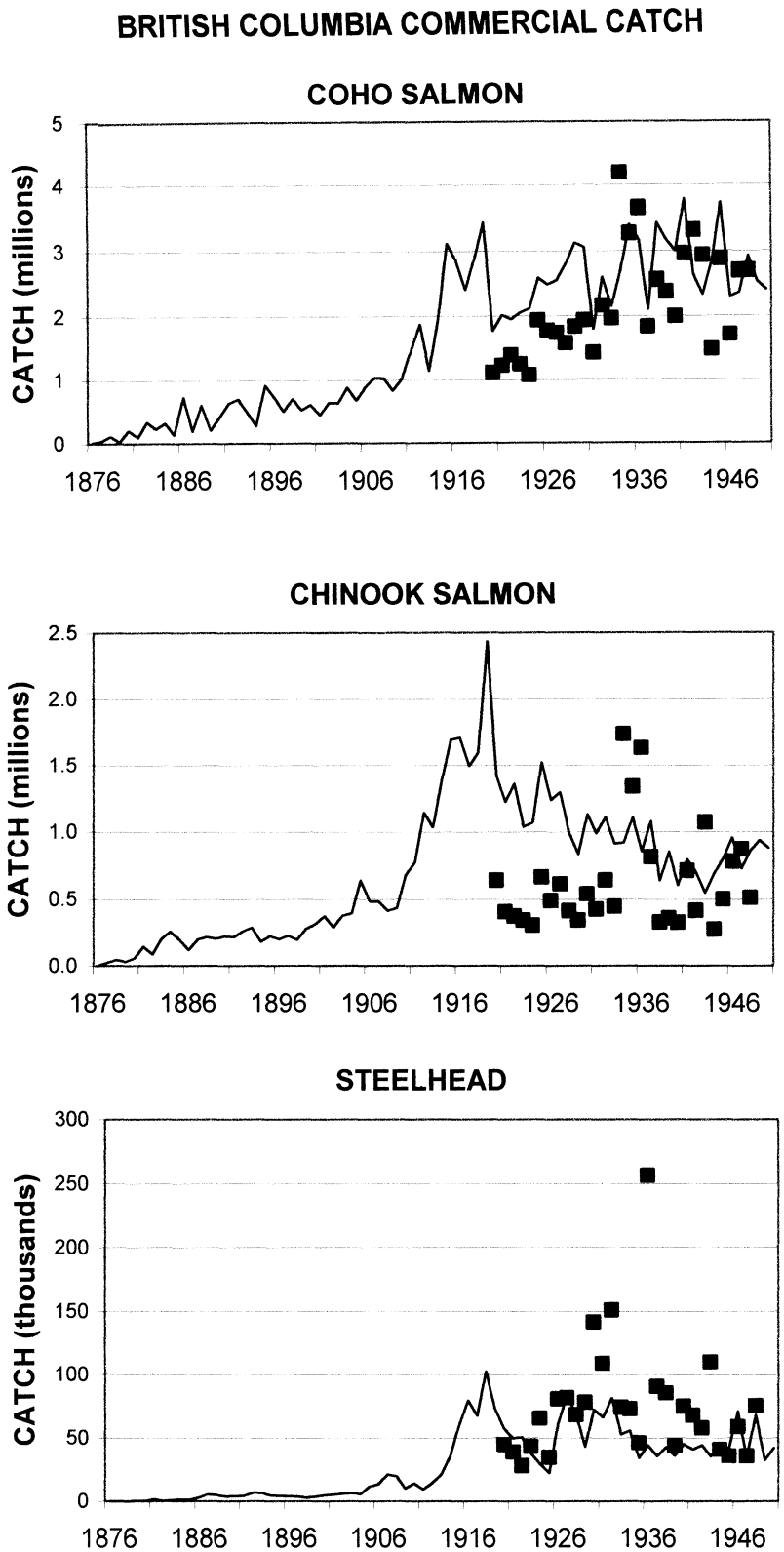


Figure 24. British Columbia commercial chinook, coho and steelhead catch-in-numbers from this report (solid line) and from DMF Annual Reports (solid squares).

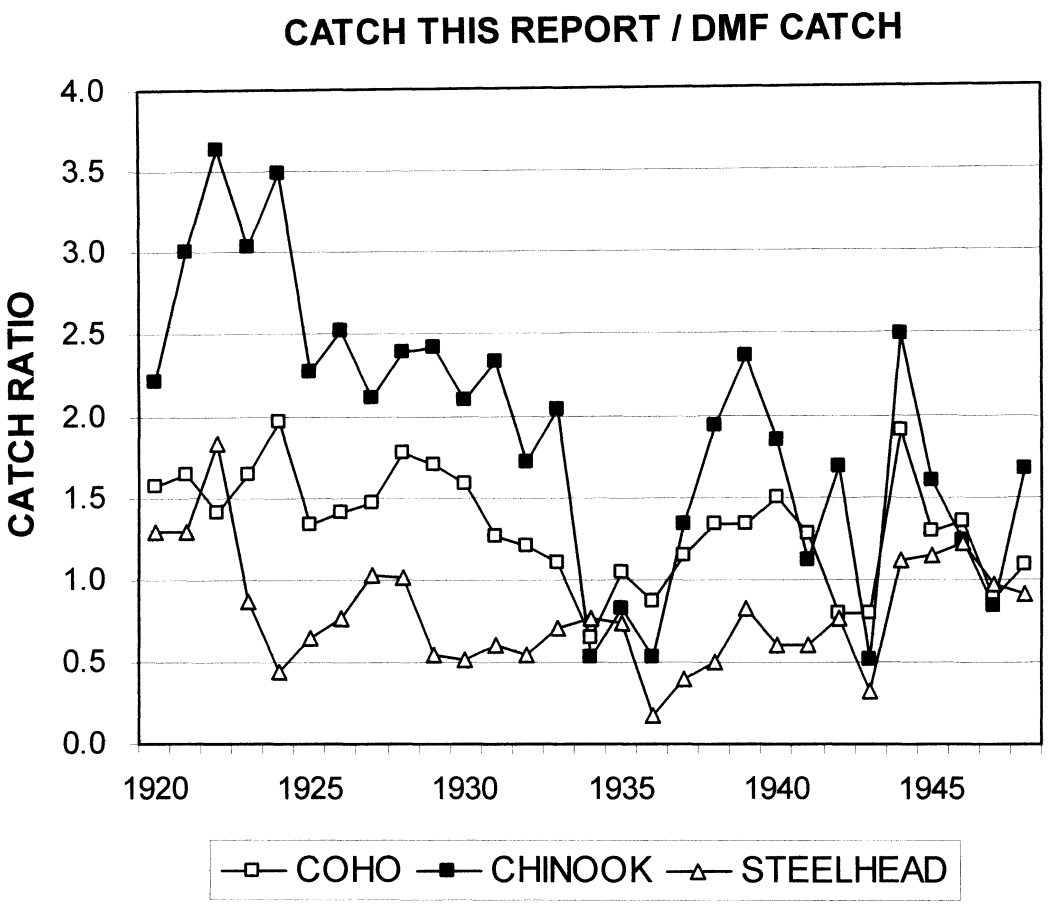


Figure 25. British Columbia coho, chinook and steelhead catch estimates from this report divided by catches from DMF Annual Reports.

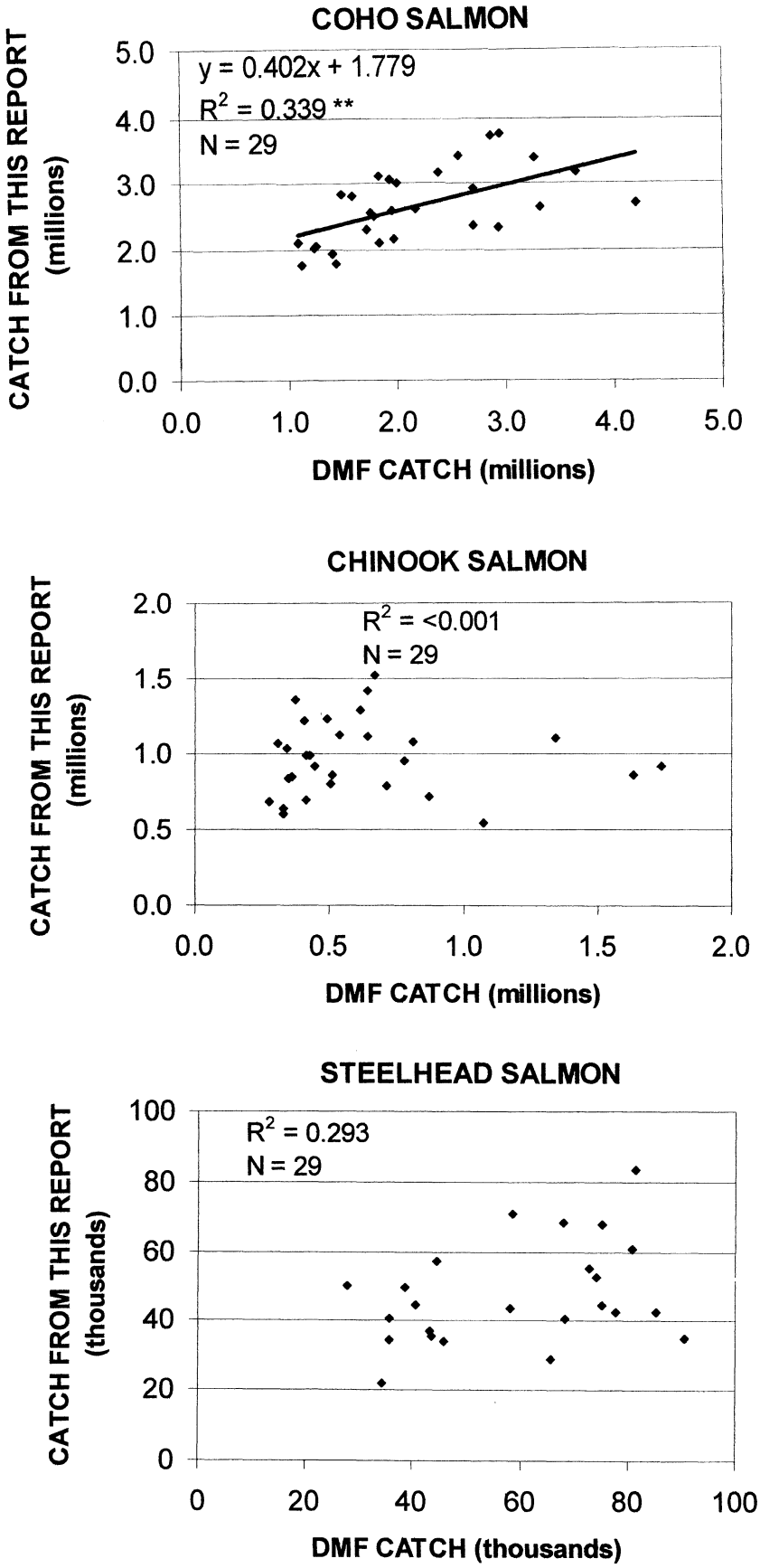


Figure 26. Linear regressions of catch-in-numbers from DMF Annual Reports on catch-in-numbers from this report, for chinook, coho and steelhead, 1920 to 1948. Goodness of fit, R (** $p<0.01$), and sample size, N, are shown for each regression.

