PACIFIC SALMON COMMISSION
COHO TECHNICAL COMMITTEE

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NORTHERN PANEL AREA COHO SALMON STATUS REPORT

DECEMBER, 1991

TABLE OF CONTENTS

LIST OF TABLES iv
LIST OF FIGURES vi
LIST OF APPENDIX TABLES ix
LIST OF APPEENDIX FIGURES xi

INTRODUCTION 1

1. FISHERIES TRENDS 1
1.1. NORTHERN BRITISH COLUMBIA 1
1.1.1. Commercial Catch 1
1.1.2. Indian Food Fishery Catch 6
1.1.3. Sport Catch 6
1.1.4. Transboundary Rivers Catch 6
1.2. SOUTHEAST ALASKA 6
1.2.1. Commercial Catch 6
1.2.2. Sport Catch 11
1.2.3. Subsistence and Personal Use Catch 11
1.3. NORTHERN PANEL AREA OVERVIEW 11

2. FISHERIES MANAGEMENT 12
2.1. NORTHERN BRITISH COLUMBIA 12
2.1.1. Licensing 12
2.1.2. Management Objectives 12
2.1.3. Troll Fisheries 13
2.1.4. Net Fisheries 14
2.1.5. Indian Food Fisheries 14
2.1.6. Sport Fisheries 14
2.1.7. Transboundary Rivers 15
2.2. SOUTHEAST ALASKA 15
2.2.1 Licensing 15
2.2.2. Management Objectives 15
2.2.3. Troll Fisheries 16
2.2.4. Purse Seine Fisheries 17
2.2.5. Drift Gill Net Fisheries 17
2.2.6. Set Gill Net Fisheries 17
2.2.7. Annette Island Fisheries 17
2.2.8. Sport Fisheries 18
2.2.9. Subsistence and Personal Use Fisheries 18

3. STOCK DESCRIPTIONS AND STATUS 18
3.1. LIFE HISTORY SUMMARY 18
3.2. NORTHERN BRITISH COLUMBIA PRODUCTION AREAS 19
3.2.1. Queen Charlotte Islands 19
3.2.2. Nass/Skeena 20
3.2.3. North Central Coast 22
3.2.4. South Central Coast 23
3.2.5. Transboundary Rivers 23

3.3. NORTHERN BRITISH COLUMBIA STOCK ASSESSMENT DATA 23
3.3.1. Escapement Enumeration 23
3.3.2. Code Wire Tag Data 24
3.3.3. Exploitation Rate Data 25
3.3.4. Habitat Quality 25
3.3.5. Enhancement Contribution 26
3.4. STATUS OF NORTHERN BRITISH COLUMBIA STOCKS 26
3.4.1. Queen Charlotte Islands 26
3.4.2. Nass/Skeena Area 27
3.4.3. North Central Coast (Areas 6, 7 and 8) 27
3.4.4. South Central Coast (Areas 9 and 10) 28
3.4.5. Transboundary Rivers 28
3.5. SOUTHEAST ALASKA PRODUCTION AREAS 28
3.5.1. Yakutat 28
3.5.2. North-Central 29
3.5.3. Lynn Canal 29
3.5.4. Stephens Passage 30
3.5.5. Central Inside 30
3.5.6. Southern Outside 30
3.5.7. Southern Inside 30
3.6. SOUTHEAST ALASKAN STOCK ASSESSMENT DATA 31
3.6.1. Escapement Data 31
3.6.2. Coded Wire Tag Data 31
3.6.3. Exploitation Rate Data 32
3.6.4. Habitat Quality 32
3.6.5. Enhancement Contribution 33
3.7. STATUS OF SOUTHEAST ALASKAN STOCKS 33
3.7.1. Yakutat 34
3.7.2. Lynn Canal 34
3.7.3. Stephens Passage 34
3.7.4. North-Central Area 35
3.7.5. Central Inside Area 35
3.7.6. Southern Outside 35
3.7.7. Southern Inside 36

4. RECOMMENDATIONS FOR RESEARCH 36
4.1. RESEARCH NEEDS 36
4.1.1. Productivity Studies 36
4.1.2. Escapement Assessment 37
4.1.3. Forecasting 37
4.1.4. Stock Identification 38
4.1.5. Indicator Stock Monitoring Programs 38
4.2. RESEARCH AND ANALYTICAL PRIORITIES 39

5. REFERENCES 40

TABLES
FIGURES
APPENDIX
APPENDIX TABLES
APPENDIX FIGURES

LIST OF TABLES

Table 1. North coast British Columbia commercial coho salmon catch, 1953 to 1989

Table 2. North coast British Columbia gillnet coho salmon catch, 1953 to 1989.

Table 3. North coast British Columbia seine coho salmon catch, 1953 to 1989.

Table 4. North coast British Columbia troll coho salmon catch, 1953 to 1989.

Table 5. North coast British Columbia coho catch by gear type, 1953 to 1989.

Table 6. North coast British Columbia Indian food fish catch, Areas 1 to 10, 1980 to 1989.

Table 7. North coast British columbia sport fishery coho catch, Areas 1 to 10, 1980 to 1989.

Table 8. Transboundary river commercial coho salmon catches by inriver fisheries, 1964-89.

Table 9. Southeast Alaska annual coho catch by commercial fisheries by gear type, 1960-89.

Table 10. Southeast Alaska annual coho catch by commercial fisheries by area and gear type, 1960-89.

Table 11. Purse seine catch of coho salmon in Southeast Alaska Districts 101-104, 1960-89.

Table 12. Drift gill net catch of coho salmon in Southeast Alaska by fishery, 1960-89.

Table 13. Annual sport harvest of coho salmon by fishery in Southeast Alaska, 1977-89.

Table 14. Southeast Alaska and Yakutat reported subsistence and personal use coho salmon harvest, 1975-89.

Table 15. Number of licenced vessels in the B.C. commercial salmon fleet reporting landings by gear category.

Table 16. The number of limited entry permits fished in the Southeast Alaska and Yakutat salmon fisheries, 1975 to 1989.

Table 17. North coast British Columbia hatchery coho releases.

Table 18. B.C. hatchery coho contribution to north coast B.C. troll and net fisheries.

Table 19. Coho salmon peak escapement survey counts for three streams in the Yakutat area, 1973-89.

Table 20. Coho salmon peak escapement survey counts and weir counts for selected streams in Lynn Canal, 1974-89.

Table 21. Coho salmon peak escapement survey counts and weir counts for streams in the Juneau area, 1980-89.

Table 22. Coho salmon peak escapement survey counts and total weir counts for six systems on the central outside coast of Southeast Alaska near Sitka, 1981-89.

Table 23. Coho salmon peak escapement survey counts and weir counts for four systems in southern inside districts (101 and 102) of Southeast Alaska, 1982-89.

Table 24. Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to Auke Lake, 1980-89.

Table 25. Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to the Berners River, 1982, 1983 and 1985-1989.

Table 26. Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to Ford Arm Lake, 1982, 1983 and 1985-1989.

Table 27. Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to Hugh Smith Lake, 1982-1989.

Table 28. Estimated exploitation rates for four coded-wire tagged indicator stocks by the Alaska troll fishery and by all fisheries combined, 1982-89.

LIST OF FIGURES

Figure 1. Map of British Columbia troll fishing catch regions.

Figure 2. Map of British Columbia gillnet and seine fishing areas and catch regions.

Figure 3. North coast British Columbia total coho catch by gear type, 1953 to 1989.

Figure 4. North coast British Columbia troll coho catch by catch regions, 1953 to 1989.

Figure 5. Queen Charlotte Islands gillnet coho catch (Areas 1, 2E and 2W), 1953 to 1989.

Figure 6. Nass/Skeena gillnet coho catch (Areas 3, 4 and 5), 1953 to 1989.

Figure 7. North Central gillnet coho catch (Areas 6, 7 and 8), 1953 to 1989.

Figure 8. South Central gillnet coho catch (Areas 9 and 10), 1953 to 1989.

Figure 9. Queen Charlotte Islands seine coho catch (Areas 1, 2E and 2W), 1953 to 1989.

Figure 10. Nass/Skeena seine coho catch (Areas 3, 4 and 5), 1953 to 1989.

Figure 11. North Central seine coho catch (Areas 6, 7 and 8), 1953 to 1989.

Figure 12. South Central seine coho catch (Areas 9 and 10), 1953 to 1989.

Figure 13. North Coast British Columbia coho catch and proportion of total catch caught by gear type, 1953 to 1989.

Figure 14. Map of Southeast Alaska statistical fishing districts.

Figure 15. Areas used for reporting catches in Southeast Alaskan fisheries.

Figure 16. Southeast Alaska coho salmon catch by troll, purse seine, drift gill net, and set gill net gear, 1960-89.

Figure 17. Southeast Alaska troll catch of coho salmon by area, 1960-89.

Figure 18. Southeast Alaska purse seine catch of coho salmon by area, 1960-89.

Figure 19. Purse seine catch of coho salmon in Southeast Alaska Districts 101-104, 1960-89.

Figure 20. Drift gill net catch of coho salmon in Southeast Alaska by fishery, 1960-89.

Figure 21. Southeast Alaska sport catch of coho salmon, 1977-89.

Figure 22. Queen Charlotte Islands (Areas 1, 2E and 2W) coho escapement trends for consistently surveyed streams, 1950 to 1989.

Figure 23. Nass/Skeena (Areas 3, 4 and 5) coho escapement trends for consistently surveyed streams, 1950 to 1989.

Figure 24. North central (Areas 6, 7 and 8) coho escapement trends for consistently surveyed streams, 1950 to 1989.

Figure 25. South central (Areas 9 and 10) coho escapement trends for consistently surveyed streams, 1950 to 1989.

Figure 26. Map of north coast British Columbia coded wire tag release sites.

Figure 27. North coast B.C. coho CWT recovery data, 1987.

Figure 28. North coast B.C. coho CWT recovery data, 1988.

Figure 29. North coast B.C. coho CWT recovery data, 1989.

Figure 30. CWT recoveries of coho from the North Coast production area of British Columbia, 1988 to 1989, [number of expanded recoveries in square brackets]. Includes Lachmach River and Oldfield Creek.

Figure 31. CWT recoveries of coho from the Nass production area of British Columbia, 1987 to 1989, [number of expanded recoveries in square brackets]. Includes Kincolith River.

Figure 32. CWT recoveries of coho from the Skeena production area of British Columbia, 1983 to 1989, [number of expanded recoveries in square brackets]. Includes Babine and Kispiox rivers and Toboggan Creek.

Figure 33. CWT recoveries of coho from the Queen Charlotte Islands production area of British Columbia, 1983 to 1989, [number of expanded recoveries in square brackets]. Includes Pallant Creek, Yakoun River tributaries and Sachs Creek.

Figure 34. CWT recoveries of coho from the Central Coast production area of British Columbia, 1984 to 1989, [number of expanded recoveries in square brackets]. Includes Kitimat and Snootli rivers, Hartley Bay and McLaughlin Bay creeks.

Figure 35. CWT recoveries of coho from the Transboundary production area of British Columbia, 1986 to 1989, [number of expanded recoveries in square brackets]. Includes Taku and Stikine rivers tributaries.

Figure 36. B.C. hatchery coho contributions to Canadian net and troll fisheries, 1977 to 1988.

Figure 37. Meziadin fishway annual coho counts and seasonal timing pattern, 1973 to 1990.

Figure 38. Skeena test fishery annual coho index and seasonal timing pattern, 1956 to 1990.

Figure 39. Babine fence annual coho count and seasonal timing pattern, 1946 to 1990.

Figure 40. Coho salmon stock groupings in Southeast Alaska.

Figure 41. Wild coho salmon coded-wire tag indicator stocks in Southeast Alaska.

Figure 42. CWT recoveries of coho from the Lynn Canal and Stephens Passage production areas of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

Figure 43. CWT recoveries of coho from the North Outside Alaska production area of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

Figure 44. CWT recoveries of coho from the Central and Southern Inside Alaska production area of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

Figure 45. CWT recoveries of coho from the Southern Outside Alaska production area of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

Figure 46. Estimated exploitation rates for four coded-wire tagged wild Southeast Alaska coho salmon stocks by the Alaska troll fishery, 1982-89.

Figure 47. Estimated total exploitation rates for four coded-wire tagged wild Southeast Alaska coho salmon stocks by all fisheries, 1982-89.

Figure 48. Location of salmon hatcheries in Southeast Alaska.

Figure 49. Alaska hatchery contributions of coho salmon to Southeast Alaska fisheries, 1980-89.

Figure 50. Alaska hatchery contribution as a percent of the total commercial harvest of coho salmon in Southeast Alaska, 1980-89.

Figure 51. Total commercial catch of coho salmon in Southeast alaska, 1890-1989.

Figure 52. Total commercial coho salmon catch in Southeast Alaska and northern British Columbia, 1953 to 1989.

LIST OF APPENDIX TABLES

Appendix Table 1. Queen Charlotte Islands (Areas 1, 2E and 2W) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 2. Nass/Skeena (Areas 3, 4 and 5) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 3. North Central (Areas 6, 7, 8, 9 and 30) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 4. South Central (Areas 10, 11 and 12) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 5. Area 1 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 6. Area 2E weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 7. Area 2W weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 8. Area 3 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 9. Area 4 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 10. Area 5 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 11. Area 6 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 12. Area 7 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 13. Area 8 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 14. Area 9 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 15. Area 10 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 16. Area 1 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 17. Area 2E weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to

1989.

Appendix Table 18. Area 2W weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 19. Area 3 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 20. Area 4 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 21. Area 5 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 22. Area 6 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 23. Area 7 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 24. Area 8 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 25. Area 9 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 26. Area 10 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 27. Southeast Alaska Area 1 troll coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 28. Southeast Alaska Area 2 troll coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 29. Southeast Alaska Area 3 troll coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 30. Southeast Alaska Area 4 troll coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 31. Southeast Alaska Area 5 troll coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 32. Southeast Alaska Area 6 troll coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 33. Southeast Alaska Area 3 purse seine coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 34. Southeast Alaska Area 2 purse seine coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 35. Southeast Alaska Area 4 purse seine coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 36. Southeast Alaska Area 5 purse seine coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 37. Southeast Alaska Area 6 purse seine coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 38. Southeast Alaska Area 4 drift gill net coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 39. Southeast Alaska Area 5 drift gill net coho catch by week, 1980-89, with 5-year averages for 1965-89.