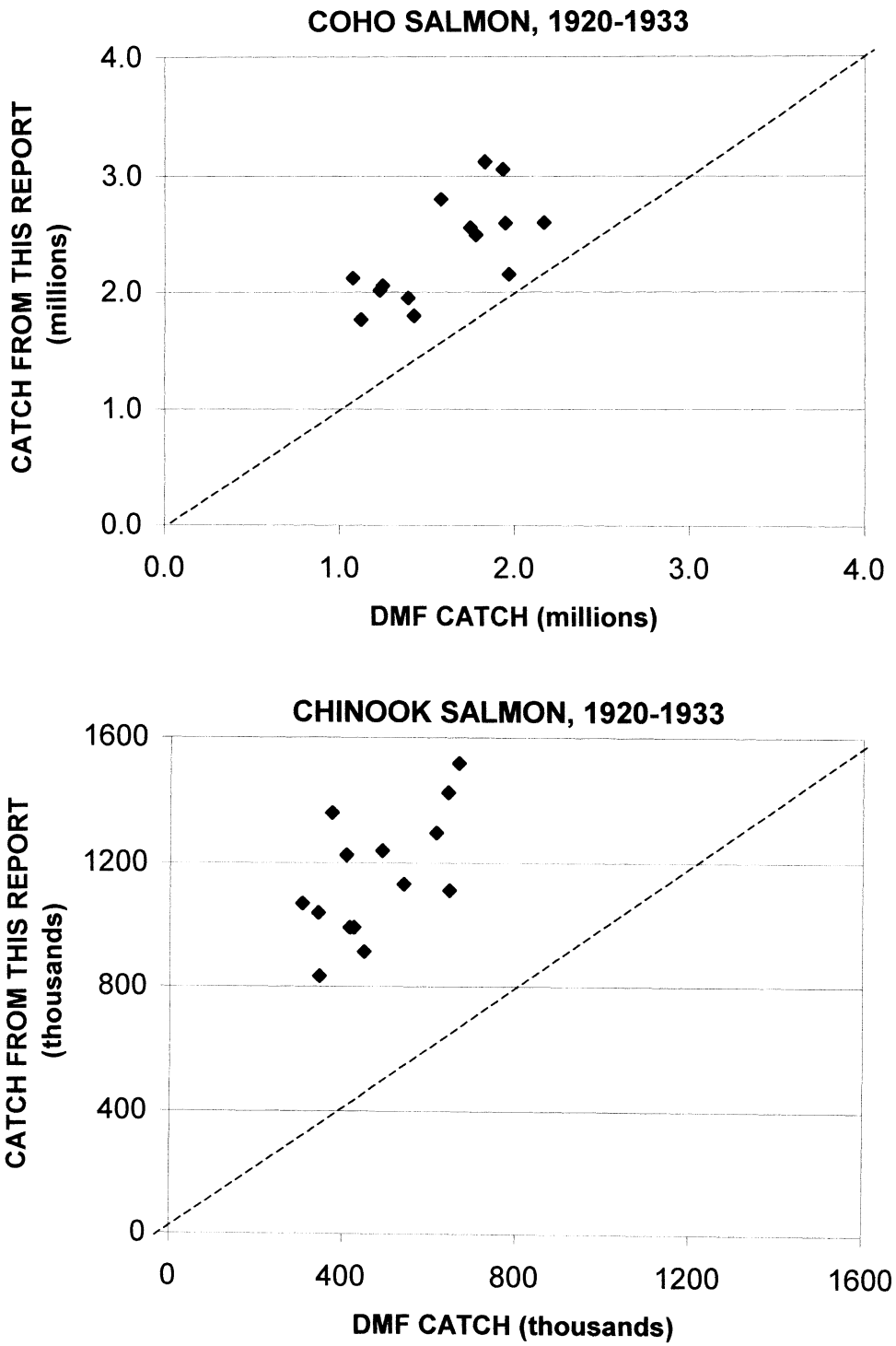
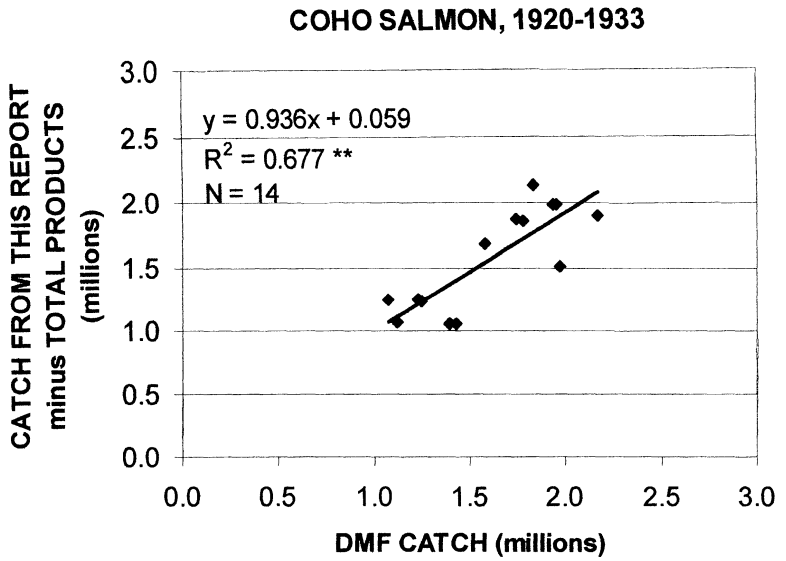
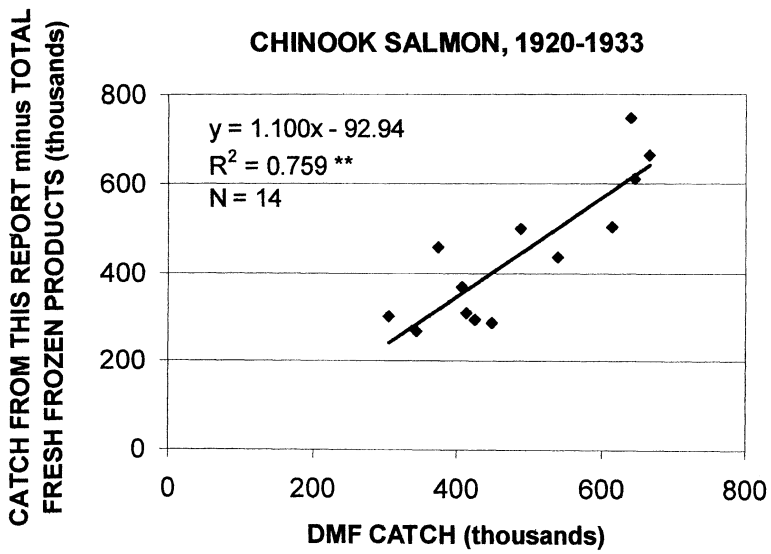


Figure 27. Relationships between coho and chinook catch-in-numbers from DMF Annual Reports and total catch-in-numbers from this report, 1920-1933. The dashed line represents a one-to-one relationship.





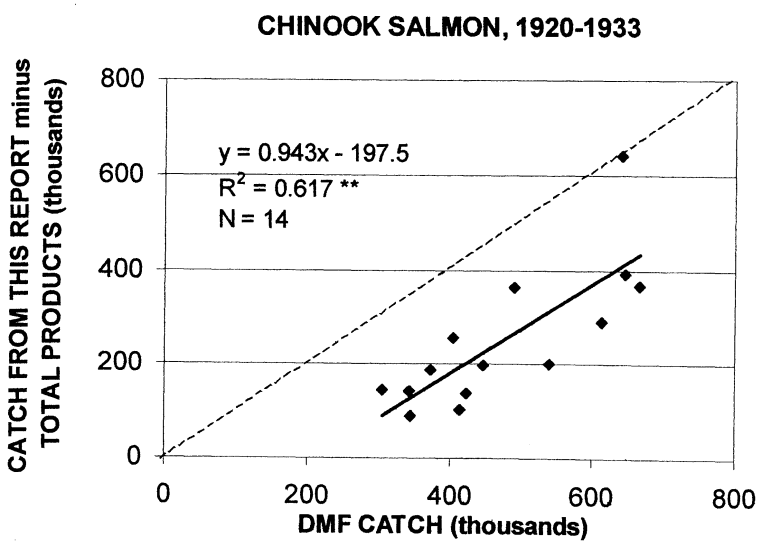


Figure 28. Linear regressions for coho and chinook catch-in-numbers from DMF Annual Reports on total catch-in-numbers from this report less total products (chinook and coho), and less fresh/frozen (chinook), 1920 to1933. Goodness of fit, R (** $p<0.01$), and sample size, N, are shown for each regression. The dashed line represents a one-to-one relationship.

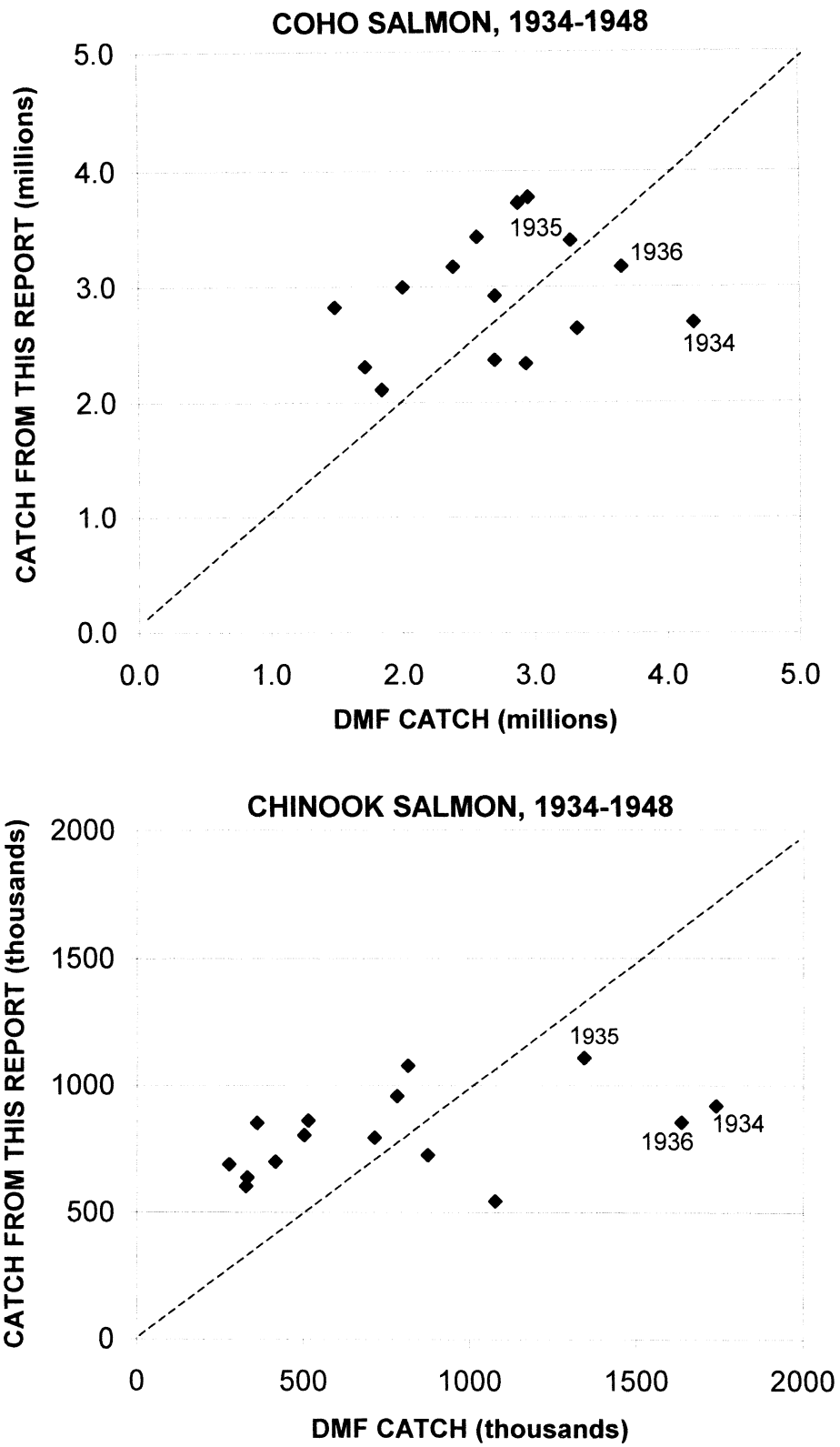


Figure 29. Relationships between coho and chinook catch-in-numbers from DMF Annual Reports and total catch-in-numbers from this report, 1934-1948. The dashed line represents a one-to-one relationship.