Appendix Table 40. Southeast Alaska Area 6 drift gill net coho catch by week, 1980-89, with 5-year averages for 1960-89.

Appendix Table 41. Consistently surveyed streams used in the analysis of B.C. coho escapement trends.

LIST OF APPEENDIX FIGURES

Appendix Figure 1. Queen Charlotte Islands and Nass/Skeena weekly troll coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 2. North Central and South Central weekly troll coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 3. Area 1 and 2E weekly gillnet coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 4. Area 2W and 3 weekly gillnet coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 5. Area 4 and 5 weekly gillnet coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 6. Area 6 and 7 weekly gillnet coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 7. Area 8 and 9 weekly gillnet coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 8. Area 10 weekly gillnet coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 9. Area 1 and 2E weekly seine coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 10. Area 2W and 3 weekly seine coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 11. Area 4 and 5 weekly seine coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 12. Area 6 and 7 weekly seine coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 13. Area 8 and 9 weekly seine coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 14. Area 10 weekly seine coho catch, 5 year averages, 1975 to 1989.

Appendix Figure 15. Southeast Alaska Area 1 troll average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 16. Southeast Alaska Area 2 troll average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 17. Southeast Alaska Area 3 troll average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 18. Southeast Alaska Area 4 troll average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 19. Southeast Alaska Area 5 troll average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 20. Southeast Alaska Area 6 troll average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 21. Southeast Alaska Area 3 purse seine average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 22. Southeast Alaska Area 4 purse seine average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 23. Southeast Alaska Area 5 purse seine average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 24. Southeast Alaska Area 6 purse seine average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 25. Southeast Alaska Area 4 drift gill net average coho catch by week for 5-year periods, 1960-89.

Appendix Figure 26. Southeast Alaska Area 5 drift gill net average coho catch by week for 5-year periods, 1965-89.

Appendix Figure 27. Southeast Alaska Area 6 drift gill net average coho catch by week for 5-year periods, 1960-89.

INTRODUCTION

Coho salmon stocks in the PSC Northern Panel Area contribute to a wide array of fisheries in Canada and Alaska. In the fall of 1988, the Coho Technical Committee was assigned the task of compiling available information on Northern Panel Area coho salmon stocks and fisheries (Appendix 1). This report presents the results of a preliminary review of the information in four major areas: (1) fishery catches and trends; (2) fishery management descriptions; (3) stock descriptions and status; and (4) research required to improve coho salmon management in the Northern Panel Area.

1. FISHERIES TRENDS

1.1. NORTHERN BRITISH COLUMBIA

Trends in the coho catch in northern British Columbia are described below. Canadian commercial coho catches in the transboundary rivers are included in this report but for a more complete description of all transboundary river stocks and fisheries please see the annual reports of the Transboundary Technical Committee.

1.1.1. Commercial Catch

Commercial catch has been grouped by gear type, statistical area and catch region for discussion (Figures 1 and 2). For the gillnet and seine fisheries, Statistical Areas 1 to 10 have been grouped into four catch regions as follows: Queen Charlotte Islands (QCI) (Areas 1, 2E and 2W), Nass/Skeena (Areas 3 to 5), North Central (Areas 6 to 8) and South Central (Areas 9 and 10). For the troll fishery the regions are slightly different: Queen Charlotte Islands (Areas 1, 2E and 2W), Nass/Skeena (Areas 3 to 5), North Central (Areas 6 to 9, and 30) and South Central (Areas 10 to 12; Please note that the vast majority of the catch in the South Central troll fishery occurs in areas 11 and 12 which are located in the PSC Southern Panel area. Catches in this fishery are presented for completeness but are not included in discussions of total Northern Panel area Canadian catch.). These areas and regions represent major fishing zones where there is some degree of fleet and, possibly, stock discreteness. Troll fishery catches are discussed only by catch region because trollers often fish more than one area within a catch region and consequently landings are difficult to assign accurately by area.

Commercial fishery catches are reported through a mandatory sales slip system to the Department of Fisheries and Oceans. The sales slip is made out at the time of sale of the catch and includes information on the vessel licence number, date, days fished, areas fished, and number, weight and species of fish caught.

Annual coho catches by gear for northern British Columbia commercial fisheries are presented in Tables 1 to 4 and in Figures 3 to 12. Weekly coho catches by gear are presented in Appendix Tables 1 to 26 and Appendix Figures 1 to 14. All catch data were obtained from the Salmon Stock Assessment catch data base, located on the VAX computer at the Canadian Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, B.C..

Over the period of record (since 1953) the total north coastal B.C. commercial coho catch has not shown a consistent trend. Apart from a high decade average of 1,380,036 fish in the 1960's, the decade average catch has ranged between 925,008 and 1,012,246 fish. In the 1980's, the annual catch ranged from a low of 556,067 in 1988 to a high of 1,742,858 in 1986.

The troll catch has been stable over the period of record, ranging from an average of 592,039 in the 1950's to 746,293 in the 1960's. Declining catches in the north central troll fishery have been more than made up for by increasing catches in the QCI troll fishery. Concurrently, the troll portion of the catch has increased from 60 and 54 percent of the catch in the 1950's and 1960's, respectively, to 73 percent in the 1980's (Table 5, Figure 13).

Gillnet fisheries are very rarely directed at harvesting coho salmon. Virtually all coho caught in gillnet fisheries are taken incidentally during fisheries directed at harvesting surplus sockeye, pink and chum stocks. As a result, recent gillnet catches are less than one-quarter of the peak decade average catch of 468,227 fish recorded in the 1960's. The average catch recorded in the 1950's and 1970's were 3 and 2.5 times greater than recent catch levels. Gillnet catches which made up one-third of the total north coastal B.C. coho catch in the 1950's and 1960's, now make up only 10 percent (1985-89 average) of the catch.

The seine catch does not show a significant trend over the period of record. However, the seine portion of the total catch has increased from 10 percent to 17 percent over this period. As with the gillnet fishery, the seine fishery is not directed at harvesting coho salmon.

1.1.1.1. Troll Fishery

Queen Charlotte Islands (Areas 1, 2E, 2W)

The QCI troll catch makes up 95 percent of the most recent 5-year average (1985-1989) commercial coho salmon catch in the QCI region (Table 1), 71 percent of the total north coast B.C. troll catch and 51 percent of the total north coast B.C. commercial catch. Recent troll catches in this region (1985-1989 average) of 491,874 coho are 32 to 56 percent higher than pre-1980's levels (decade averages). During the 1980's the QCI troll catch has ranged from 284,027 coho in 1982 to 800,606 coho in 1986.

Weekly catches peak between the second and fifth weeks of July. During the 1985-89 period the peak average weekly catch was 77,932 (Appendix Table 1). This compares with peak average weekly catches of 64,713 in the early 1980's (1980-84) and 36,686 in the late 1970's (1975-79). Since the signing of the Pacific Salmon Treaty in 1985, late September coho fisheries directed mainly at local QCI stocks have been curtailed because of season closures.

Nass/Skeena (Areas 3, 4, 5)

Recent troll catches (1985-89) have averaged 135,023 fish, and although highly variable from year to year, have not shown a definite trend since the 1970's. During the 1980's, the Nass/Skeena troll catch has ranged from 59,519 in 1981 to 288,879 in 1986.

In recent years (1985-89) peak average weekly catches occurred between the second and fourth weeks of July. Historically, a second peak in late August and September was sometimes larger than the July peak. This late peak was made up primarily of local stocks caught in near-shore areas. This late fishery has been curtailed in recent years because of closures implemented for chinook conservation reasons.

North Central Coast (Areas 6, 7, 8, 9, 30)

Troll coho catches have declined sharply with the recent average catch (1985-89) of 69,915 being less than one-half of pre-1980's levels.

South Central Coast (Areas 10, 11 and 12)

Most of the catch in this region occurs in Areas 11 and 12 which are part of the PSC Southern Panel area. Catches for this fishery have been included for completeness but have been omitted in Northern Panel area summaries.

1.1.1.2. Gillnet Fishery

Queen Charlotte Islands

Area 1

Area 1 gillnet coho catches have been very low (< 1,000) since 1982. Peak catch levels in this fishery occurred from 1964 to 1972. The highest recorded catch was observed in 1968 (88,667).

Area 2E

Coho are caught incidentally during gillnet fisheries directed at pink and chum salmon. Catches have averaged under 7,000 fish in each of the past four decades.

Area 2W

Coho are rarely caught by gillnets in Area 2W. Average catches have been below 500 fish in each of the past four decades.

Nass/Skeena

Gillnet catches have declined to one-third of 1950's and 1960's levels. The elimination of directed coho fisheries and the low abundance of some stocks, like the upper Skeena coho are believed to be major contributors to the decline. The gillnet proportion of the catch in this region has declined from a high of 49 percent during the 1950's to 21 percent during the most recent 5-year period (1985-89 average), due to the elimination of the late August and September fisheries directed at coho salmon.

Area 3

Area 3 gillnet coho catches have declined to an average of 10,622 fish during the most recent five year period (1985-89) from 1950's and 1960's averages of 45,784 to 43,346 fish, respectively. Coho catches occur throughout the fishing period from early July to early September, with no apparent peak.

Area 4

The Area 4 gillnet coho catch, like the Area 3 gillnet catch, declined steadily over the period of record and averaged 36,511 fish in the most recent 5-year period (1985-89). The average catch for the 1960's and 1970's was 61,885 and 46,146 fish, respectively. A combination of the elimination of directed coho fisheries, management measures to conserve coho and steelhead and low upper Skeena River stock size are the reasons for the decline. Coho are caught in significant numbers throughout the gillnet fishing season from the first week of July to the last week of August.

Area 5

Recent gillnet catches (1980-84 and 1985-89 averages), averaging under 10,000 fish, are less than one-half of the 1970's average of 21,229 fish and one-sixth of the 1960's average of 62,560 fish.

North Central Coast

Gillnet coho catches in the 1980's are 15 to 20 percent of decade average highs recorded in the 1950's and 1960's. The gillnet catch now accounts for 14 percent of the region total (1985-89 average), down from a high of 38 percent during the 1950's.

Area 6

Recent gillnet catches, averaging less than 10,000 fish (1980-84 and 1985-89), are well below the peak decade average of 66,021 fish recorded during the 1960's.

Area 7

Recent gillnet catches averaging less than 10,000 fish are well below the levels reported during the three previous decades.

Area 8

Recent gillnet catch levels are averaging less than one-fifth of the peak decade average catch of 72,001 fish, reported in the 1950's. There is a strong declining trend through the entire period of record.

South Central Coast

Gillnet catches have declined sharply from a decade average high of 109,201 during the 1960's to an average of 11,228 during the late 1980's (1985-89).

Area 9

Recent Area 9 gillnet coho catches, averaging 5,490 fish (1985-89), are sharply lower than during previous decades. The peak average was 37,158 fish during the 1960's.

Area 10

Very large gillnet catches were reported in Area 10 during the 1960's (average of 72,043 fish), but earlier and later catches have averaged less than 10,000 fish per year.

1.1.1.3. Seine Fishery

Queen Charlotte Islands

Area 1

The Area 1 seine coho catch has been highly variable, but has shown an increase in the 1980's. Coho are an incidental catch in this largely sockeye and pink directed fishery.

Area 2E

As with the gillnet catch, coho are caught incidentally during seine fisheries directed at pink and chum salmon. Catches have averaged less than 9,000 fish in each of the past four decades.

Area 2W

The seine coho catch is highly variable and is incidental during the Area 2W summer fishery on passing stocks and the fall terminal fishery on local chum stocks.

Nass/Skeena

Area 3

Area 3 seine catches averaged 50,673 fish during the most recent 5-year period (1985-89), compared with previous decade averages of 10,158 to 15,567 fish. High weekly seine catches occur over a five week period from the third week of July to the second week of August.

Area 4

Coho are caught incidentally during pink and sockeye fisheries by seines who gained access to the Area 4 fishery (Skeena River) in the early 1970's. The recent 5-year average coho catch by seines is 6,215 fish (1985-89).

Area 5

Recent seine catches (6,381, 1985-89 average) are similar to those in the 1970's but are less than one-third of those in the 1960's.

North Central Coast

Recent seine catches (84,242, 1985-89 average) indicate no discernible trend. However, the decline in the gillnet and troll catch has meant that the seine catch now makes up a much higher proportion of the north central catch than in the past. The seine catch makes up 47 percent of the total North Central coast coho catch in the most recent 5-year period (85-89), compared with 21 to 25 percent of the catch in the 1950's, 1960's and 1970's.

Area 6

Area 6 seine catches have remained fairly stable, averaging 33,247 (1950's) to 50,524 fish (1960's) over the period of record. The recent average (1985-89) is 38,390 fish.

Area 7

Area 7 seine catches have remained fairly stable, averaging from 8,918 (1950's) to 20,209 (1970's) fish over the period of record. The recent average (1985-89) is 13,572 fish.

Area 8

There has been no discernible trend in the Area 8 seine catch. The recent 5-year average coho catch is 32,280 fish (1985-89).

South Central Coast

There is currently no seine fishery in this region.

1.1.2. Indian Food Fishery Catch

Preliminary estimates of the north coast B.C. Indian food fish coho catch (Areas 1 to 10) have averaged 20,803 fish during the 1980's (Table 6). Since 1987, the catch has been well below average levels. The catch in Area 4 (including the Skeena River) is by far the largest, accounting for 62 percent of the total. Areas 6, 3 and 8 are the next most significant in that order.
In addition to the coastal fisheries there is also a very limited Indian food fish coho catch on the transboundary rivers (see Transboundary Technical Committee reports for details)

Indian food fish catches are estimated by fishery officers based on field observations of catch and effort. There is no catch reporting system as there is for commercial fisheries.