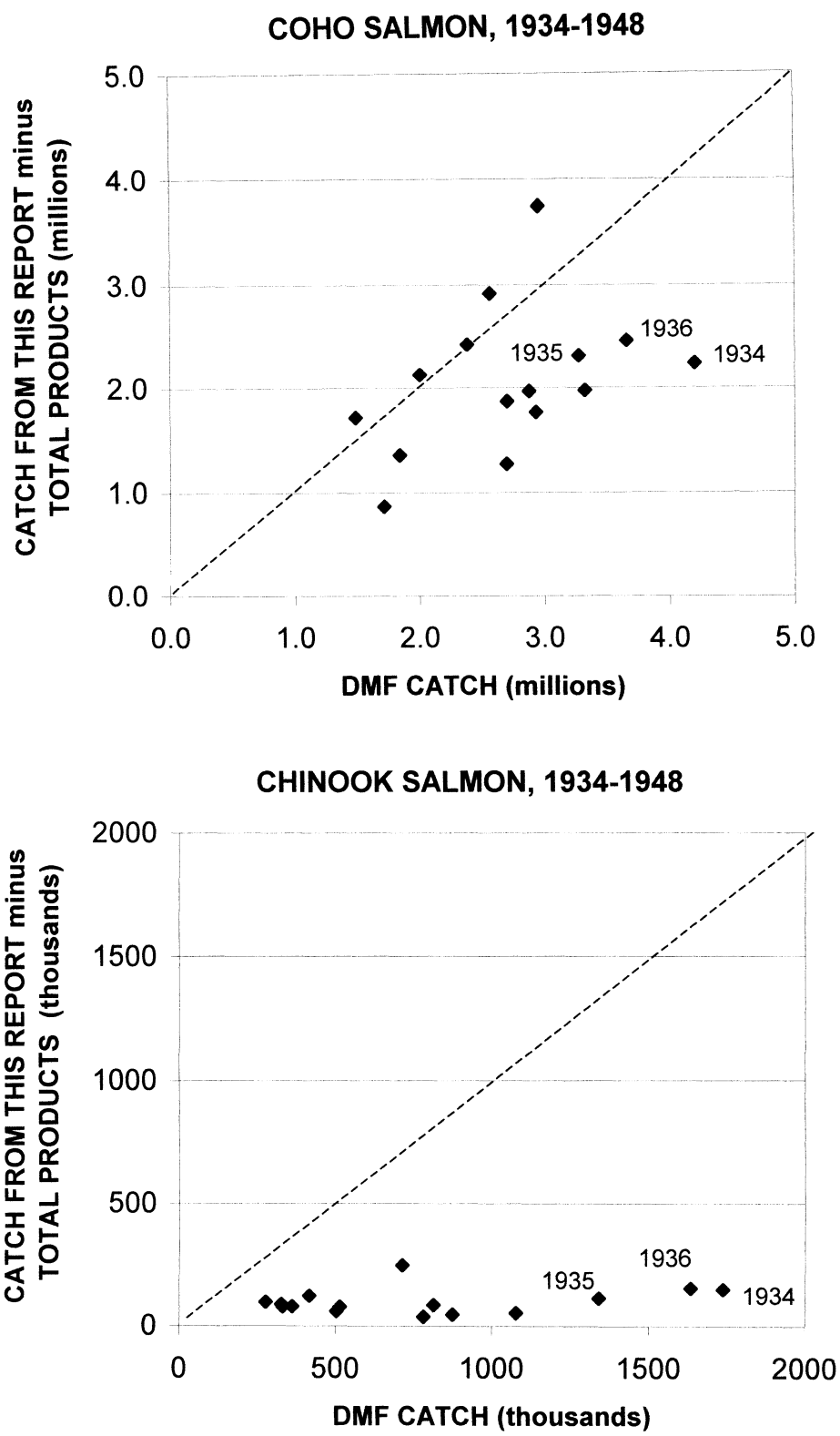
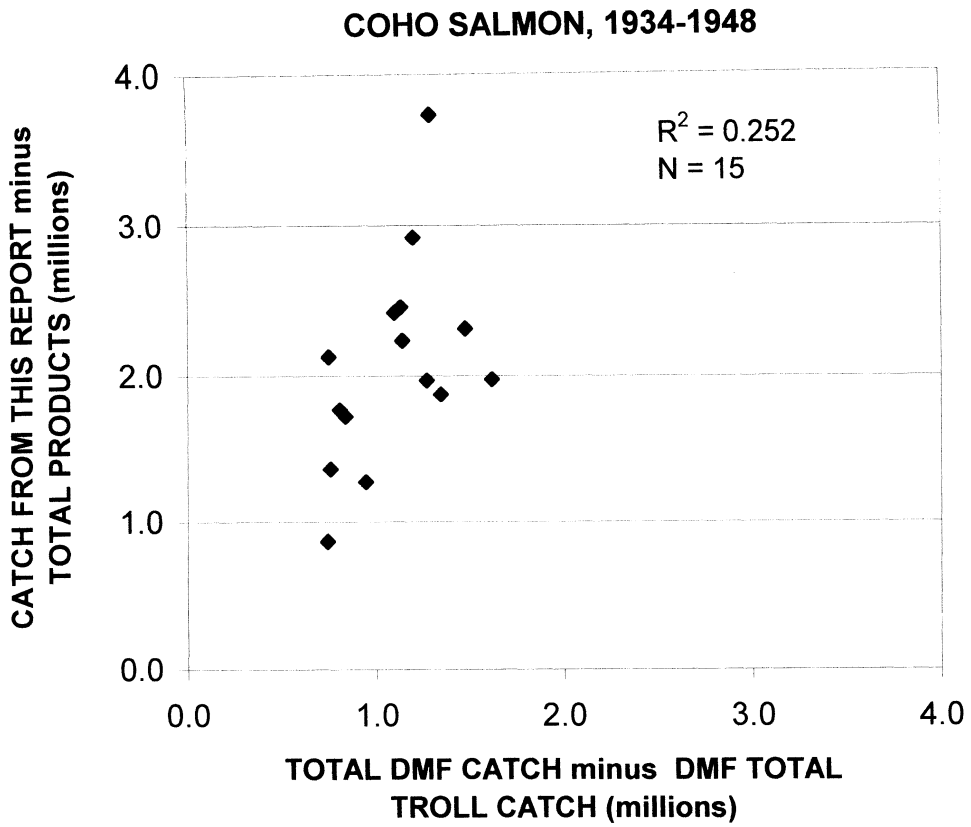


Figure 30. Relationships between coho and chinook catch-in-numbers from DMF Annual Reports and total catch-in-numbers from this report less total products, 1934-1948. The dashed line represents a one-to-one relationship.



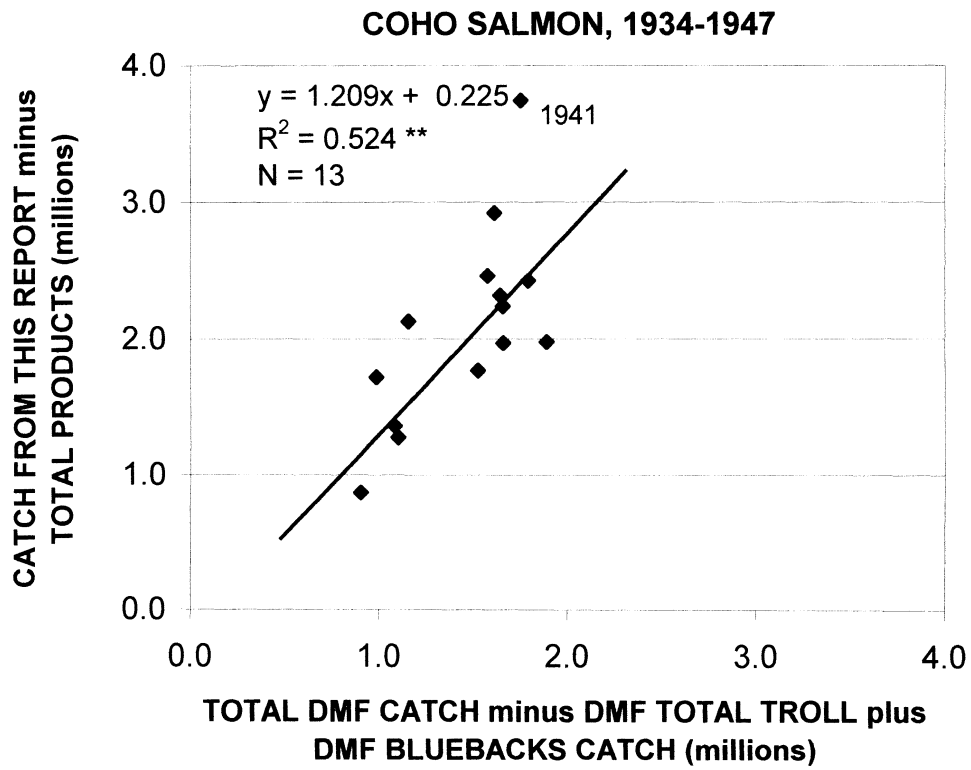
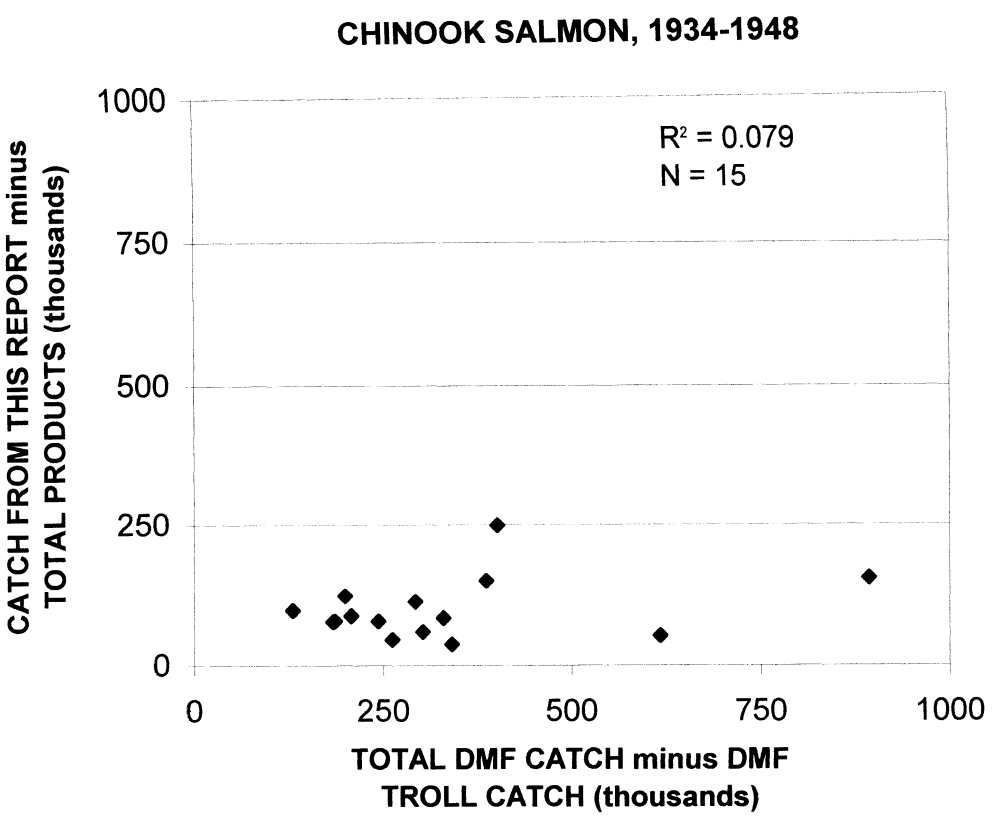


Figure 31. Linear regressions of coho catch-in-numbers from DMF Annual Reports less troll catch from DMF Annual Reports on total catch-in-numbers from this report less products, 1934 to 1948. Goodness of fit, R (** $p<0.01$), and sample size, N, are shown for each regression. 1941 outlier excluded from regression in lower graph.



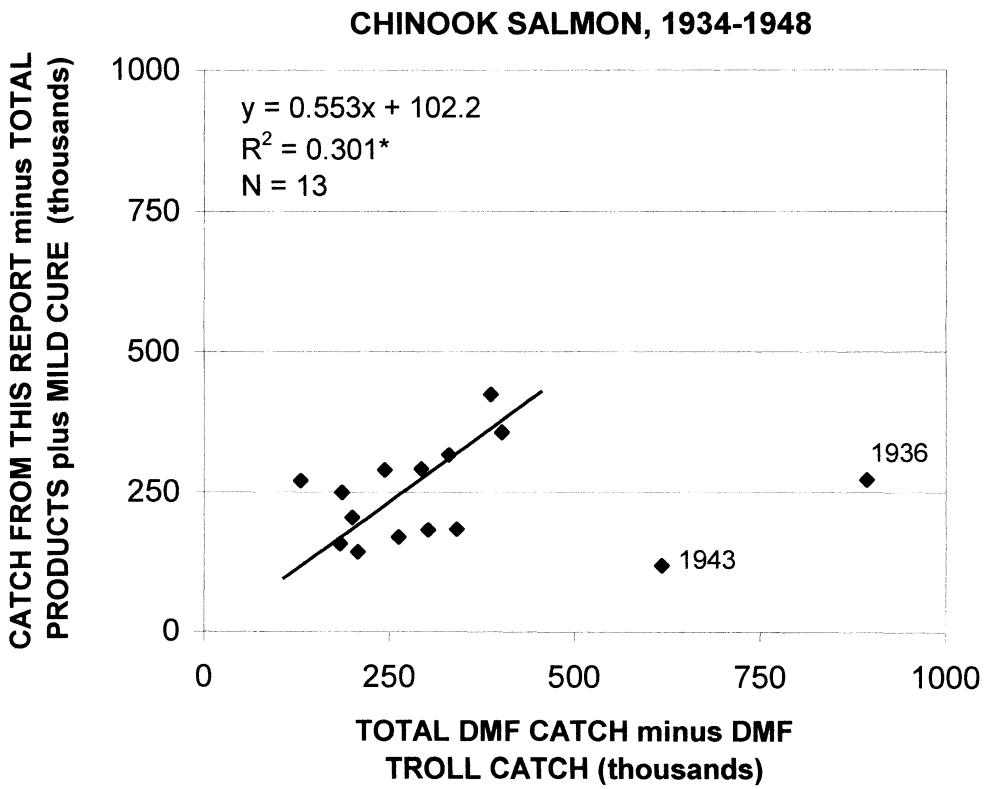


Figure 32. Linear regressions of chinook catch-in-numbers from DMF Annual Reports less troll catch from DMF Annual Reports on total catch-in-numbers from this report less products (lower graph, mild cure included), 1934 to 1948. Goodness of fit, R (* $p<0.05$), and sample size, N, are shown for each regression. 1936 and 1943 outliers excluded from regression in lower graph.

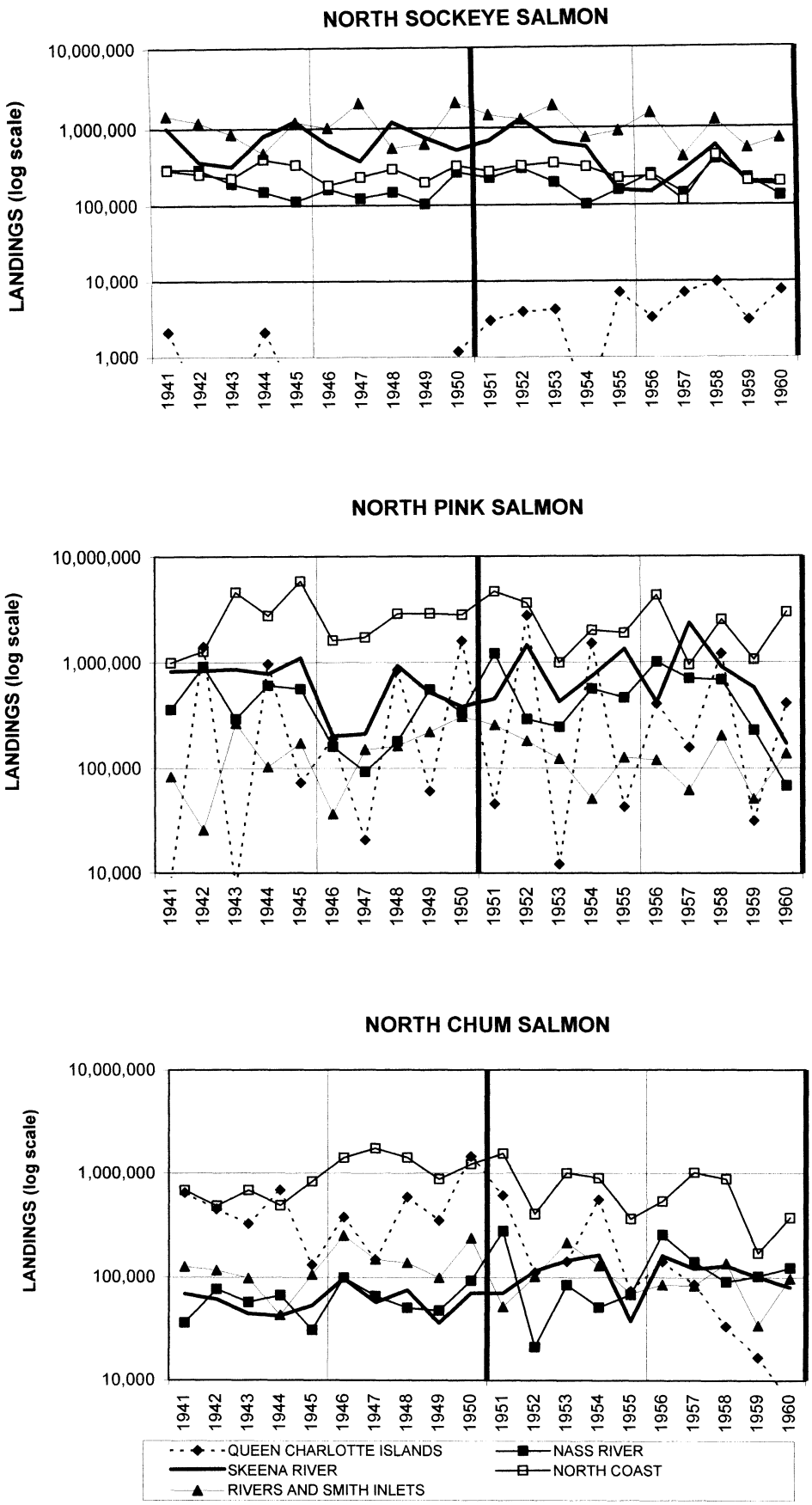


Figure 33. Annual landings (log scale) of sockeye pink and chum salmon in numbers of fish for northern areas for ten years before and after the sales slip statistical system was introduced in 1951.

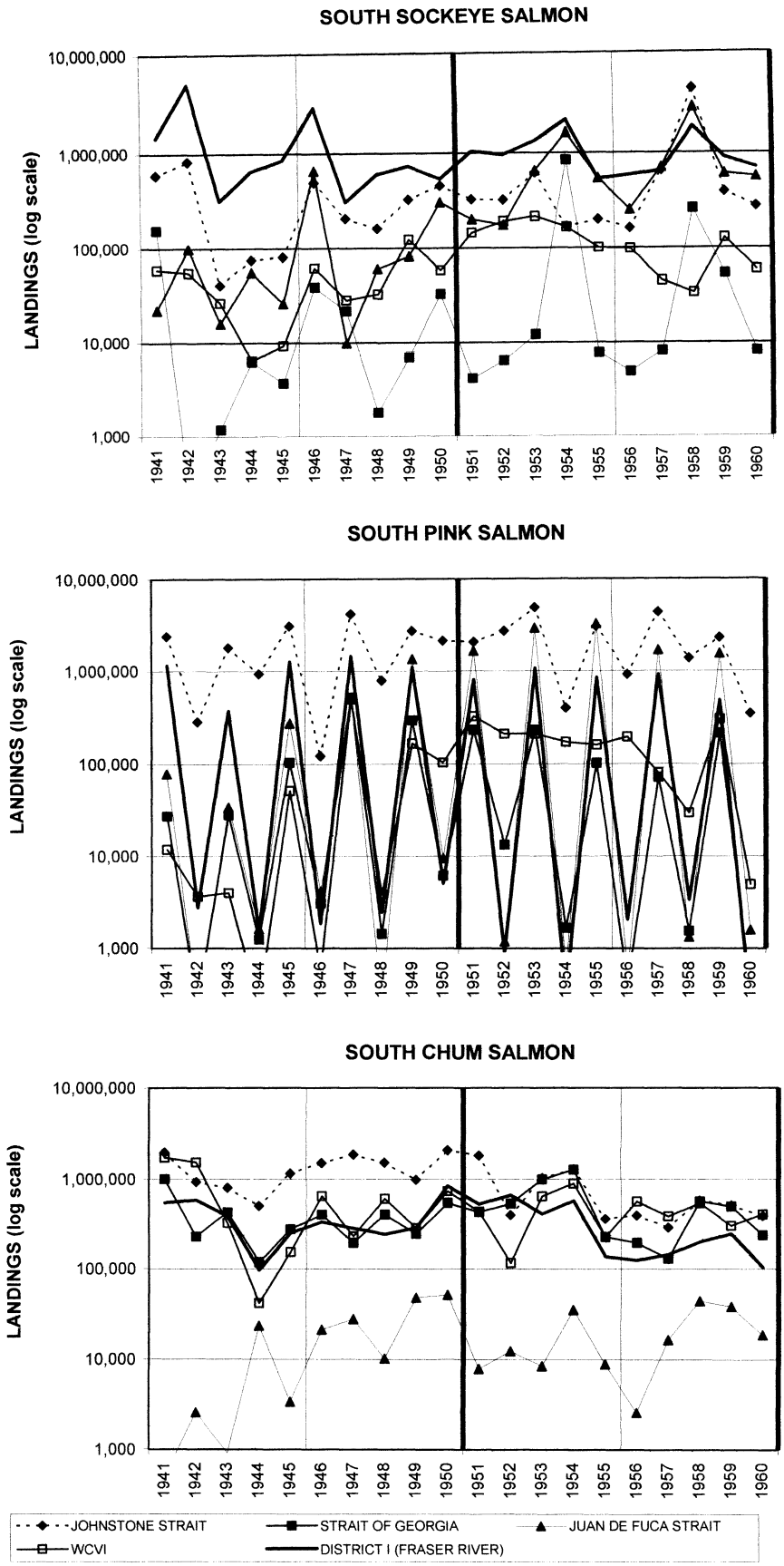


Figure 34. Annual landings (log scale) of sockeye pink and chum salmon in numbers of fish for southern areas for ten years before and after the sales slip statistical system was introduced in 1951.