1.1.3. Sport Catch

Preliminary estimates of the north coast B.C. sport fishery coho catch have averaged 17,110 fish during the 1980's (Table 7). The catch is divided fairly evenly across most Statistical Areas, with Areas 9, 8 and 2E having the three highest catches in that order.

Sport catches are estimated by fishery officers based on field observations of catch and effort. In addition, creel surveys have been conducted sporadically in some areas.

1.1.4. Transboundary Rivers Catch

The commercial fishery for coho on the Stikine River is constrained by Pacific Salmon Treaty catch limits and has averaged 3,676 coho over the 1985-89 period (Table 8). Coho caught in the Taku River commercial fishery are limited to incidental catches during the sockeye directed fishery. Recent (1985-89) catches in this fishery have averaged 3,030 coho. The Alsek River supports the largest transboundary river coho sport fishery in British Columbia with an average catch of 103 coho during the 1980's (1980-89 average). There are also minor Indian food fishery catches for coho on all of the transboundary rivers.

1.2. SOUTHEAST ALASKA

The coho catch in Southeast Alaska by fishery type and major fishing area is described below.

1.2.1. Commercial Catch

Commercial catches of coho salmon occur in 25 separate marine statistical districts in Southeast Alaska (Figure 14). Only troll catches occur in all 25 districts, purse seine fishing is limited to 14 (1 through 14) districts and drift gillnet fishing occurs in only 5 districts (1,6,8,11,and 15). In addition, an in-river set gill net fishery occurs in separate districts in the northern outside area (area 1). The set gill net fishery is primarily terminal in nature and occurs in several river systems in the Yakutat area, including the transboundary Alsek River. To reduce the number of tables and simplify the presentation, catches have been grouped by districts into six areas which are used routinely by the Alaska Department of Fish and Game for analysis of fisheries performance (Figure 15). Annual coho catches for Southeast Alaska fisheries are presented in Tables 9 to 12 and in Figures 16 to 20. Weekly catches for some of the major commercial fisheries are shown in Appendix Tables 27 to 40

and in Appendix Figures 15 to 27. All commercial catch data were obtained from the Southeast Region Integrated Fisheries Data Base (IFDB) located on the VAX computer at the Alaska Department of Fish and Game, Douglas, Alaska.

Only the common property catch (does not include hatchery cost recovery harvest) in state managed waters and adjacent federal waters is reported. Common property catches from the Special Hatchery Harvest areas are not reported. Also reported are catches from the Annette Island Indian Reserve near Ketchikan.

1.2.1.1. Troll Fishery

The total Southeast Alaska troll catch followed a relatively stable trend during the 1960's and 1970's with decade averages of 569,983 and 610,050, respectively. Average catches in the 1980's approximately doubled to 1,056,430 in 1980-84 and 1,336,846 in 1985-89 (Table 9 and Figure 16). The majority of the increased catch occurred in SEAK areas 1 through 3 while catches in SEAK areas 4 through 6 have remained stable. Areas 1 through 3 are outside waters while areas 4 through 6 encompass primarily inside waters including straits and passages within the archipelago.

SEAK Area 1 (Districts 116,156,157,181,183,189, and 191)

SEAK Area 1 (northern outside) average troll catches in the 1980's far exceeded those of previous decades (63,541 in the 1960's and 83,620 in the 1970's). Recent 5-year averages for 1980-84 and 1985-89 were 145,314 and 220,082, respectively. Average weekly catch for the most recent 5-year period shows a bimodal pattern with a reduced average catch near the mid-August closure. The average peak weekly catch occurred relatively late in this area (mid-August to early September) compared with other outside areas.

SEAK Area 2 (Districts 113 and 154)

SEAK Area 2 (central outside) has accounted for the highest proportion of the Southeast Alaska troll coho catch (39% in 1985-89). The average catch increased dramatically from 111,026 in the 1960's to 122,422 in the 1970's to 381,491 in 1980-84 and 519,262 in 1985-89. In recent years, the average peak weekly catch has occurred in late July to early August.

SEAK Area 3 (Districts 103, 104, and 152)

SEAK Area 3 (southern outside) was the second most important Alaska troll area in the 1980's. The average catch increased from 83,889 in the 1960's and 123,812 in the 1970's to 194,905 in 1980-84 and 258,637 in 1985-89. In recent years, the average peak weekly catch has occurred in late July to early August, the same as in SEAK area 2.

SEAK Area 4 (Districts 111, 112, 114 and 115)

SEAK Area 4 (northern inside) catches have shown a more stable trend with average catches decreasing from 154,868 in the 1960's to 118,690 in the 1970's and 112,918 during 1980-1984 and 122,649 in the 1985-89. Specific area and time restrictions have been implemented in this area since the late 1970's. Average weekly catches show a trend toward a later, more distinct peak catch in the 1980's compared with previous years. This may reflect the implementation of the 10-day troll closure during the early portion of the peak.

SEAK Area 5 (Districts 105, 106, 107, 108, 109, and 110)

SEAK Area 5 (central inside) catches have increased from 77,168 in the 1960's and 70,397 in the 1970's to 121,803 in 1980-84 and 137,701 in 1985-89. Average weekly catches in this area have peaked earlier in the most recent 5-year period compared with earlier periods. This area contains an important fishing area on the outer coast as well as extensive inside waters and, therefore, catch timing is likely to vary substantially within the area.

SEAK Area 6 (Districts 101, 102, and 150)

SEAK Area 6 (southern inside) catches have shown a stable trend with decade averages of 79,491 (1960's), 91,110 (1970's), 99,997 in 1980-1984 and 78,515 in the late 1980's. Average peak weekly catches in recent years have occurred from mid-July to early August.

1.2.1.2. Purse Seine Fishery

With the exception of specific hatchery terminal harvests, purse seine fisheries are managed for species other than coho, primarily pink salmon, while coho are taken incidentally or as part of a targeted mixture of all five species. The total purse seine catch of coho salmon decreased from an average of 320,623 in the 1960's to 204,619 in the 1970's before rebounding again to 315,287 in 1980-84 and 328,000 in 1985-89. All purse seine fisheries occur nearshore.

SEAK Area 2 (District 113)

SEAK Area 2 (central outside) purse seine catches are very minor (Average <11,000) have occurred primarily in local bays and inlets incidentally to fisheries directed at pink salmon.

SEAK Area 3 (Districts 103 and 104)

SEAK Area 3 (southern outside) accounted for over half of the Southeast Alaska purse seine catch of coho salmon in the 1980's. Average purse seine coho catches in that area decreased from 92,929 in the 1960's to 58,313 in the 1970's but then increased in the 1980's to 168,861 (1980-84) and 176,940 (1985-89). The majority of the harvest (78%) has occurred in District 104 where recent catches during the 1980's averaged 146,000. The average peak catch in the most recent 5 year period occurred in early August.

SEAK Area 4 (Districts 111, 112 and 114)

SEAK Area 4 (northern inside) purse seine coho catches decreased dramatically from an average of 110,951 in the 1960's to 44,885 in the 1970's and 28,454 during 1980-1984 and 18,445 during 1985-89. This decrease resulted primarily from closure of the more mixed-stock migration areas in District 114 to purse seining after 1973. Peak catches in Area 4 have typically occurred in early or mid August.

SEAK Area 5 (Districts 105, 106, 107, 108, 109 and 110)

SEAK Area 5 (central inside) average purse seine catches have shown a declining trend from 37,497 in the 1960's to 28,729 in the 1970's, 27,211 during 1980-1984 and 21,582 during 1985-1989. Most of the catch has usually occurred in August and early September.

SEAK Area 6 (Districts 101 and 102)

SEAK Area 6 (southern inside) average purse seine catches increased from 71,735 in the 1960's and 68,564 in the 1970's to 76,095 in 1980-84 and 95,558 in 1985-89. The average peak catch occurred in late August.

1.2.1.3. Drift Gill Net Fishery

The drift gill net fisheries target a variety of species at different times. Coho salmon are typically the primary target species in fall fisheries in Districts 106, 108 and 111. However, the fisheries in Districts 101 and 115 harvest primarily other species, although coho salmon are important. The total Southeast Alaska drift gill net catch of coho salmon increased from an average of 119,376 in the 1960's to 165,332 in the 1970's and 163,743 during 1980-1984 and 240,086 during 1985-1989. Most of the catch in the Lynn Canal and Taku-Snettisham fisheries has occurred from the last week of August through the third week of September. Substantial catches can occur in more southern fisheries beginning in mid July while the peak typically occurs around the first week of September. Catches of coho salmon are reported combined in Table 10 and separately for each fishery in Table 12.

SEAK Area 4 (Districts 111 and 115)

SEAK Area 4 (northern inside) is composed of 2 distinct and separately managed drift gill net fisheries, the Lynn Canal and Taku/Snettisham.

Lynn Canal (District 115)

The Lynn Canal fishery targets species other than coho salmon including sockeye during the summer season and chum during the fall. The average catch has increased from 34,637 in the 1960's to 54,789 in the 1970's, 56,614 in the early 1980's and 73,190 in the late 1980's (Table 12).

Taku-Snettisham (District 111)

The Taku-Snettisham fishery is typically split nearly evenly between coho and chum salmon, although coho is usually the most valuable component. Catches in that fishery have been relatively stable in recent years with decade averages of 24,272 in the 1960's, 35,665 in the 1970's, 30,534 in the early 1980's and 43,621 in the late 1980's. Peak catches are typically in late August.

SEAK Area 5 (Districts 106 and 108)

SEAK Area 5 (central inside) is composed of 2 distinct and separately managed drift gill net fisheries, the Stikine and Prince of Wales.

Prince of Wales (District 106)

Management of the fall fishery in District 106 (Prince of Wales) is sensitive to coho salmon abundance. Catches have varied widely in recent years. Decade average catches in the 1960's was 40,842 and 40,666 during the 1970's. The catch averaged 39,023 in the early 1980's but increased to 89,717 in the late 1980's, when the record annual catch of 205,000 fish occurred in 1986. Peak catches are typically in late August and early September.

Stikine (District 108)

The fall Stikine fishery targets coho salmon. In recent years, fishing time has been very restricted except in years of very high abundance while participation by fishing vessels has been low when the district has been open. Average annual catches declined from 21,758 in the 1960's to 14,700 in the 1970's and to 8,989 in the early 1980's and 4,949 in the late 1980's. Peak catches are typically in late August and early September.

SEAK Area 6 (Districts 101 and 102)

The majority of the SEAK Area 6 drift gill net catch was harvested by a single fishery, Tree Point (Subdistrict 101-11), while a small average catch in the 1980's was taken in hatchery terminal areas in District 101.

Tree Point (Subdistrict 101-11)

The Tree Point catch increased from an average of 7,818 fish in the 1960's to 19,179 in the 1970's. Catches in the 1980's have increased again to 28,726 (1980-84) and 39,607 (1985-89). This fishery targets a mixture of species. Coho contribute substantially to the fall fishery but are typically secondary to chum salmon in both number and value.

1.2.1.4. Annette Island Fisheries

The Annette Island Fishery Reserve was established by Presidential Proclamation in 1916. It provides a zone out to 3,000 feet offshore of Annette Island wherein the Reserve Indians have exclusive fishing rights. The reserve is located entirely within SEAK area 6. Salmon are harvested by seine and gill net gear. Also four floating fish traps are allowed to fish in specific areas on the west side of the island.

Trap

Coho salmon catches by fish traps operated at Annette Island have been relatively minor with averages of 4,121 in the 1960's, 1,973 in the 1970's, 4,019 in the early 1980's and 1,252 in the late 1980's.

Drift Gill Net

The drift gill net catch around the perimeter of Annette Island increased from an average of less than 1,000 in the 1960's and 1970's to 6,085 in 1980-84 and 25,694 in 1985-89.

Purse Seine

The purse seine catch at Annette Island increased from less than 100 in the 1960's to an average of 1,249 in the 1970's, 3,947 during 1980-84 and 7,396 in 1985-89.

1.2.1.5. Set Gill Net Fishery

The set gill net fishery occurs almost entirely in rivers in the Yakutat area, although a small saltwater catch occurs in Yakutat Bay. Almost all of the catch is contributed by several local rivers. The most important of these are the Tsiu and Situk Rivers. The transboundary Alsek River is a minor producer with catches averaging only 5,806 fish in the 1980's (Table 9). The total set gill net catch decreased from an average of 113,968 in the 1960's to only 64,628 in the 1970's before increasing

again to an average of 142,976 in the 1980's (Table 9 and Figure 16). Geological changes and transportation problems have been important factors in this catch history. A glacial advance adversely affected production in the Tsiu River, the single most important producer, beginning in 1966 and the fishery was closed. The glacier retreated several years later, but transportation became a problem until aircraft were brought into use to transport fish in the mid-1970's.

1.2.2. Sport Catch

Sport harvest estimates of coho salmon in marine and freshwater are available beginning in 1977 (Table 13). Sport catches were estimated by the ADF&G Sport Fish Division based on mail out surveys of anglers. The total catch shows an increasing trend, although weak returns to the Ketchikan area in 1987 and 1988 contributed to a lower total harvest. The total 1989 catch of 90,789 coho was the highest recorded. While the Juneau and Sitka marine sport fisheries showed a relatively constant upward catch trend, the Ketchikan marine catch increased substantially in the 1980's compared with the late 1970's.

1.2.3. Subsistence and Personal Use Catch

A directed coho salmon subsistence fishery occurs in Mitchell Bay on Admiralty Island and in Yakutat systems. Coho are considered an incidental species in other subsistence and personal use fisheries in the region. The total reported coho catch in Southeast Alaska has averaged less than 1,000 fish (Table 14). During the 1980's, the Yakutat catch averaged about 800 fish and ranged as high as 2,200. A new personal use fishery directed at sockeye was opened in the Taku River in 1989. The incidental catch of coho salmon by that fishery amounted to only 73 fish.

1.3. NORTHERN PANEL AREA OVERVIEW

Although the total commercial catch of coho salmon by each country in the Northern Panel area has varied widely from year to year, for the most part they have varied together (Figure 52). To the extent that catch is an indicator of abundance, then this similarity in trends may be due to the similar freshwater and/or early marine environmental conditions experienced by coho salmon in the Northern Panel area. Research in southern British Columbia and the Pacific Northwest indicates that temperature and rainfall during freshwater rearing, and coastal upwelling during early ocean life are important factors in determining survival rates to the adult stage.

Since Alaskan statehood, and until approximately 1977, the northern British Columbia commercial catch of coho salmon was slightly higher than the SE Alaskan catch. Since 1977, the total SE Alaskan commercial catch has been greater. The greater SE Alaskan commercial catches may be attributed to several factors. There may have been a higher survival of coho salmon in SE Alaska than in northern B.C.. There has been a gradual shift by the SE Alaska troll fleet to some outside areas thus increasing the number of stocks available for harvest, and the time and area other stocks would be exposed to fishing. Returns from hatchery programs in SE Alaska have been greater than those in northern B.C.. Finally, there has been more targeting by the SE Alaskan troll fleet on coho due to shortened chinook salmon seasons resulting from PST chinook catch ceilings.

Except for the exclusion of purse seines from Icy Straits in SEAK area 4, the pattern of net fishing in Southeast Alaska has remained essentially unchanged since statehood. The troll fishery is responsible for the majority of the increase in the SE Alaskan catch. The average troll catch during the 1985 to 1989 period increased by 776,863 (135%) over the average catch during the 1960's. The average purse seine catch during the period 1985 to 1989 increased by only 4,995 (2%) over that of the 1960's while that of the drift and set gillnets' increased by 120,710 (101%) and 39,076 (34%)

respectively.

In northern B.C., the total commercial coho catch has not shown an increasing or decreasing trend over time, although the 1960's was a decade of high average catch (1,380,036) relative to the 1950's (1,012,246), 1970's (968,078) and 1980's (925,008). Over this period of time, the troll and seine fleet have increased their proportion of the commercial catch while the gillnet fleet has taken a sharp reduction. Gillnets and seines no longer target on coho salmon in British Columbia and their coho catch is taken entirely as a bi-catch in fisheries directed at sockeye, pink and chum salmon. PST chinook restrictions have also influenced the conduct of troll fisheries for coho in northern B.C.. A shorter chinook season coinciding with the coho season, and attempts to minimize periods of chinook non-retention have probably resulted in lower harvest rates on coho despite the increase in fishing effort during July and August.

2. FISHERIES MANAGEMENT

2.1. NORTHERN BRITISH COLUMBIA

2.1.1. Licensing

The introduction of entry controls in the salmon fishery in 1969 marked the beginning of licence limitation in Pacific fisheries in Canada. At that time, two categories of licences were issued for salmon fishing; an "A" licence to vessels with 10,000 pounds or more of pink or chum salmon, or equivalent, during 1967 or 1968, and a "B" licence to vessels with less than 10,000 pounds of pink or chum salmon or equivalent in value, during 1967 or 1968. In 1969, there were 5,870 A licences and 1,062 B licences issued based on these criteria. Currently, there are approximately 4,500 licenced fishing vessels in B.C. reporting salmon landings (Table 15).

In 1970, a phase out period for B licences was announced: they would be issued annually only up to 10 years. In 1978, when most of the B licences were set to expire, the Minister of Fisheries and Oceans extended for an additional five years 103 licences which were still held by the original B vessel owner. At present there is only one B licence still being issued by the Minister.

Between 1969 and 1977 there was no restriction on the type of gear (gillnet, seine or troll) which could be used on a salmon licenced vessel. In 1977, a moratorium on the number of vessels allowed to fish with seine gear was implemented. In 1982, salmon vessels with a seine privilege were issued distinct salmon validation tabs. Those salmon vessels with a seine privilege are currently entitled to fish for salmon with any gear. Those vessels without a seine privilege may use either gillnet or troll gear or both (combination vessel). In 1989 (preliminary), 1,966 gillnets, 536 seines, 1,221 trollers and 785 troll/gillnet combination vessels registered salmon landings in British Columbia.

2.1.2. Management Objectives

As with other Canadian fishery resources a combination of biological parameters, and economic and social objectives is responsible for shaping the management system for coho salmon.

Spawning escapement goals have not been developed for most Canadian coho stocks, however, the attainment of escapement goals over large stock aggregates remains as an implicit objective throughout the management process. Rigorous stock assessments are being conducted

through the Pacific Stock Assessment Review Committee (PSARC) process so that MSY (maximum sustained yield) related spawning escapement goals or exploitation rate targets can be determined for some of these stock aggregates.

Economic and social objectives are inextricably intertwined, since uses of the resource for recreation or Indian food fish have economic aspects (resident recreational consumers, tourism and equipment manufacturing, and the value of the food product respectively) as well as their social and cultural value. Similarly commercial fisheries have social aspects, in addition to their economic value, such as the maintenance of coastal communities and the provision of fresh seafood to the non-fishing public.

In addition to the harvest management of wild fish stocks, the Canadian management system strives to actively protect the aquatic environments upon which the fish depend and takes advantage of opportunities to expand the available resource through ecologically sound enhancement programs. The cost effectiveness of different approaches is also a consideration. Accomplishing these objectives requires extensive consultation with public groups and a constant review by management agencies to ensure that component programs are effective.

An essential element in understanding the Canadian management approach to coho salmon is the relative priority given to the various uses of the resource. Complementary to these priorities is the principle that the viability of all fishing groups is extremely important to Canada. The following list, in order of priority, represents the basis for the current management approach:

1) spawning escapement

2) Indian food fisheries

3) commercial and recreational fisheries

These priorities provide general guidance on the allocation of the available harvest and they do not imply that one priority must be completely satisfied before the next one is addressed. The relative priority of commercial net and troll fisheries, and freshwater and ocean recreational fisheries may vary over broad geographic regions. For the most part, because of the large number and remoteness of B.C. coho stocks, ocean troll and recreational fisheries are the most effective means of harvest. On large river systems, however, such as the Skeena and Fraser rivers, there is a growing demand for freshwater recreational and Indian food fisheries in the rivers themselves.

2.1.3. Troll Fisheries

The major coho troll fishery in north coastal B.C. is the Queen Charlotte Islands troll fishery in Areas 1, 2E and 2W. This fishery also catches large numbers of chinook and pink salmon.

Troll fishery management has undergone major changes over the past two decades, particularly since the early 1980's when restrictions associated with chinook conservation were first imposed. The coho troll fishery in the 1970's began on June 15th (or earlier in conjunction with net fisheries) and continued until the troll season ended, generally at the end of October. Trolling was not permitted in the majority of inside areas on the mainland coast; the June fisheries were restricted to barbless hooks only and eight lines per boat.

Major changes to the troll fishery began in 1981, when the starting date for the coho fishery was moved to July 1st as an economic measure to increase the size of coho harvested.

After the Pacific Salmon Treaty was signed in 1985, coho trolling was also impacted by the troll management measures for chinook salmon that included area closures to trolling (west coast of the Queen Charlotte Islands in mid-August) and closure of the troll season in early to mid-September from 1986 through 1989 to minimize chinook shaking. Troll management measures designed to assist in the conservation of early run Skeena River coho stocks were implemented in 1989 and included seasonal closures to trolling in the coastal areas adjacent to the Skeena River, and a 2 week closure of part of northern Hecate Strait.

2.1.4. Net Fisheries

Changes in the management of coho net fisheries in the past 20 years have been significant. Prior to the late 1970's net fisheries directed at all salmon species opened in many areas in early June and continued into September and often October. Fisheries on the mainland coast were targeting on coho after the third or fourth week of August. In the late 1970's and early 1980's there was a major realignment of net fisheries. The most significant actions were:

a) to delay the seine fishery openings until mid-July, mainly to reduce juvenile salmon mortalities;
b) to eliminate fisheries targeting on coho salmon; and
c) to close the outer fisheries on the mainland coast in Areas 5 through 10.

The closure of the fall coho directed fisheries has significantly reduced the gillnet catch of coho. The early season seine closures have eliminated the coho catch and juvenile mortality during this period, but the total season seine catch of coho has not declined. This is due to the increased fishing effort required to harvest the large pink and chum runs in northern B.C. during the last decade.

As with the troll fishery, major stock specific management actions have been taken in net fisheries harvesting early run Skeena River coho salmon stocks. Beginning in 1983, the gillnet and seine fisheries in Area 4 were restricted to a maximum of 4 days per week as a conservation measure to protect Skeena coho and steelhead. In 1989, this measure was strengthened to restrict the fishery to 2 days per week during the peak migration period in the first two weeks of August.

2.1.5. Indian Food Fisheries

Indian food fisheries have the first priority for harvesting surpluses after conservation objectives are met. Indian coho fisheries occur predominantly in non-tidal or river mouth areas. These fisheries are generally regulated through the issuance of food fishing licences which generally specify gear or time restrictions, but may include area, species or quantity limitations.

The impacts of management actions have had little effect on catch or effort trends, except in the Skeena where native catch has been reduced as part of conservation efforts in all fisheries.

2.1.6. Sport Fisheries

Tidal

Sport fisheries for coho in tidal waters are regulated by a daily bag limit of 4, a possession limit of 8 salmon and a minimum size limit of 30 cm. There are no closed times for tidal sport fishing for coho and only few river mouth area closures (in place as chinook conservation measures). These management measures have remained unchanged for the past two decades.

Non-tidal

Sport fisheries for coho in non-tidal waters are regulated by daily limits of 2 and possession limits of 4 coho over 50 cm, with an additional 2 coho between 30 and 50 cm allowed daily (jacks). In addition to these basic regulations, there are numerous restrictions on time, area and gear throughout northern British Columbia that affect coho fisheries. In many cases these measures are intended for the conservation or allocation of chinook, steelhead or trout species rather than for coho.

Of the coho specific management measures, the most significant is the closure of coho sport fishing, instituted in 1989, in all of the Skeena River and it's tributaries for the duration of the upper Skeena coho run (July 1 to August 25). In 1990, this restriction was relaxed to permit the retention of 1 coho per day beginning in mid-August in response to a larger than expected upper Skeena coho run. This in-season management is based on the strength of the Skeena test fishery coho index.

2.1.7. Transboundary Rivers Fisheries

Management of transboundary river salmon to achieve conservation and allocation objectives, as stipulated by the Pacific Salmon Treaty, requires a cooperative approach by Canada and the United States. To this end, management plans are developed within the PSC prior to each season, to guide the conduct of fisheries and stock assessment programs in each country (see PSC Report TCTR (90)-2 for the 1990 salmon management plan for the Stikine, Taku and Alsek Rivers). Canadian commercial fisheries in the Stikine and Taku rivers are managed primarily for sockeye salmon, however, catch limits for coho salmon exist in both rivers.

2.2. SOUTHEAST ALASKA

2.2.1 Licensing

Salmon net and power troll fisheries in Southeast Alaska were placed under limited entry in 1975. Entry into the hand troll fishery was limited in 1980. Vessel participation by gear type is discussed in sections 2.2.3. through 2.2.6.

2.2.2. Management Objectives

The principal management objective for Southeast Alaska coho salmon is to achieve maximum sustained yield. However, there are also established guidelines for allocation among user groups that can affect that objective. The Board of Fisheries has established a guideline for allocation of the commercial catch among four gear groups which preserves the historical harvest distribution from the years 1969-1988 (troll 61%, seine 19%, drift gill net 13%, and set gill net 7%). With the exception of the 10-day region-wide troll closure first initiated in 1980, the department has not taken direct management actions to achieve these percentages which were established as a long-term objective.

The primary management objective for stocks that are harvested primarily in highly mixed-stock fisheries is to regulate average exploitation rates to a sustainable level and to reduce these rates inseason in years of low wild stock returns. Fisheries targeting on larger, less mixed stocks from Lynn Canal systems, the Taku River and Yakutat systems are managed to achieve levels of escapement that are thought to be near optimum or at least sustainable. Because of very limited escapement programs, fisheries are managed primarily on the basis of catch and effort

statistics compared with historical values. There is very limited feedback from escapement assessment programs with which to evaluate success in meeting objectives. Overall management effectiveness is based on an assessment of general trends in coho abundance, combined with available information on escapements, harvest rates, and fishery performance data.

2.2.3. Troll Fisheries

Historically, the troll coho salmon season opened June 15 and extended through September 20. However, in recent years, the general fishery has not opened until July 1. There are two types of troll vessels in Alaska, power troll and hand troll. Vessels using hand troll gear are limited to 2 lines on hand-operated gurdies or 4 sport fishing poles. Although more permits are available compared with power troll gear, hand trollers take a smaller portion of the catch. Vessels using power troll gear are generally larger than those using hand troll gear and are limited to 4 lines on power operated gurdies except within the Exclusive Economic Zone north of the latitude of Cape Spencer where 6 lines may be used. Entry into the power troll fishery was limited in 1975. Since then, an average of 812 permits have been fished each year (Table 16). However, the number of participants in the hand troll fishery greatly increased in the late 1970's in anticipation of limited entry which was implemented for that fishery in 1980. Since entry was limited, an average of 882 have been fished each year. The number has shown a steady decline until 1989 and 1990 with 687 and 701 respectively.

Prior to 1979, the troll fishery was relatively unrestricted within the general regulatory season with the exception of early season closures in 1969 and 1975 when coho runs were exceptionally weak. In 1979, the Board of Fisheries adopted regulations which closed or restricted fishing in several inside districts of northern Southeast in order to lower the exploitation rate. A large portion of Stephens Passage (District 111) was closed to commercial trolling while the primary migration corridor including Cross Sound, Icy Strait and northern Chatham Strait was placed on 8 day on, 6 day off fishing periods. The 8 day on, 6 day off restriction was relaxed over most of the migration corridor area after the mid-1980's. Beginning in 1979, trolling effort began to be more concentrated in outer coastal and offshore areas and an increased percent of the catch began to occur in those areas.

In 1980, in response to concern about increased catches in the highly mixed-stock fisheries in outside areas, the Board of Fisheries established provisions for a possible 10-day troll closure during the peak of the season to maintain the historical allocation balance between outside and inside fisheries and, if necessary, to respond to conservation concerns. The need for the closure is based on an inseason assessment of catches and catch rates in the troll fishery, drift gill net fisheries and the Juneau marine sport fishery, the only sport fishery with a historical series of inseason catch data. Catches and catch rates are compared with regional averages from 1971-80. The 10-day closure has been implemented each year since 1980.