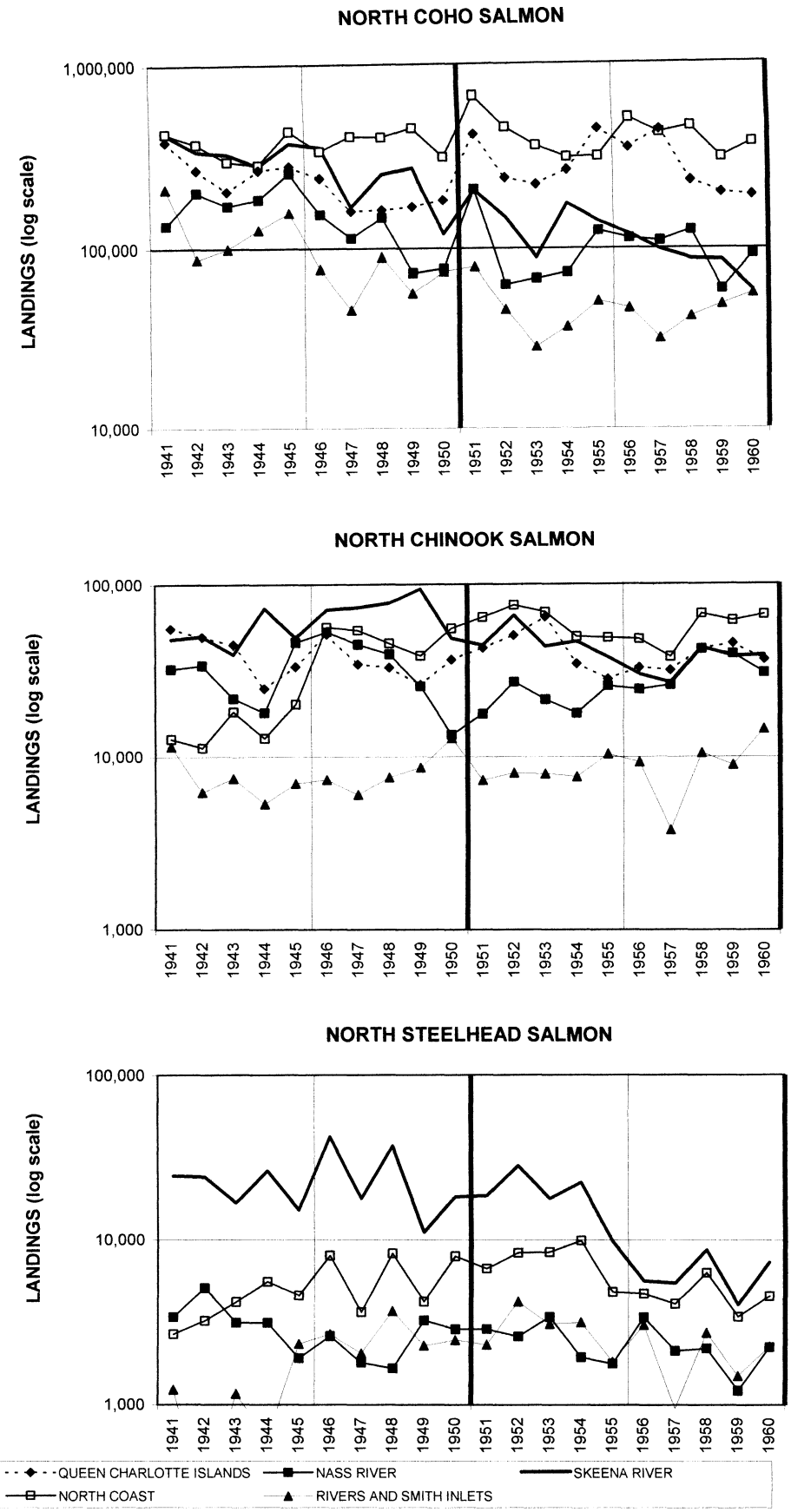


Figure 35. Annual landings (log scale) of coho, chinook and steelhead salmon in numbers of fish for northern areas for ten years before and after the sales slip statistical system was introduced in 1951.

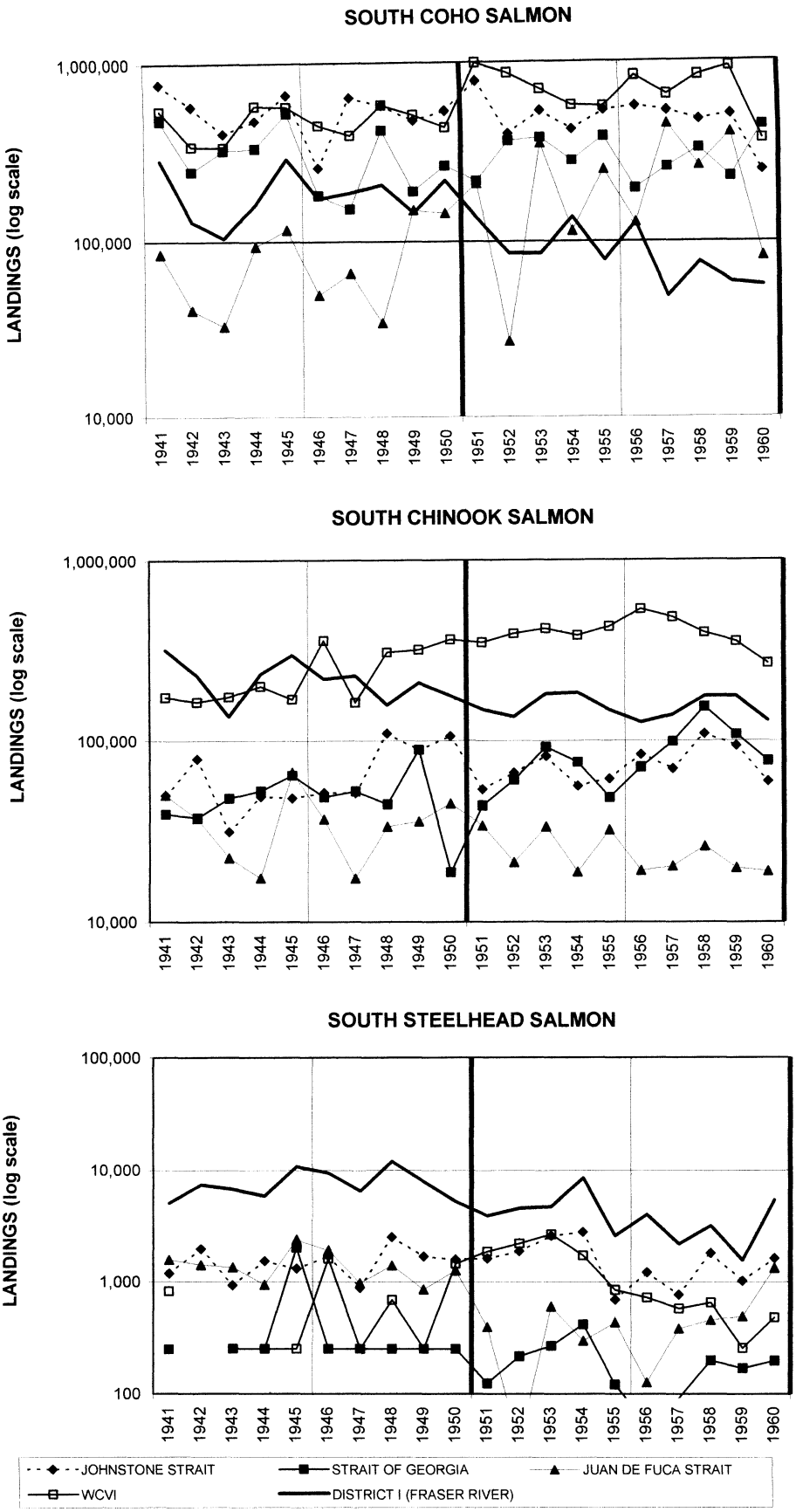


Figure 36. Annual landings (log scale) of coho, chinook and steelhead salmon in numbers of fish for southern areas for ten years before and after the sales slip statistical system was introduced in 1951.

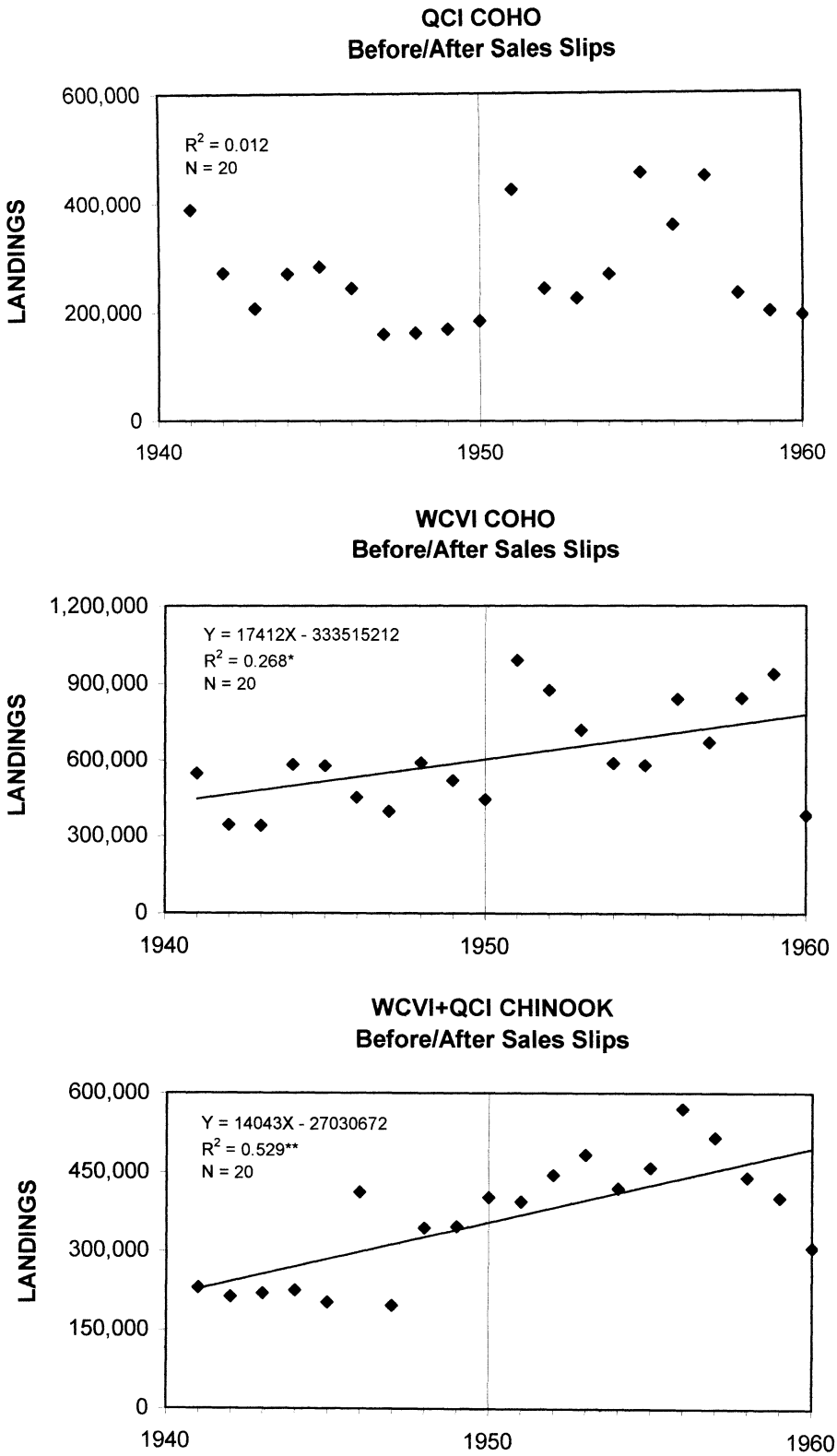


Figure 37. Annual west coast of Vancouver Island (WCVI) and Queen Charlotte Islands (QCI) landings of coho and chinook salmon in numbers of fish for ten years before and after the sales slip statistical system was introduced in 1951. Regressions significant at $p<0.05$ and $p<0.01$.