Strong coho salmon returns have occurred in most years after 1980 and the only major inseason management action has been to implement the 10-day region-wide closure. An exception occurred in 1988 when stocks in southern Southeast were very weak and 13 additional days of region-wide inseason closures were implemented, and the season in southern Southeast was closed early.

In addition to these closures, the troll fishery has been closed for a few days during late June or early July each year since 1981 in order to meet chinook management objectives. These management objectives have also resulted in more targeting on coho due to shortened chinook salmon seasons.

During its 1989 meeting, the Board established an allocation guideline for coho salmon among the commercial gear types as follows: troll 61%, purse seine 19%, drift gill net 13% and set gill net 7%.

2.2.4. Purse Seine Fisheries

The purse seine coho catch is taken in fisheries that are directed at other species. Permitted fishing time and, therefore, catch is heavily dependent upon the abundance of the most common target species, pink salmon. Entry into the purse seine fishery was limited in 1975, since then an average of 352 permits have been fished each year. Purse seine vessels are limited to an overall length of 17.9 m and may not use drums.

A shift in the distribution of the purse seine catch toward southern Southeast has been largely the result of elimination of purse seining beginning in 1974 in most of District 114, a major salmon migration corridor in northern Southeast. Prior to this, an average of 55% of the purse seine catch occurred in southern Southeast compared with 87% following this action. The average purse seine catch in northern Southeast decreased after 1973 from 139,000 to 37,000 while the average catch in southern Southeast increased from 186,000 to 228,000.

2.2.5. Drift Gill Net Fisheries

The Lynn Canal (District 115) and Tree Point (District 101) fisheries are managed primarily for species other than coho. Fishery openings and vessel participation in these fisheries have been influenced primarily by chum and sockeye abundance and the abundance of pink salmon (District 101). The Prince of Wales (District 106) and Stikine (District 108) fisheries are managed based on coho salmon abundance after mid-August. Openings in District 108 are very restricted in years of low coho catch rates in central inside districts. The Taku-Snettisham fishery (District 111) is managed primarily for coho salmon after mid-August but fall chum salmon abundance is also given substantial weight in determining fishing times and areas.

Entry into the drift gill net fishery was limited in 1975, since then an average of 456 permits have been fished each year.

2.2.6. Set Gill Net Fisheries

Management of the Yakutat set gill net fisheries has remained relatively consistent from year to year since the 1960's. Catches have been influenced primarily by coho abundance, weather and transportation considerations rather than changes in management strategy. Most of the Yakutat set gill net fisheries target only specific local stocks, with the exception of a small fishery in Yakutat Bay. Fisheries in clear streams are managed based on catch, effort and aerial survey counts while catch and effort data alone are used to determine run strength in glacial streams.

Entry into the set gill net fishery was limited in 1975; since then, an average of 150 permits have been fished each year.

2.2.7. Annette Island Fisheries

Fisheries in the waters within 3,000 feet of the shore of Annette Island are under the exclusive control of the Metlakatla Indian Community which establishes all regulations. No data is available on effort.

2.2.8. Sport Fisheries

The sport bag limit for coho salmon in most Southeast Alaska saltwater and freshwater sport fisheries is six fish per day and 12 in possession. Exceptions include Juneau roadside streams were the daily limit is 2 fish. Marine sport fisheries have occasionally had bag limits restricted to conserve weak coho stocks. Emergency closures have also occurred in freshwater fisheries (i.e. September closure of streams in Sitka Sound in 1990).

2.2.9. Subsistence and Personal Use Fisheries

Coho are managed as an incidental species in most subsistence and personal use fisheries. Exceptions include Mitchell Bay on Admiralty Island and Yakutat systems where coho is the primary target species of fall subsistence fisheries. State and Federal laws both require that preference be given to subsistence fisheries over commercial, sport and personal use fisheries. However, the laws conflict and are currently unclear about who qualifies for subsistence. The outcome of legislative, legal and Board of Fisheries decisions about subsistence may have a major impact on the use of coho salmon by the subsistence fishermen and could have a significant effect on other fisheries. Subsistence and personal use fisheries are limited to a specified seasonal catch per individual or household.

Note: Effort data for Northern Panel Area fisheries was exchanged in the fall of 1989 as part of this assignment. However, the schedule for completion of this report did not allow for the thorough analysis required to fully evaluate this data. Simple trends in effort patterns are not always easy to explain and their impacts on coho salmon stocks may not always be obvious. Factors such as changes in gear, allocations, catch ceilings, inter-species interactions and stock migration patterns need to be fully considered if misleading conclusions are to be avoided. Because of these complexities, the Coho Technical Committee recommends that a full evaluation of available effort data be considered by the Northern Panel as the subject of a follow-up report dealing specifically with this topic.

3. STOCK DESCRIPTIONS AND STATUS

3.1. LIFE HISTORY SUMMARY

Coho salmon stocks in Southeast Alaska and northern British Columbia are characterized by an older average freshwater age compared with more southern stocks. While most coho salmon from Oregon, Washington and southern B.C. spend one year in freshwater, a higher percentage of fish in the north spend 2 or 3 years in freshwater. Stocks in lake systems in Southeast Alaska tend to have more varied and older average freshwater ages; smolts up to 5 or 6 years old have been found in these systems.

Most coho smolts migrate to sea from late April through mid-June. The vast majority spend 14-18 months in the ocean. A substantial proportion of the males in some populations return as jacks after only one summer at sea. Coho salmon that have spent more than one winter in the ocean are very rare. Most fish migrate north and west along the coast during their first summer (Hart 1980) after leaving freshwater and move into the north Pacific in the fall and winter. They return toward the coast in the spring and early summer as the ocean surface warms (Godfrey et al. 1975). Coho arrive along the British Columbia coast from late June to September. Migration into Alaskan fisheries typically increases during the month of July with peak abundance occurring in early to mid-August.

Most northern coho stocks migrate into freshwater in the fall, usually between mid-August and mid-October. Movement from estuaries into streams and from lower river pools to headwaters spawning areas often coincides with fall freshets. Depending on the system, fall stocks appear to spawn from October until as late as February. Less common are early migrating and spawning stocks that enter freshwater during July and August. These stocks are known to occur in several lake systems, often associated with partial barriers to migration, and in interior tributaries of large rivers like the Skeena and Taku.

Northern coho stocks occur in three major types of systems. The most prevalent are short coastal streams with only limited off channel rearing habitat such as ponds and sloughs. These systems are common in narrow valleys on both islands and the mainland. While the productivity of most individual streams of this type is usually low, amounting to up to a few hundred adults, they are never-the-less thought to be an important component of total regional production because of their large number.

Much more productive are coastal streams that are connected to accessible lakes and ponds. Lakes provide important rearing habitat and environmental stability by acting as a buffer against wide fluctuations in temperature and streamflow. Several lake systems in Southeast Alaska have been studied as indicator stocks, while the Lachmach River in northern B.C. is an indicator stock with numerous ponds. Most have total adult production between 1,000-8,000 fish. Varied age classes, combined with a more constant rearing environment, contribute to stable production from coho stocks in lake systems.

Rivers with extensive off channel habitat such as sloughs, marshes, beaver ponds, and lakes are a third major system type. Lower sections of these streams are usually low-gradient and flow through broad valleys. Although more limited in number, large river systems typically produce several thousand or more coho salmon. Some of the largest systems of this type such as the Skeena, Nass, Stikine, Taku, and Alsek Rivers originate from behind the coast range and host distinctive interior coho populations which often have earlier run timing. These interior coho populations present special management problems because they may be less productive compared with coastal stocks and often inter-mix in net fisheries with other more abundant species from the same rivers.

3.2. NORTHERN BRITISH COLUMBIA PRODUCTION AREAS

In this report, Canadian coho stocks have been described by Statistical Areas and have been further grouped into regions as described in Section 1.1 (ie. Queen Charlotte Islands, Nass/Skeena, North Central, and South Central). This was done mainly to be consistent with the groupings for catch data. Analysis of whether different production area groupings might be more appropriate given the range of coho production and harvest characteristics such as types of producing streams, ocean migration patterns, harvest patterns, and exploitation rates, has not been done at this time.

3.2.1. Queen Charlotte Islands

Area 1

Area 1 includes those streams flowing north and west from the northern portion of Graham Island. Much of this area consists of low gradient drainages with extensive wetlands. Access is generally poor due to lack of roads and the difficulty of open-ocean boat access. Coho escapement records exist for 15 streams with most located in Masset Inlet and Naden Harbour.

Two-thirds of these are significant producers (escapements estimated to be in excess of 1000) but only the major Masset Inlet streams and Naden River have consistently recorded coho escapements. There are several other fairly large systems flowing into the north and west coasts of Graham Island which are suspected to produce significant numbers of coho, but have never been properly assessed due to inaccessibility. The Yakoun River in Masset Inlet is thought to be the largest producer in Area 1. Area 1 stocks enter the spawning streams in early-mid September and are available to ocean troll fisheries in July and August.

Coded wire tagging of coho in Area 1 is currently limited to one hatchery in Masset Inlet - King Creek in the Yakoun River system). There is no reliable escapement assessment for this tagged stock. Accurate escapement information exists for recent years on several minor streams with small enhancement projects.

Area 2E

Area 2E includes all streams flowing into the east coast of Graham and Moresby islands as well as streams off southern Moresby. The northern portion of Area 2E includes a fairly flat section of Graham Island, with long, low gradient streams such as the Tlell River, while the southern portion has much steeper terrain and many short streams with relatively small coho populations. Coho escapement has been reported in 106 Area 2E streams, but only 25 have been consistently recorded since 1950. Area 2E is divided into 8 sub-areas for domestic management purposes. Within Area 2E, 80% of recent production originates from Skidegate Inlet (main systems Deena and Honna rivers), Cumshewa Inlet (Pallant and Mathers creeks), and the Tlell and Copper rivers. Most stocks in this area enter spawning streams from mid-September to mid-October. The Tlell River and Cumshewa Inlet stocks may be slightly earlier, with arrival in-stream beginning in mid-August.

Pallant Creek Hatchery has been releasing coded wire tagged hatchery coho since the 1977 brood year. The northern B.C. troll fishery is the largest harvester of this stock, with terminal sport harvest also being substantial in some years. Weir counts of Pallant Creek coho escapement have been conducted since 1981. Accurate coho escapement data also exists for several smaller streams which have small enhancement projects.

Area 2W

Coho production from the west coast of the Queen Charlotte Islands is thought to be fairly minor, with most streams being small, steep gradient systems. Sporadic coho escapement data exists for 71 Area 2W streams, but only 3 streams (all in Tasu Inlet) have consistent records going back to 1950. Coho enter these streams from mid-September to late October.

There are no coho coded wire tagging of coho in Area 2W.

3.2.2. Nass/Skeena

Area 3

Area 3 consists of the Nass River and tributaries and the surrounding coastal area. The Nass River tributaries account for the majority of the coho producing streams in this area and approximately 60% of the recent escapement.

There are coho escapement records for 32 streams in the coastal portion of Area 3, while only six streams have been surveyed consistently since 1970. The major stocks are from medium-

sized systems associated with the coastal inlets such as the Bear River (Portland Canal), Kitsault River (Observatory Inlet), Khutzeymateen and Kwinamass rivers (Portland Inlet), and Kincolith and Iknouk rivers (Nass Bay). These stocks are believed to migrate through the terminal Area 3 sockeye and pink fishery in August and September.

There is coded wire tag information for two coho stocks in the coastal portion of Area 3. The Kincolith River community hatchery has released coded wire tagged hatchery coho since the 1984 brood year, while wild coho smolts have been enumerated and tagged in the Lachmach River (Work Channel) since 1987. Adult fence counts are available for the Lachmach since 1989.

The major Nass River stocks are from the Tseax, Cranberry, Meziadin, and Kwinageese systems. The Meziadin stock has been partially enumerated at a sockeye counting facility since the early 1970's. The timing of this stock at the fishway (early August to mid-September) indicates a mid-July to mid-August timing through the terminal fishery. It appears that the upper river stocks (from Meziadin upstream) generally have earlier run timing than the coastal systems and the lower river stocks such as the Tseax. Escapement data for the Nass tributaries is generally not available for the 1950's and 1960's. Escapement reporting has been more complete since 1970, with 14 streams having consistent records.

There has been no coded wire tagging of Nass River stocks to date. The Kincolith hatchery stock may have a similar migration pattern, but tends to have later run timing than the upper river stocks are believed to have.

Area 4

Area 4 consists of the Skeena River system and some small coastal streams near the mouth of the Skeena. Skeena River tributaries constitute over 90 percent of the coho streams in Area 4. Coho are distributed throughout the Skeena River system up to 600 km from the mouth. The different Skeena coho stocks therefore experience a very wide variation in spawning and rearing conditions with a gradation from wet coastal conditions (cool summers/mild winters) to drier interior habitats (warm summers/cold winters). There are also corresponding differences in adult run timing and possibly individual stock productivity.

Upper Skeena stocks such as the Babine and Morice probably migrate through the river-mouth net fishery from mid-July to mid-September. The coho count through the Babine River fence, for instance, peaks in September and tapers very quickly through October. Lower Skeena stocks such as the Lakelse are later in spawning and probably peak in the river-mouth terminal fishing area in September. These stocks are likely caught at higher rates in the ocean troll fisheries than are up-river stocks because of their run timing, but escape most of the terminal net fishery. Coastal Area 4 stocks are even later in timing than the lower Skeena River stocks.

The Skeena River test fishery and the Babine River fence provide long term, consistent records of coho escapement to the Skeena River. Although both enumeration projects were implemented primarily to record the sockeye migration, a significant portion of the coho run is also covered. The Skeena River test fishery has operated since 1956 and provides a consistent index of the magnitude of the early part of the Skeena River coho escapement past the commercial fishery. The Babine River fence, located in the upper reaches of the Skeena watershed, has been in operation since 1947 and provides a count of most of the coho escapement into the upper Babine system.

Coded wire tag data are available for a number of small hatchery stocks in the Skeena system beginning with the 1986 fishing year. Currently, there are three upper Skeena stocks with

at least three years of coded wire tag data; Toboggan Creek, Babine River, and Kispiox River. A lower Skeena stock was tagged in 1989 and returns are expected beginning in 1990.

Area 5

The production from this area comes from about 50 small coastal streams located on the mainland coast flowing into Grenville Channel and on the islands to the west. Many are lake fed and also support sockeye, pink, and chum stocks. There are consistent coho escapement records since 1950 for 18 streams. The timing of these stocks through the terminal net fishery is probably from mid-August to September (from backdating appearance dates on the spawning grounds).

There are no coded wire tag data for Area 5 coho.

3.2.3. North Central Coast

Area 6

Area 6 is a very large area consisting of larger mainland systems in the northern, 'inside' portion and many smaller coastal-type streams on the islands in the southern, 'outside' portion.

The northern half of Area 6 (Gardner Canal, Kitimat Arm, and Douglas Channel) includes 46 streams with coho escapement records and currently accounts for over 75% of the total Area 6 escapement. The major producers are the larger mainland rivers such as the Kemano, Kitlope, Quall, and Kitimat. The Kitimat River hatchery now contributes significantly to the production of this area. The southern portion of Area 6 consists of 73 streams with coho escapement records, most of which are of the small coastal variety with peak escapements of less than 1000 fish. Migration into the streams occurs from late August through early October in all portions of Area 6. There are consistent coho escapement records since 1950 for 44 of the larger coho producers.

The Kitimat hatchery has released coded wire tagged coho since the 1983 brood year, while the Hartley Bay community hatchery, located near the entrance to Douglas Channel, has released coded wire tagged coho since the 1985 brood year. There is no accurate escapement information for either of these stocks.

Area 7

The streams in Area 7 are mainly small island and mainland coastal systems with modest production. There are 61 streams with coho escapement records, with only 12 of the larger producers having consistent records from 1950-89. Some runs are reported to enter the streams as early as mid-July, with the majority having late August through September arrival timing.

Two small community hatcheries in Area 7 have released coded wire tagged coho, with returns beginning in 1987 - McLaughlin Bay Creek hatchery near Bella and Kitasu Creek hatchery at Klemtu. The escapement monitoring in these systems is incomplete.

Area 8

There are 30 streams in Area 8 with recorded coho escapements, but only 8 have been recorded consistently from 1950-89. Coho production in Area 8 is dominated by stocks from the Bella Coola system, with recent escapements estimated to average 20,000 spawners. This represents more than 60 percent of the estimated Area 8 escapement. The other significant

producers are the larger mainland systems such as the Kimsquit, Dean, Kwatna, and Koeye. Coho are reported to enter the Bella Coola and Dean systems as early as July, while the majority of the stocks arrive in the spawning streams in September.

Coded wire tagged hatchery coho from Bella Coola stocks have been released since the 1981 brood year. The escapement data for Area 8 is considered to be of poor quality with the exception of the Martin River, which has been surveyed in a consistent manner since at least 1970.

3.2.4. South Central Coast

Area 9

This is a relatively small area consisting of mainland streams entering Rivers Inlet. There are 24 streams with recorded coho escapements. Over 50% of the coho production originates from the Owikeno Lake system. Only 6 streams in Area 9 have consistent coho escapement records for the 1950-89 period. Coho stocks are reported to arrive in the spawning streams in September and early October.

There is no coded wire tag information for Area 9 stocks. The escapement data for this area are considered to be of poor quality.

Area 10

Area 10 consists of streams entering Smith and Boswell Inlets. There are 8 streams with coho records. The coho run timing is similar to Rivers Inlet, with September-October arrival in-stream.

There is no coded wire tag information for these stocks and the escapement data for coho is considered to be very poor.

3.2.5. Transboundary Rivers

Transboundary rivers supporting Canadian fisheries include the Stikine, Taku and Alsek rivers. Escapements have been enumerated by aerial surveys, and through weir counts in a small number of tributary streams.

3.3. NORTHERN BRITISH COLUMBIA STOCK ASSESSMENT DATA

3.3.1. Escapement Enumeration

Extensive escapement surveys are conducted annually by DFO fishery officers using visual enumeration techniques (usually foot or aerial surveys). The information is recorded on standard forms (B.C. 16) and is entered on a computer database to facilitate retrieval and analysis of the data. These records include escapement estimates for all salmon species present in a stream. In north coastal B.C., coho escapements have been recorded for over 500 streams, but the majority of these have only been surveyed sporadically. Approximately 175 streams have relatively consistent coho escapement records for the period from 1950 to 1989.

In most cases, the coho escapement data are collected incidentally to other fisheries management activities, and therefore, may not be collected in a consistent manner and at the

optimum time to assess the coho run. Often, streams are visited only once during the season. The protracted timing of most coho runs and the presence of coho in a very large number of small tributaries (usually having ample amounts of debris cover) also make the visual assessment of coho escapement very difficult. Other factors such as variability in weather, streamflows, visibility, migration timing, and differences among observers, all affect the reliability of the estimates. Despite these problems, the coho escapement data on the B.C. 16 reports are, in most cases, the only indication of escapement levels in most coho streams, and if aggregated over large areas, may permit the examination of trends over long periods of time.

For this report, the existing escapement database was used, but only streams which had consistently recorded coho escapements were included in the summary for each Statistical Area (Figures 22 to 25). Streams with infrequently recorded coho escapements (ie. gaps in data of over 4 years in succession, or more than 5 years in a decade) were not included. A list of the streams which were used in the summary is presented in Appendix Table 41. The data are intended to indicate trends in escapement over time rather than absolute escapement levels.

Work is underway in Canada to assess the existing coho escapement data and recommend ways to improve coho escapement monitoring. This process will include an analysis of the quality of the existing data in order to focus on those indicator streams which may be most useful for analysis of trends in coho escapement.

The highest quality coho escapement data are those from streams which have counting fences which enumerate virtually every fish entering the river. On the north coast of B.C., only the Babine River, a major tributary of the Skeena River has a long time series (since 1946) of accurate coho escapement data from fence counts. This fence is used primarily for sockeye enumeration, but a substantial portion of the coho run is also enumerated annually. There are several other coho streams which have more recently established counting fences which will enumerate adult coho. These fences are mainly associated with enhancement facilities and include the following streams (with location and first year of accurate count):-

1) Pallant Creek - Area 2 East, Queen Charlotte Islands (1981)
2) Lachmach River - Area 3, Work Channel (1989)
3) Toboggan Creek - Area 4, Upper Skeena/Bulkley R., Smithers (1989)
4) Upper Bulkley R. - Area 4, Upper Skeena/Bulkley R., Houston (1989)
5) Thornhill Creek - Area 4, Lower Skeena R. near Terrace (1990)
6) Clearwater Creek - Area 4, Lower Skeena R., Lakelse (1990)

The next level of coho escapement data quality would include those streams which are enumerated specifically for coho, have good visibility/access, are surveyed several times over each coho run, and have been surveyed consistently for a reasonable time period (eg. over at least 5 years). The existing database will be reviewed to identify these streams which may have higher quality coho escapement data.

3.3.2. Code Wire Tag Data

A broad range of north coast B.C. coho stocks have been coded wire tagged to determine catch distribution patterns and hatchery contribution rates (Figure 26). Coded wire tag data for British Columbia coho stocks is summarized in Figures 27 to 35. The following tagged coho stocks are currently providing important information for present and future fisheries management programs (first significant year of tagged returns is in brackets).

a) Kincolith River - Area 3 (mouth of the Nass River) - hatchery smolts (1987)

b) Lachmach River - Area 3 (head of Work Channel) - wild smolts (1989)
c) Babine River - Area 4 (Skeena River) - hatchery smolts (1987)
d) Toboggan Cr. - Area 4 (Skeena River) - hatchery smolts (1988)
e) Kispiox River - Area 4 (Skeena River) - hatchery smolts (1986)
f) Hartley Bay Cr. - Area 6 (bottom of Douglas Channel) - hatchery fed fry (1988)
g) Kitimat River - Area 6 (head of Kitimat Arm) - hatchery smolts (1986)
h) Mclaughlin Bay - Area 7 (McLaughlin Bay Cr.) - hatchery smolts (1987)
i) Snootli River - Area 8 (Bella Coola River) - hatchery smolts (1984)
j) Pallant Creek - Area 2E (Cumshewa Inlet) - hatchery smolts and fed fry (1980)
k) Masset - Area 1 (King Creek, Yakoun River) - hatchery smolts (1989)

A lower Skeena River stock (Kitsumkalum) was first tagged in 1989 and fishery recoveries are expected in 1990. Other than a need for CWT data for Nass River coho and Area 4/5 coastal stocks, the production of coho in north coastal British Columbia is reasonably well represented by the current CWT program. The reliability of CWT based catch distribution patterns is a concern for some stocks in some years when low numbers (<200) of estimated recoveries are reported. In recent years, low ocean survival rates have been the primary reason for low numbers of estimated tag recoveries. Inadequate tagging rates can also contribute to this problem.

3.3.3. Exploitation Rate Data

Only one of the above CWT'ed stocks, the Lachmach River, is a wild stock. It is part of a study on northern coho productivity and currently provides the only estimate of exploitation rate on north coastal B.C. coho stocks. Counting fences on hatchery streams at Pallant and Toboggan creeks also provide an opportunity for collecting CWT escapement data. Further critical evaluation of Pallant Creek data is required before it is used to estimate exploitation rate, while technical problems at Toboggan Creek need to be addressed to provide an estimate of total CWT escapement. Incomplete recovery of escapement CWT's is the primary concern.

3.3.4. Habitat Quality

Coho salmon are particularly sensitive to the degradation of stream and lake environments because of their relatively long residency in freshwater compared to other salmon species. Water removal for agricultural and industrial purposes, chemical and domestic pollution, siltation, and physical blockages to spawning and rearing habitat can all seriously affect coho production.

The north coast of British Columbia has relatively little 'heavy' industrial activity with very local impacts centred around Prince Rupert (pulp mill, fish processing, port facilities), Kitimat (aluminum smelter, pulp mill), Stewart (log handling, shipping), and, to a lesser extent, the Interior towns (saw milling). Agricultural activity is also sparse, with some activity centred around the Hazelton/Bulkley Valley area and in the Bella Coola Valley.

The most widespread activity which may affect habitat quality in the area is timber extraction and handling. Logging activity has expanded greatly in virtually all areas since the 1950's. Forestry activities can result in increased sedimentation of streams, increased streambed instability, and changes in streamflow and temperature regimes. The research currently available on fish/forestry interaction, however, indicates that the effects on salmon populations are very complex and difficult to measure. In the past, there have undoubtedly been some adverse changes to stream habitat and some (at least temporary) loss of production as a result of logging practices. With improved habitat protection practices, increased public awareness, and improved agency policy (eg. DFO National Habitat Policy) immediate, direct habitat losses should no longer occur.

Potential long term, cumulative impacts are much more difficult to determine and to manage.

In general, coho salmon habitat on the north coast of British Columbia has not been seriously degraded by industrial development in the past, and there is no reason to expect significant changes in the near future.

3.3.5. Enhancement Contribution

Canadian hatchery releases of coho salmon fry and smolts have grown significantly since the early 1980's (Table 17).

Canadian enhancement contributions to north coast B.C. troll and net fisheries have averaged 34,000 and 3,000 coho respectively from 1977 to 1988 (Table 18 and Figure 36). Hatchery contributions are estimated by expanding the recoveries of coded wire tagged fish by the fishery sampling rate and the proportion of the hatchery release that is tagged. The proportion of the troll catch made up of Canadian hatchery production has increased from 22,000 or 3 percent of the total troll catch (1977 to 1981 average) to 42,000 fish or 4.6 percent of the catch (1984 to 1988 average). Net fishery contributions are highly dependant upon the precise location of enhancement facilities and the management regime for other salmon species since coho are always caught incidentally in chum, sockeye or pink fisheries. As a result, net fishery contributions have remained fairly stable varying by only 500 fish and 0.3 percent between the two previously mentioned periods.

Although there has been an increase in the overall Canadian enhancement contribution to north coast B.C. fisheries, the increase may have been dampened by apparently very poor ocean survival rates experienced in recent years.

3.4. STATUS OF NORTHERN BRITISH COLUMBIA STOCKS

3.4.1. Queen Charlotte Islands

Catch data are not useful as indicators of QCI coho stock strength. Net fisheries take place in both terminal and mixed stock areas and are not consistent in their time and location from year to year. Troll fishery catches are made up of a mixture of QCI, north and central coast B.C. and southern Southeast Alaska stocks.

QCI escapement data is generally considered to be of poor quality. Several large stream systems have no data. Visual estimates may not be consistent due to variability in run timing and access (eg. due to development of logging road systems in 1960's and 1970's, access in some areas has improved). QCI escapement trends based on streams with consistent records indicates a stable pattern in the 1980's at levels lower than those in the 1960's and 1970's. Within this overall pattern, Area 2E shows a steady decline from the mid-1970's, while the other two areas show no particular recent trend. Comparisons of escapement levels between Statistical Areas is not generally valid, however, the relative order of escapements for QCI areas is believed to be an exception; ie. Area 2E > Area 1 > Area 2W.

Coded wire tag data indicate that QCI coho are caught primarily in the northern B.C. troll fishery (Areas 1 to 5), with sport fisheries, both tidal and non-tidal, the next largest harvester. Alaskan fisheries in total harvest an extremely small (<5%) proportion of the catch.

Escapement data is available for the Pallant Creek hatchery stock, but detailed evaluation of this data for estimating fishery exploitation rates has yet to be completed.

The available data is insufficient to draw firm conclusions about the status of QCI coho stocks. While escapement levels are down from the mid-1970's, there is no significant recent trend.

3.4.2. Nass/Skeena Area

Total commercial coho catch in Areas 3, 4 and 5 has been relatively stable since the 1960's, however, catches in terminal river-mouth gillnet fisheries have declined markedly over this period. Low run sizes of early run Skeena River coho stocks is one reason for this decline, as are fishery regulations eliminating directed coho fisheries and measures designed to reduce the incidental catch of coho in fisheries targeting on sockeye and pink salmon.