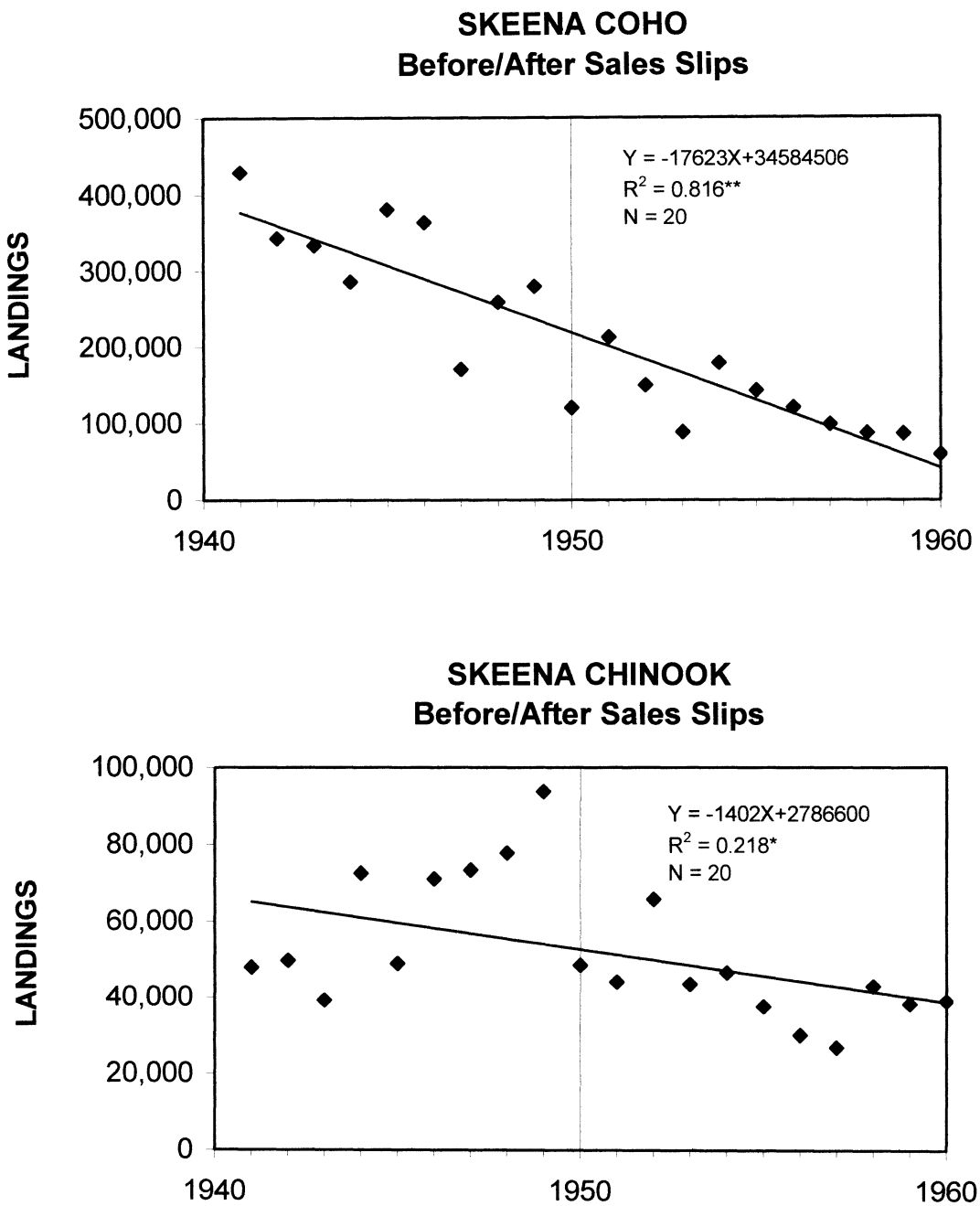


Figure 38. Annual Skeena River landings of coho and chinook salmon in numbers of fish for ten years before and after the sales slip statistical system was introduced in 1951. Regressions significant at $p<0.01$ and $p<0.05$.

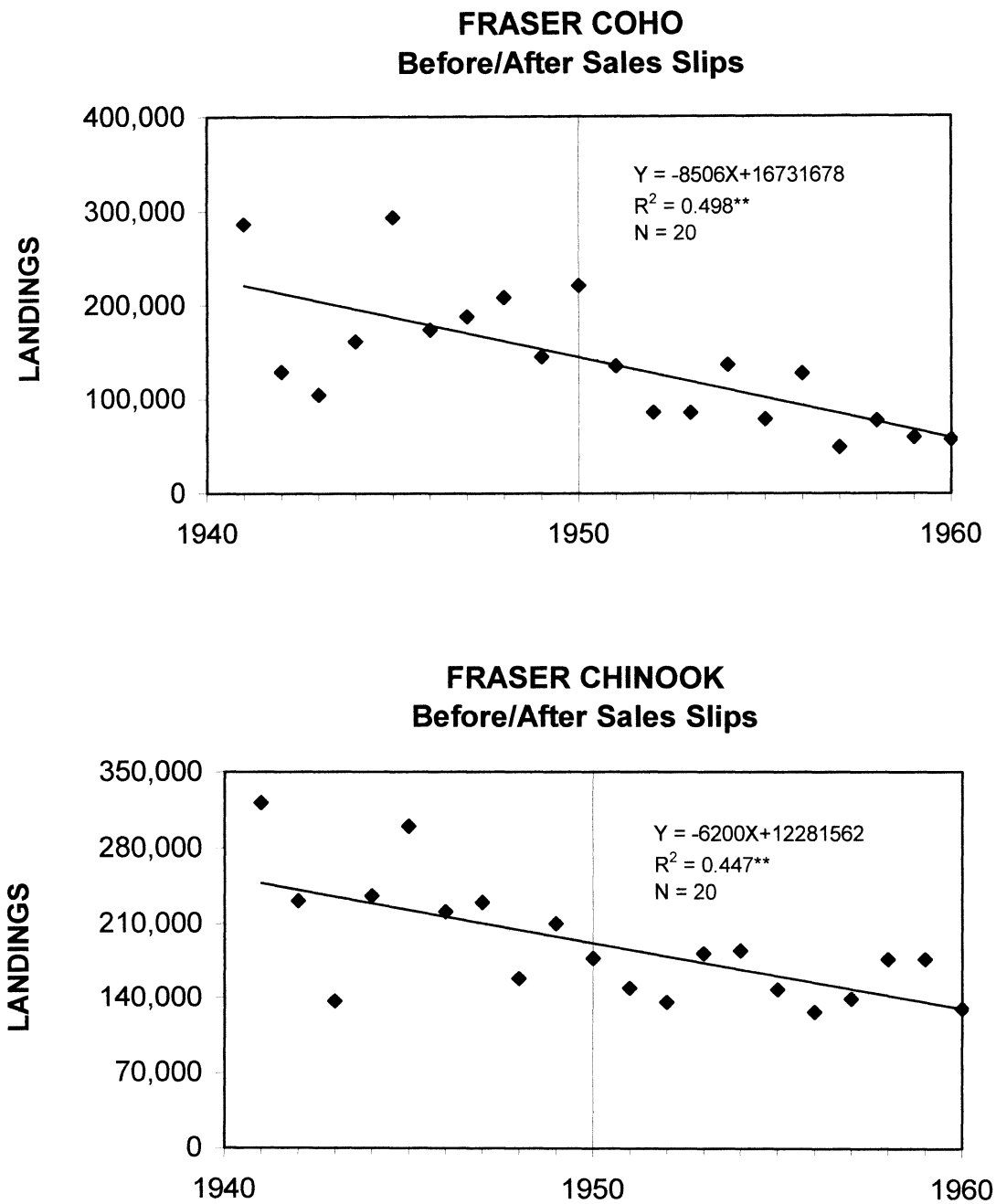
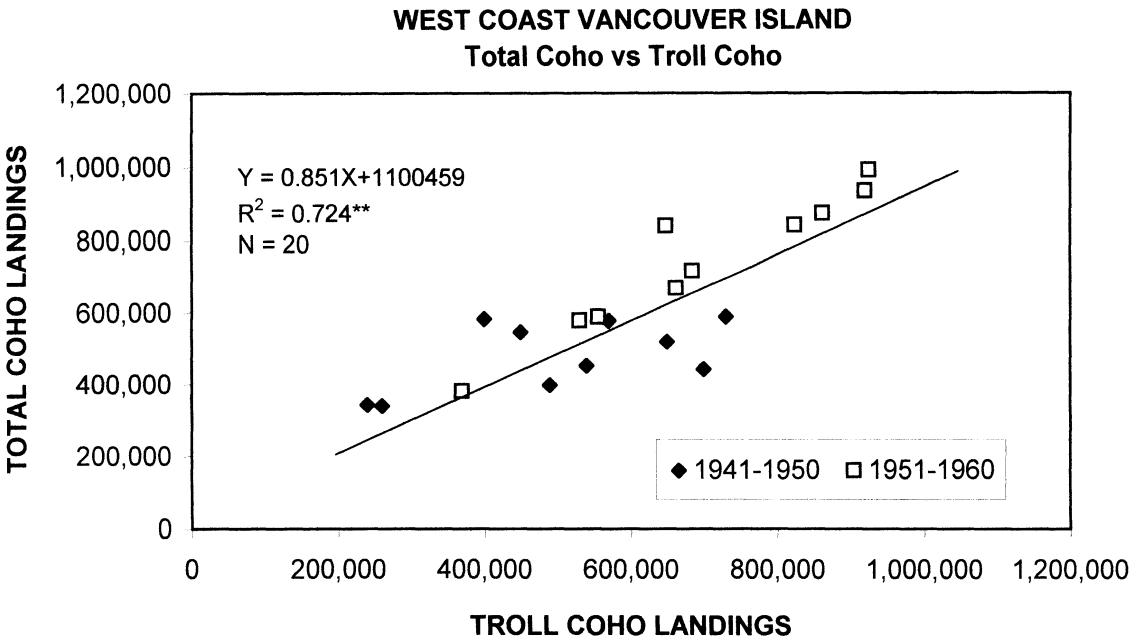


Figure 39. Annual Fraser River landings of coho and chinook salmon in numbers of fish for ten years before and after the sales slip statistical system was introduced in 1951. Regressions significant at $p<0.01$.