Escapement data for consistently reported streams indicates a declining trend for Areas 4 and 5 and no discernible trend for Area 3 coho streams. However, consistent data for Area 3 is only available from 1970 and for Area 4 from 1960.

The Meziadin fishway coho count, although it does not include the entire run, is highly variable but has increased in recent years (Figure 37).

Both the test fishery index and the Babine fence count indicate a decline in coho escapements in the 1970's and 1980's from the 1960's (Figures 38 and 39). A stock assessment of early run Skeena River coho, indicated that escapement levels in the late 1970's and 1980's were usually below the 33,000 fish required to maximize catch from this part of the Skeena coho run. Management actions to meet the escapement target recommended in the stock assessment were implemented beginning in 1989, and the target was reached in 1989 and 1990. Concern remains, however, for the distribution of the aggregate escapement to individual streams in the upper Skeena River watershed. Further work is required to determine whether individual stream escapement goals can be adequately met by the recommended aggregate escapement target.

Returns of coded wire tagged fish through 1989 indicate that high proportions of the catch of these stocks occurs in Southeast Alaska (20 to 70 percent), the northern B.C. troll fishery (20 to 30 percent) and the northern B.C. net fishery (10 to 30 percent). Exploitation rate data from the Lachmach River in Area 3 indicates that U.S. and Canadian fisheries harvested 62 percent of this stock (R. Kadowaki, pers com) in 1989. Southeast Alaskan fisheries accounted for 60 percent of this exploitation and Canadian fisheries accounted for 40 percent.

No clear trends are evident in the catch and escapement data for Area 3 coho stocks. The exploitation rate measured at the Lachmach River in 1989 does not appear to be excessive. Early run Skeena River coho have been at low levels for most of the last decade. Catch and escapement have also declined in Area 5, however, the quality of data in this area does not permit a firm conclusion on stock.

3.4.3. North Central Coast (Areas 6, 7 and 8)

Gillnet catches during the 1980's were well below previous levels in all three Statistical Areas. However, significant directed coho net fisheries have not been conducted in these areas for many years, and the relationship between the current catch levels and run size is unclear.

Escapement trends also show a decline, however, North Central coast coho escapements are

believed to be of particularly poor quality. Difficult access, poor visibility in streams and reductions in survey effort have contributed to this condition.

Coded wire tag data indicates that the northern B.C. troll and central B.C. net fisheries are the primary harvesters, with Southeast Alaskan fisheries being important for some stocks.

Despite the negative stock status indicators in this area, further analysis and monitoring is required before firm conclusions about stock status are drawn.

3.4.4. South Central Coast (Areas 9 and 10)

Gillnet catch levels have declined in both Area 9 (Rivers Inlet) and Area 10 (Smiths Inlet). Some of this decline is due to reduced effort directed at coho and sockeye.

There is a downward, though highly variable trend in escapements in Area 9 and no discernible trend in Area 10.

No firm conclusions can be drawn at this time from the available data, however, there is some indication in both the gillnet catch and the escapement that stock levels may be below historic levels.

3.4.5. Transboundary Rivers

Stock assessment programs on the Northern Panel area transboundary rivers are carried out by both Canada and the United States and are reported on in the annual reports of the PSC Transboundary River Technical Committee. Coho runs to the Stikine, Taku and Alsek rivers were relatively strong in 1989 (PSC Report TCTR (91)-1) and preliminary indications for 1990 are for continuing strong runs to the Stikine and Taku but for a poor return to the Alsek (R. Harrison, Canadian co-chair, Transboundary Technical Committee, pers com).

3.5. SOUTHEAST ALASKA PRODUCTION AREAS

Southeast Alaska coho salmon stocks are grouped into seven aggregates, based primarily on geographic location and harvest patterns and distributions (Figure 40). The purpose of these groupings is to establish a logical way of aggregating stocks in the region for management and stock assessment purposes. The primary characteristics that were considered in establishing stock group boundaries were migration patterns and harvest distributions by area and gear type. Also considered were total exploitation rates and primary types of producing systems.

3.5.1. Yakutat

The most northerly grouping represents stocks in the Yakutat management area which extends from Cape Fairweather west to Cape Suckling.

Most of the coho production in the Yakutat area occurs in medium to large streams that support instream set gill net fisheries with an average 1980-89 catch of 143,000 (range 82,000-203,000). The low gradient tributaries of these systems extend throughout much of the coastal plain and support extensive populations of coho salmon. Trolling occurs along the coast and harvests local fish as well as fish from more distant systems from Prince William Sound to northern British Columbia. While catch rates of troll vessels fishing in this area are typically high compared with the rest of the region, participation is limited primarily to larger, more seaworthy

vessels and fishing effort is heavily affected by weather conditions along the exposed coast. Exploitation rates on Yakutat stocks are unknown but are believed to be moderate for most systems.

The two largest producing systems in the Yakutat area are the Tsiu and Situk Rivers which had average set gill net catches of 41,000 and 35,000, respectively, during 1980-89. These two small, clearwater systems contributed an average of 52% of the total Yakutat set gill net catch. Peak survey counts for these systems representing only a portion of the total escapement have averaged 24,000 and 7,000, respectively, during the same period. In addition, they support important freshwater sport fisheries. The largest system in the Yakutat area, the Alsek River, is a glacial transboundary river and a portion of the coho salmon production occurs in the Canadian section of the system. The set gill catch in the lower Alsek River averaged 5,800 fish during 1980-89.

3.5.2. North-Central

The large North-Central area consists primarily of small-medium stream and lake systems on the islands of northern and central Southeast. The area is large and contains the greatest total length of streams accessible to anadromous fish. Much of it is steep and mountainous with limited slow flowing sections and off-channel habitat preferred by rearing coho salmon. Therefore, most streams host small coho populations, while larger populations are limited to lake systems and a number of streams that have substantial off-channel habitat (beaver ponds, sloughs and backwaters). Several inaccessible lakes are stocked with coho fry by the Northern Southeast Regional Aquaculture Association to supplement production for accessible natural systems. In addition, a small amount of production occurs at the Sheldon Jackson Hatchery in Sitka.

The majority of the catch (85-100%) from stocks in this production area typically occurs in the troll fishery while the remainder is taken in purse seine fisheries directed at local pink salmon stocks.

3.5.3. Lynn Canal

Most of the coho salmon production in Lynn Canal occurs in large, glacial river systems. The Chilkat River at the head of the canal is by far the most important of these, although the total population size is unknown. A tagging study has been initiated in 1990 to estimate total escapement of both coho and chum salmon in the Chilkat system. The Chilkoot River also supports a significant population that has produced documented total adult returns as large as 10,500 fish. Substantial production also occurs in Berners Bay systems including the Berners, Lace and Antler Rivers. Estimated total adult production from the Berners River alone has averaged 23,000 fish (range 14,000-34,000).

Lynn Canal stocks are typically very heavily fished. They are harvested by the troll fishery at rates similar to other stocks in the region, but must then pass through an intensive drift gill net fishery in which an average of approximately 250 boats participate. The fall drift gill net fishery is managed primarily for late sockeye runs and Chilkat River chum salmon stocks while coho are secondary in importance. Smaller numbers of Lynn Canal coho are taken in purse seine fisheries, marine and inriver sport fisheries, and an inriver subsistence fishery.

The major Lynn Canal stocks are all distinctively late in their migration. The troll harvest of these stocks peaks around September 1 and occurs primarily in northern outside waters from Cross Sound northward and in Icy Strait.

3.5.4. Stephens Passage

The Stephens Passage area is the terminus of two transboundary river systems, the Taku and Whiting drainages as well as numerous smaller systems. Production is dominated by the Taku River which is believed to be the single most important coho producing system in the region. The Taku River hosts individual populations with a variety of peak run timings in the lower river ranging from late July to mid-September. The Whiting and Speel Rivers in Port Snettisham are also important contributors. Remaining production occurs primarily in small streams along the mainland and Admiralty Island. Hatchery production of coho salmon has been recently initiated at the Gastineau and Sheep Creek facilities in Juneau.

A drift gill net fishery targets Taku River stocks while some other systems in Stephens Passage are harvested primarily by the troll fishery with only minor catches occurring in the drift gill net fishery.

3.5.5. Central Inside

The Central Inside area supports stocks in both island and mainland systems in central Southeast Alaska. Included are a variety of types of systems from small streams to lake systems and large, glacial mainland rivers including the transboundary Stikine River. The Crystal Lake Hatchery has supplemented wild coho salmon production in this area since the late 1970's.

Typically, about 70-80% of the harvest of central inside stocks has occurred in the troll fishery while lesser catches have occurred in the drift gill net fishery in Districts 106 and 108. Purse seine catches account for only about 5% of the total.

3.5.6. Southern Outside

The Southern Outside area includes the outer coast of Prince of Wales Island and several smaller islands. All of the production in this area occurs in small-medium size island systems. Three of the larger producers include the Sarkar Lake system, Klawock Lake and Staney Creek. In addition to wild stocks, the Klawock hatchery has a relatively stable coho production program.

Southern outside stocks are harvested almost entirely by both troll and purse seine fisheries.

3.5.7. Southern Inside

The Southern Inside area consists of drainages into Clarence Strait and Behm Canal, including the transboundary Unuk River system. This area's production is widely distributed over several types of systems on both islands and mainland. Some of the known major producers include the Unuk, Chickamin, Karta and Tombstone Rivers. Early stocks are known to occur in a few systems which include Reflection Lake and the Karta River. Combined returns to hatchery facilities in the Ketchikan area including Neets Bay, Whitman Lake, Tamgas Creek and Deer Mountain usually amount to over 100,000 fish, annually. The Deer Mountain facility is currently experimenting with an early migrating brood stock from Reflection Lake.

The harvest of southern inside stocks is distributed over a broad area from Yakutat to northern British Columbia and several gear types including troll, purse seine, drift gill net, sport and trap. Early stocks are harvested primarily by net fisheries while the troll fishery takes the largest proportion of the catch of late stocks.

3.6. SOUTHEAST ALASKAN STOCK ASSESSMENT DATA

3.6.1. Escapement Data

Coho escapement surveys are conducted annually on approximately 75 streams throughout Southeast Alaska. Surveyed streams represent only a small fraction of the total number of coho producing systems. Many of the surveyed systems are only visited once during the season. Apart from limited coverage, the utility of escapement survey data is limited by inter-annual variability of several important factors including: weather, stream flow, visibility, fish migratory behavior, physical changes in streams, and differences among observers. A reliable comparison of survey counts between years requires that these factors be considered. Unfortunately, a method of incorporating this information into a single comparable set of statistics for each stream has not yet been developed. However, assuming that most factors that affect the efficiency of surveys occur randomly, survey data should provide some utility in examining trends over decades as a more extensive data base becomes available (providing that survey timing and methods remain constant).

Weirs have been operated on a few small systems beginning in the late 1970's and early 1980's. These projects are expensive and weirs can be successfully operated in only a few locations, primarily at lake outlets, because of severe freshets that typically occur in late September and October.

Mark-recapture estimation is another technique that is used in some systems. All or most fish that are counted at some weirs are marked in order to facilitate escapement estimation from spawning ground recovery in the event that fish escape past a weir uncounted. Techniques are under development to estimate escapements to two large river systems, Taku and Chilkat. These projects involve tagging at lower river fishwheel sites and upstream recovery in fisheries (Taku River) or on the spawning grounds (Chilkat River).

Peak escapement survey and weir counts for 23 index streams in the region are shown in Tables 19-23. These represent the best available data for systems that have been assessed for at least five years. Additional index streams in southern Southeast and the Taku River system have been surveyed annually beginning in 1986 and 1987, however, a historical data base including more than 3-4 years is unavailable for those systems. A consistent data base for most systems did not begin until the early 1980's, although Yakutat and some Lynn Canal systems have been surveyed consistently since the mid-1970's. No trend is apparent in the short escapement data series for most index streams.

3.6.2. Coded Wire Tag Data

The stock composition of catches in most Southeast Alaska fisheries is largely unknown. Run reconstruction data for 5 years or more is available for four coded-wire tagged wild stocks (Tables 24-27). These include Auke Lake and the Berners River north of Juneau, and Ford Arm Lake on the outside coast, and Hugh Smith Lake near Ketchikan (Figure 41). The combined contribution of these indicator stocks has totalled only 1-2% of the annual region total harvest. Three of the stocks reside in lake systems with average total production of 1,100-5,000 adults while the Berners River has produced average runs of over 23,000 adults.

Harvest distribution estimates for coded-wire tagged coho salmon from Southeast Alaska are shown in Figures 42 to 45.

3.6.3. Exploitation Rate Data

3.6.3.1. Alaska Troll Fishery

Annual troll fishery exploitation rate estimates are available for four wild indicator stocks in Southeast Alaska (Table 28 and Figure 46). Hatchery stocks are not used as exploitation rate indicators because of problems in accounting for tag returns in the escapement. Exploitation rates are estimated from coded wire tag recoveries in fisheries and in escapement sampling programs. Average estimates have ranged from 36% for Hugh Smith Lake located south of Ketchikan to 51% for Ford Arm Lake which is located near the area of most intensive troll fishing effort on the central outside coast. The overall average for all four systems was 42%. It should be noted that exploitation rate estimates for the Berners River are probably biased high because the escapement is accounted for using intensive foot and helicopter surveys compared with weir counts for the other three systems. In 1984, estimates were available for only two of the systems, however, in order to reduce bias from excluding the other two that might typically have higher or lower estimates than others, the average for those years was arrived at by weighting estimates for individual systems by their 1982-1983 and 1985-89 average proportion of the sum of estimates for the five systems.

Average troll exploitation rates for the four systems showed no strong trend during 1982-89, although the estimate for 1989 (54%) was the highest recorded. The lowest estimates occurred in 1982 (37%) and 1988 (34%).

3.6.3.2. Total Exploitation Rates

Exploitation rates for the four indicator stocks by all fisheries combined have averaged close to 60% in recent years. Average estimates for 1985-89 have ranged from 45% for Auke Lake near Juneau to 76% for the Berners River in lower Lynn Canal (Table 28). Annual weighted averages have ranged from a low of 55% in 1988 to 67% in 1986 (Figure 47).