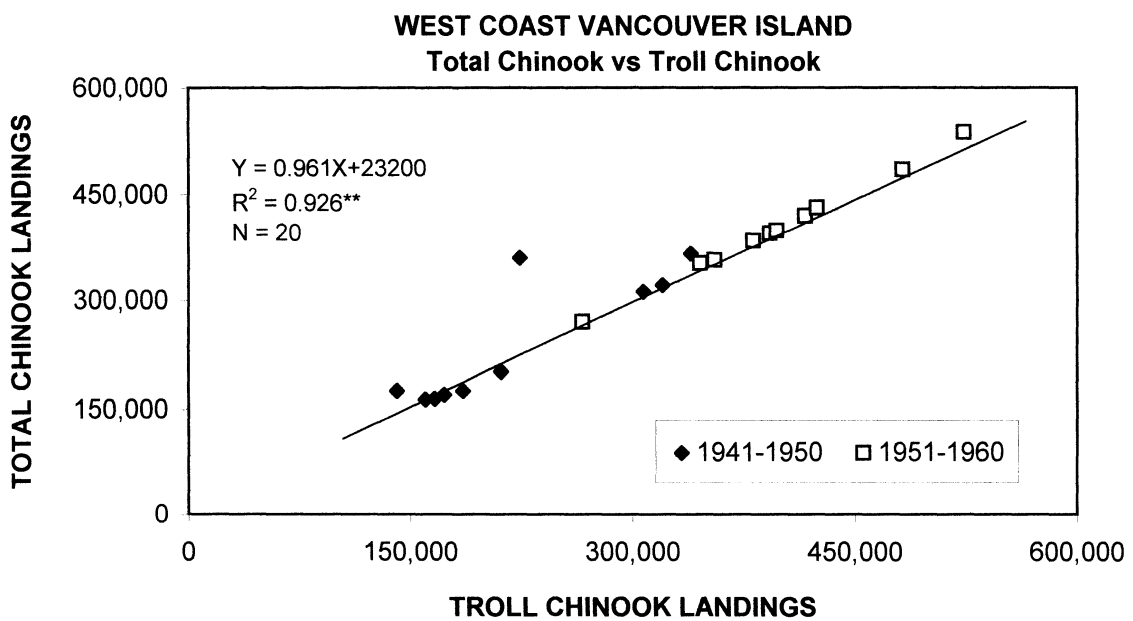


Figure 40. Relationship between west coast Vancouver Island (WCVI) coho and chinook landings in numbers of fish from this report (all gears) and WCVI troll landings reported in Milne (1964) for 1941-1950 and in Argue *et al.* (1987) for 1951-1960. Regressions significant at $p<0.01$.

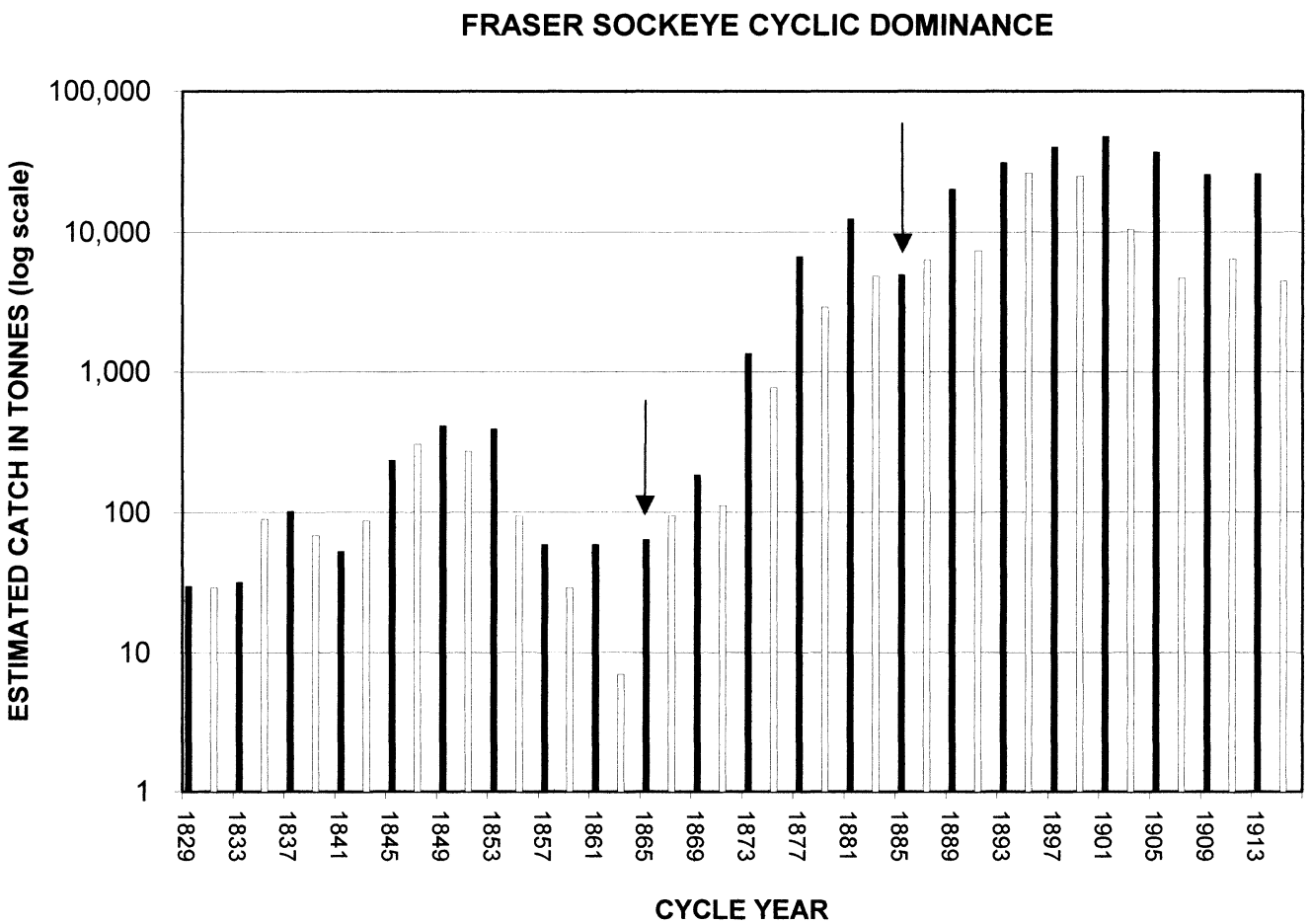


Figure 41. Evidence for Fraser River sockeye cyclic dominance of the 1901 brood year and 1902 subdominant year prior to 1915. Sum of the 1901 cycle year and 1902 subdominant year are the solid bars; clear bars are the sum of the two off years. Arrows identify cycles between 1849 and 1913 when dominant/subdominant landings were less than those in the off-years. Very small landings prior to 1849 do not suggest cyclic dominance.

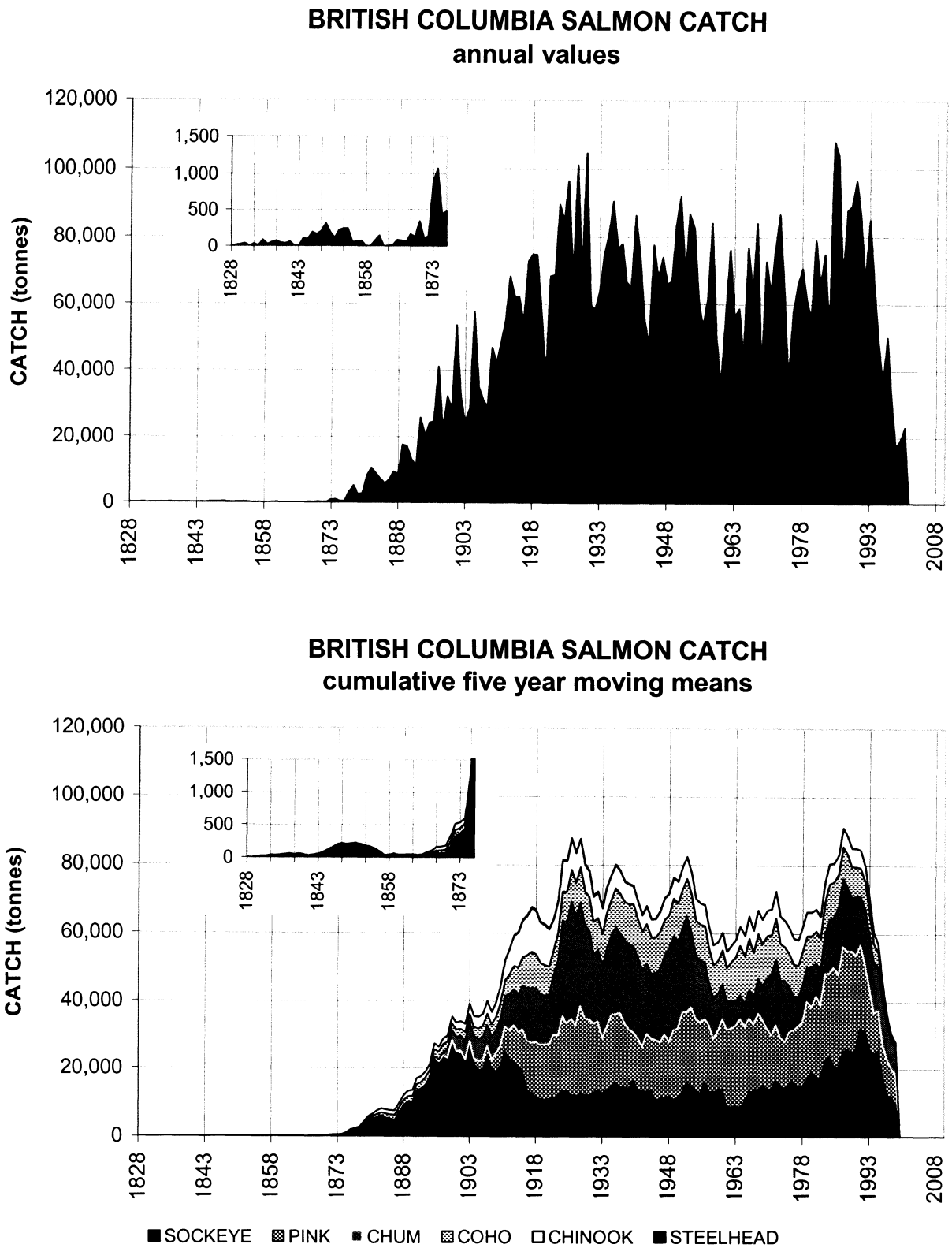


Figure 42. Annual total British Columbia catch of salmon in tonnes, 1828 to 2001 in the top graph, and cumulated by species and presented as a five year moving average centred on the third year in the lower graph (steelhead indistinguishable). Insert graphs show early years.

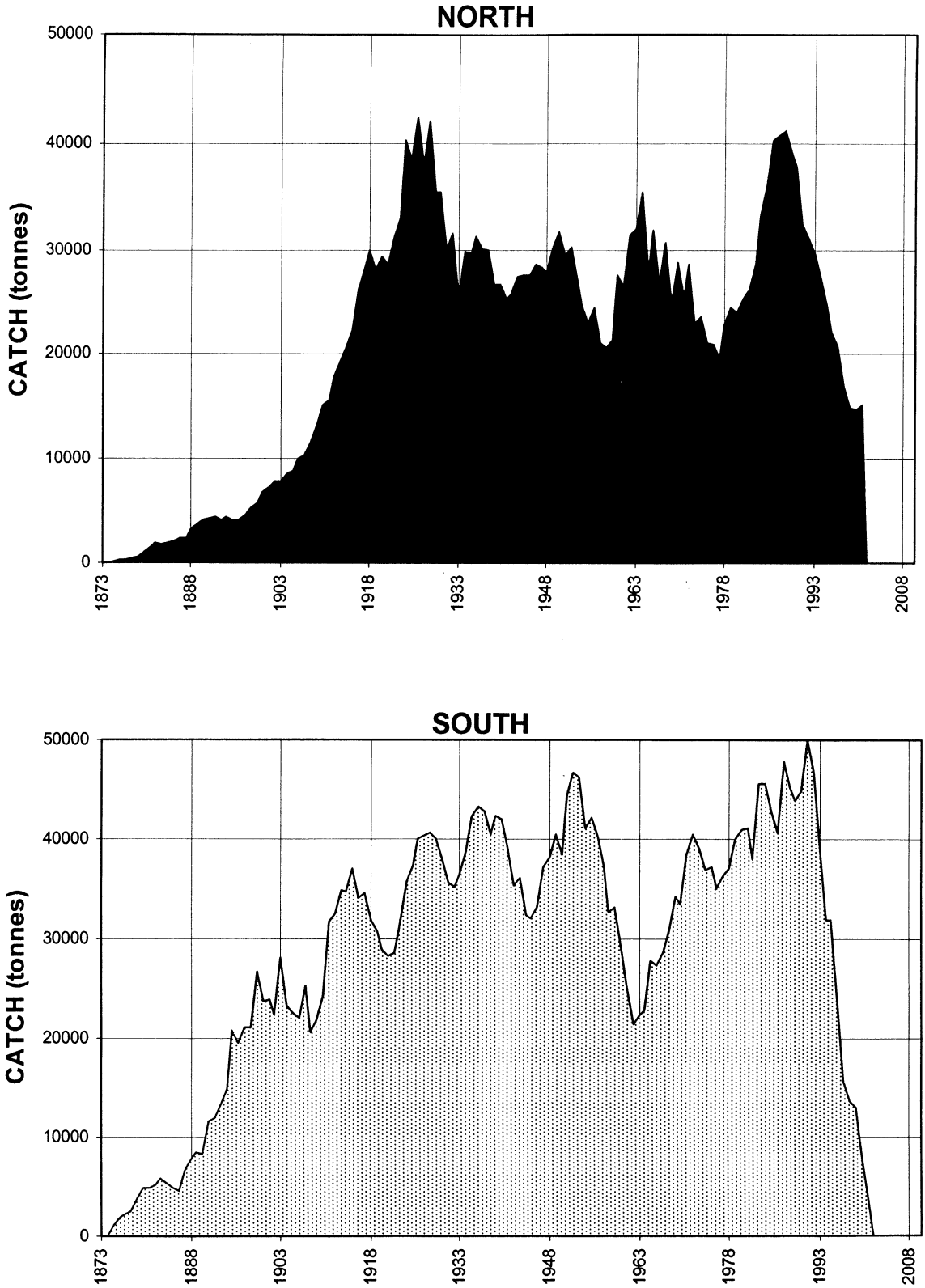


Figure 43. Annual British Columbia catch of all salmon species, 1873 to 2001. Catches are for areas north and south of Cape Caution. Catches cumulated by species and presented as a five year moving average centred on the third year in the lower graph.

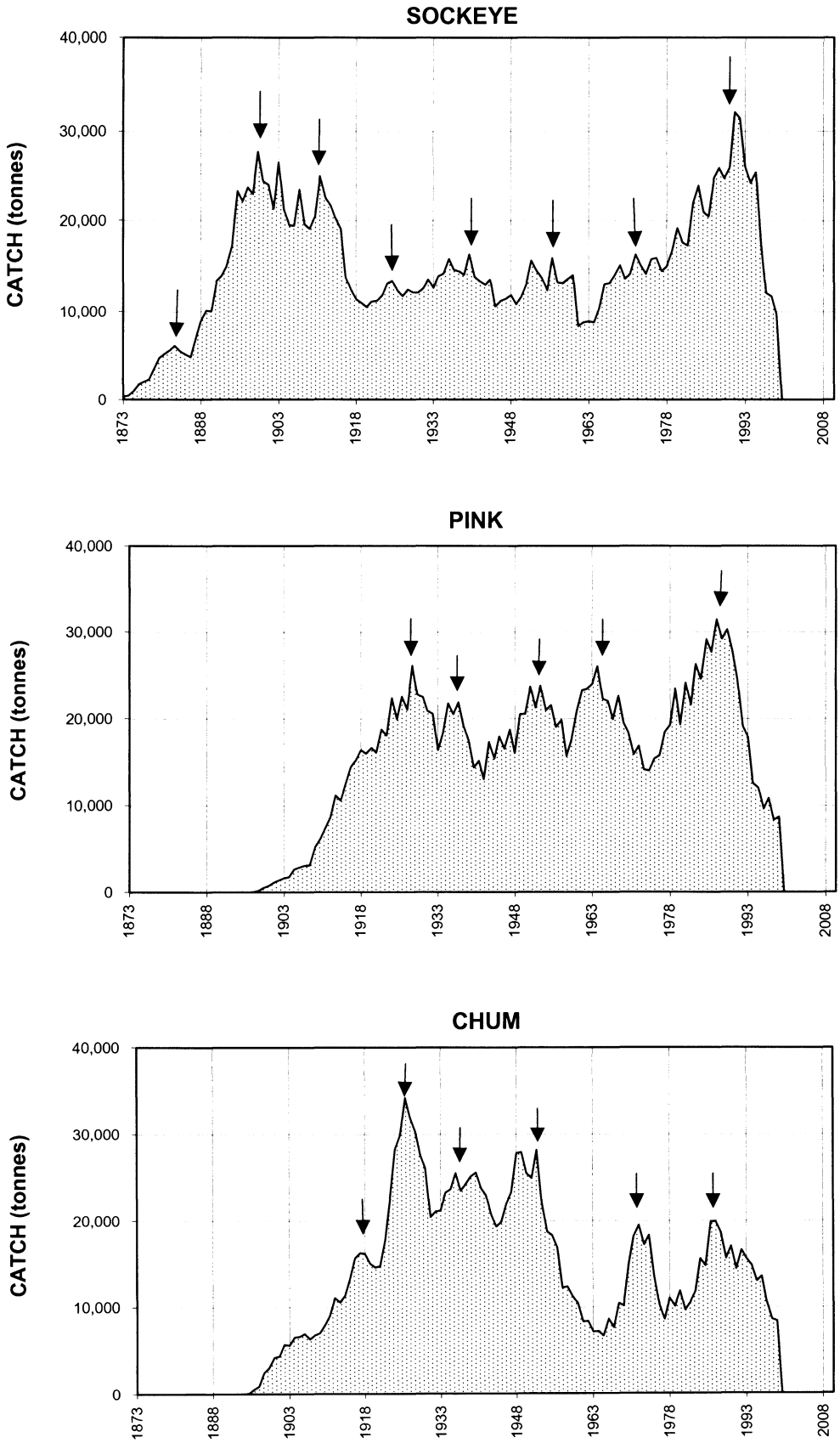


Figure 44. Annual British Columbia catch of sockeye, pink and chum salmon, 1873 to 2001. Catch is presented as a five year moving average centred on the third year. Arrows represent our interpretation of peaks in harvest.

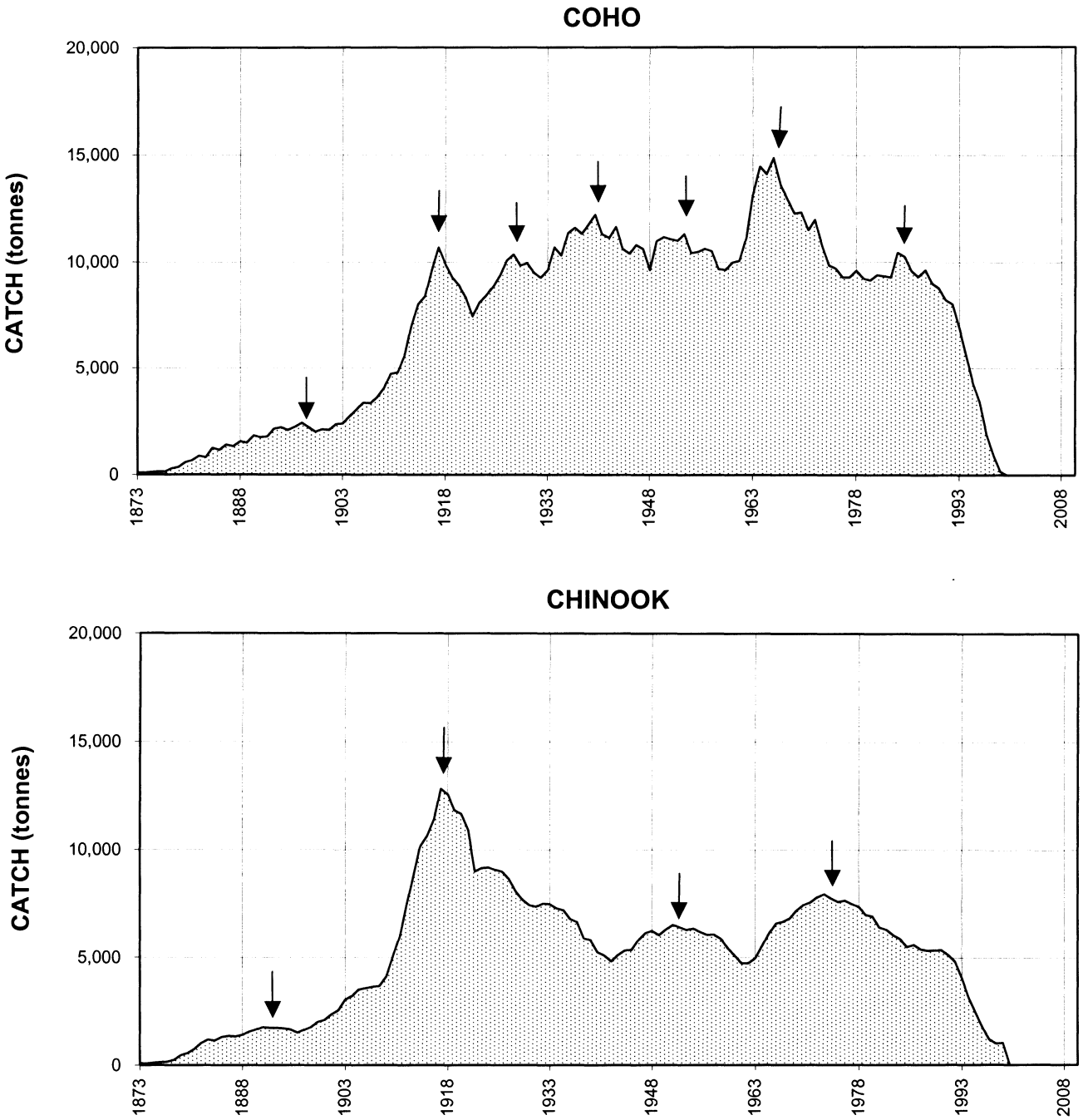


Figure 45. Annual British Columbia catch of coho and chinook salmon, 1873 to 2001. Catch is presented as a five year moving average centred on the third year. Arrows represent our interpretation of peaks in harvest.