Exploitation rates by individual gear types are shown in Tables 26 to 29. Northern Southeast stocks that are not located near gill net fisheries are harvested primarily by the troll fishery with only a relatively minor harvest by other gear types. Examples are Auke Lake and Ford Arm Lake. Northern Southeast stocks like the Berners River that are located near major gill net fisheries can be heavily harvested by those fisheries. Southern Southeast stocks represented by Hugh Smith Lake contributed to a wide range of fisheries from Yakutat to northern British Columbia. During 1982-89, the estimated average exploitation rate for Hugh Smith Lake coho salmon was 64.4% with a breakdown by fishery as follows: Alaska troll 36.1%; Alaska seine 11.4%; Alaska drift gill net 7.9%; Alaska trap 0.3%; Alaska marine sport 0.4%; British Columbia troll 7.2%; and British Columbia net 1.1%.

3.6.4. Habitat Quality

While a large proportion of the coho salmon habitat in Southeast Alaska remains in pristine condition, many systems particularly in southern Southeast have been heavily impacted by the harvest of timber. Also, both positive and negative changes in productivity of individual systems have been documented in relationship to natural geological events and wetlands succession.

The largest single threat to the productivity of coho salmon habitat has been clear-cut logging. Streams have been logged to the bank, thereby reducing large woody debris, a critical habitat feature in many streams. Continued loss of woody debris may be a less severe problem in the future as State and Federal laws have been enacted in 1990 that require timber operators to

leave uncut buffer strips along stream banks. A 100 foot minimum buffer strip is required on Tongass National Forest, State and municipal land while a 66 foot buffer strip is required on private land. Research has demonstrated the importance of large woody debris recruited from buffer strips to the productivity of coho salmon populations (Murphy and Koski 1989). However, the effects of timber harvesting practices on coho salmon production through alterations in steamflow, temperature, sedimentation and nutrient dynamics are more difficult to document.

3.6.5. Enhancement Contribution

A variety of techniques have been used to enhance coho salmon production in Southeast Alaska. These include improving access to spawning and rearing habitat, stocking fry in lakes with barrier falls, construction of spawning channels, improving rearing habitat structure, and raising smolts in hatchery facilities.

Significant enhancement programs by 22 hatcheries located throughout Southeast Alaska (Figure 48) for coho salmon began in the late 1970's and expanded rapidly in the early 1980's. Contributions to the region's fisheries increased dramatically from 4,000 fish in 1980 to an estimated 416,000 in 1986 (Figure 49). Total hatchery returns decreased after 1986 while contributions to common property fisheries declined to only 51,000 in 1988. The hatchery contribution increased again in 1989 to 148,000.

The percent contribution by Southeast Alaska hatcheries showed a similar trend to the absolute contributions (Figure 50). Hatchery production increased dramatically from only 0.4% of the total catch in 1980 to a peak of 12.8% in 1986 and then declined to 5.0% in 1988. The percent contribution of hatchery stocks increased again in 1989 to 7.4%.

Future trends in enhanced production are difficult to predict because of their dependence on highly variable survival rates as well as the decisions of several private and government aquaculture groups. Current state and private non-profit plans for coho salmon releases suggest that hatchery smolt production in the next several years will show a relatively stable trend.

Coded-wire tagging of hatchery releases and sampling of fishery harvests is expected to continue as the primary technique used to evaluate enhancement programs and to distinguish wild and hatchery contributions to the fisheries.

3.7. STATUS OF SOUTHEAST ALASKAN STOCKS

Historical escapement data is too limited to provide definite conclusions on the status of any Southeast Alaska coho salmon stocks over a historical period of more than 10-17 years. However, fishery harvests have indicated a trend of historically strong abundance during the 1980's. Coho salmon have been commercially exploited in Southeast Alaska since the late 1800's. The total commercial harvest by all gear types increased from an average of approximately 200,000 fish in the 1890's to a peak of 3.3 million in 1951 before declining again during the late 1950's through the 1970's (Figure 51). This period of depressed coho catches coincided with overall depressed catches of salmon throughout the state. The peak decade average catch of 2.0 million occurred in the 1940's, while the 1950's, 1960's and 1970's averaged 1.5 million, 1.1 million and 1.0 million, respectively. The trend of declining catches reversed in the 1980's when the commercial harvest averaged 1.9 million fish of which 1.8 million were attributable to wild production.

Coded-wire tag data suggests that very weak runs to certain parts of the region in some

recent years (i.e. southern Southeast in 1988) can be attributed largely to poor marine survival rather than a deterioration in smolt production. Available data concerning Southeast Alaska stocks provides no indication of reduced production from specific systems or groups of systems that can be attributed to over-exploitation.

Coded-wire tag data indicates that recent exploitation rates have been moderate with an overall average of about 60%. This is near or lower than exploitation rates sustained by wild stocks in more southern areas. Some Southeast Alaska stocks are probably exploited as rates that average in excess of 60%. These include stocks in Lynn Canal, the Taku River and the southern inside production area. The production trend in the Lynn Canal and Taku drift gill net fisheries indicates that these higher rates have been sustained for northern inside stocks at run sizes that occurred in the 1980's. Although the 1989 estimated exploitation rate of 82% for Hugh Smith Lake may have been above optimum, the 1982-89 average for that southern inside indicator stock has averaged a more moderate 65%. Overall, recent exploitation rates for Southeast Alaska stocks appear to have been within a range that is sustainable for most coastal stocks.

3.7.1. Yakutat

Yakutat stocks typically experience moderate fishing effort which is responsive to abundance. The majority of the commercial catch is taken by inriver gill net fisheries while the remainder is taken by the troll fishery in nearby waters. Recent catches by the set gill net fishery have been strong relative to the most recent 30 year trend while escapement counts for three surveyed systems have shown a stable trend since the early 1970's.

3.7.2. Lynn Canal

Exploitation rate estimates for the Berners River located in lower Lynn Canal have ranged from 62% to 93% (average 76%). However, estimates for the Berners River are believed to be biased upward because of less complete escapement accounting compared with weired systems. Upper Lynn Canal systems are exposed to more intensive fishing effort and probably experience higher exploitation rates.

The Lynn Canal stocks came under very intensive fishing effort in the early to mid-1980's as drift gill net fishing effort was increased to harvest strong fall chum salmon returns. Surveys and weir counts indicated low escapements in some of these years while exploitation rates for upper Lynn Canal stocks exceeded 80%, resulting in concern by managers about over-exploitation. However, returns from these heavily exploited brood years have been very strong while fishing effort in 1989 and 1990 was curtailed to protect weak chum salmon returns. A stable trend is evident in available escapement counts for Lynn Canal systems since the mid-1970's.

3.7.3. Stephens Passage

Average exploitation rates for Stephens Passage systems have varied widely from as low as approximately 45% for systems that are harvested primarily by troll and marine sport fisheries to about 65-75% for fall Taku River stocks that are also harvested intensively by the District 111 drift gill net fishery in addition to the troll fishery.

Fishery data and mark-recapture estimates indicate that overall production from the Taku River system and adjacent streams has been strong in recent years. However, adult escapement and rearing juvenile surveys indicate relatively sparse populations in some tributaries of the upper system compared with available habitat. Coded-wire tagged juvenile coho salmon from three wild

tag groups in the upper Taku River system have survived at lower rates (1.5-2.9%) than juveniles of comparable age and size in coastal streams (average 6.5%; Shaul, 1990). Lower natural survival rates combined with intermittent obstructions to migration of interior coho stocks indicate that they may not remain productive under the moderate to high exploitation rates experienced by coastal stocks. Unfortunately, insufficient escapement information exists to determine long-term trends in early interior stocks because escapement surveys were not initiated until 1986.

Available escapement data beginning in 1980 indicates a stable trend in Juneau roadside streams in recent years.

3.7.4. North-Central Area

North-central coho stocks have been exploited at very moderate average rates of 50-55%. The harvest occurs primarily in a highly mixed-stock troll fishery and, therefore, local catches do not provide a reliable indicator of local stock strength.

Coho stocks in Sitka Sound have shown an apparent decline in overall production since the early to mid-1980's. Decreasing trends in escapement survey and weir counts are evident for Sitka Sound streams. Troll and freshwater sport fishery closures have been implemented in Sitka Sound during September to provide protection for depressed local coho stocks.

Pink salmon populations in Sitka Sound have followed a sharp decline at the same time with purse seine catches during even years falling from 281,586 (1984) to 34,340 (1986) and 2,101 (1988). Catches of pink salmon from the typically dominant odd year cycle fell from 1,360,116 in 1985 to 9,210 in 1987 and 0 in 1989. The data suggests that both species, which have approximately the same residence time in the marine environment, experienced unfavourable conditions for survival. The decline has not extended to the Ford Arm area only 70 km north of Sitka Sound where strong pink and coho returns have continued throughout the mid to late 1980's.

3.7.5. Central Inside Area

Average exploitation rates on central inside stocks have been moderate (50-60%). On average, about 70-80% of the harvest of central inside stocks has occurred in the troll fishery while lesser catches have occurred in the drift gill net fishery in Districts 106 and 108. Purse seine catches account for only about 5% of the total.

Management of the fall drift gill net fisheries in Districts 106 and 108 is responsive to the abundance of coho salmon, the primary target species. Catches in District 106 are highly mixed-stock and are comprised of fish from the southern inside production area as well as the central inside area. The District 108 fishery targets primarily on local stocks, particularly the Stikine River. Catches in District 108 have declined substantially since the 1960's, however, effort and areas open to fishing have also decreased. Therefore, there is no reliable fishery indicator of trends in local stock strength.

3.7.6. Southern Outside

Exploitation rates on southern outside stocks have been moderate to high on average (60-70%). Virtually all of the catch occurs in highly mixed-stock or mixed-species fisheries. There is very little escapement data for this stock group and no useful fishery indicators of run strength.

3.7.7. Southern Inside

Southern inside stocks are exploited at moderate to high rates averaging between 60-70%. The catch is distributed over a wide variety of mixed-stock fisheries from Yakutat to northern British Columbia.

Catches in fisheries harvesting southern inside stocks have shown stable or increasing trends since 1960. However, a high degree of inter-annual variability has been evident in the 1980's compared with fishery indicators in northern Southeast. Much of the harvest of southern Southeast stocks is taken in fisheries directed at other species or in highly mixed-stock fisheries. Therefore, while overall abundance of southern Southeast stocks becomes evident from fishery performance data relatively early in the season, options to efficiently alter exploitation rates inseason in response to extremes in run strength are very limited.

4. RECOMMENDATIONS FOR RESEARCH

4.1. RESEARCH NEEDS

4.1.1. Productivity Studies

Information on productivity and stock-recruit relationships of northern boundary coho salmon stocks is critical for establishment of harvest management policies. Maximizing production from the more mixed-stock fisheries requires knowledge of exploitation rates that provide maximum sustained yield from the mixture of stocks. Available catch and coded-wire tag data provides some understanding of the sustainability of current exploitation patterns, but information on stock-recruit relationships of contributing stocks from different types of systems is needed in order to establish management policies that improve yield.

The wide variety of coho salmon habitat types used by northern boundary coho salmon combined with a lack of research information on habitat values and survival rates greatly complicates application of habitat models to determine carrying capacity and spawning escapement requirements. Rearing habitat rather than spawning habitat is widely accepted as the feature that limits production of coho smolts in the vast majority of systems. Stocks in individual northern stream systems typically utilize more than one type of rearing habitat such as pools, side channels, sloughs, beaver ponds and lakes. If habitat models are to be useful in establishing escapement goals, additional research is needed to determine the contribution of each type of habitat and how they inter-relate to determine overall smolt production. Research of this type was begun in 1987 on the Lachmach River in north coastal B.C.. In addition, more research is needed to determine survival rates through different life stages and factors that affect survival.

The complexity of the inter-related factors that affect smolt production indicates that a direct measurement approach may be more successful than a habitat based model in determining optimum escapement and stock-recruit relationships for northern boundary coho stocks. This approach requires at least a decade of detailed assessment of escapements and resulting production from individual systems before providing useful results. Studies of this type have been underway on four systems in Southeast Alaska since the early 1980's. Three of these indicator stocks reside in lake systems while one resides in a mainland river system. The dynamics of populations in lake systems may vary substantially from those in non-lake systems. There is a need for detailed population studies of more non-lake systems.

In addition, there is some evidence that interior coho salmon populations in headwaters

tributaries of large river systems like the Skeena and Taku are not as productive as coastal stocks and cannot sustain such intensive exploitation. Additional research on factors influencing production from interior coho stocks is needed for rebuilding and enhancement.

4.1.2. Escapement Assessment

Widely scattered coho salmon production among numerous systems combined with access limitations and difficult fall weather conditions greatly limits the ability to accurately assess escapements. Current escapement accounting programs represent only a very small percentage of total production in both countries. Surveys should be continued on systems with more favourable conditions for observation of spawners. Survey data for all systems is dependent on inter-annual variations in weather and water conditions during the coho salmon migration. However, if collected in a consistent manner, spawner survey data should provide a measure of the trend in escapements over a number of years. Careful review of surveyed systems and methodology is needed to insure the usefulness of survey data in future stock assessments. Research aimed at improving escapement estimation methodologies is being conducted in both the U.S. and Canada and should be continued.

Coho escapement estimates for many streams in British Columbia are of poor quality and efforts to establish a subset of indicator stocks and to standardize methodologies is currently underway. Escapement enumeration studies have been conducted on three east coast of Vancouver Island streams since 1985. Two indexing concepts are being investigated in this research. The first, called "between stream" indexing, relies on the degree to which spawning escapements within a region vary together. If escapements vary together then one intensively surveyed stream might be used as an index of escapement to an entire region. The second concept is called "in-stream indexing" and involves the intensive survey of index reaches within a stream to estimate the total escapement to the stream. This research is aimed at improving the current methods of enumeration being used by fishery officers.

Weirs provide the best quality escapement data, but they are very expensive to operate and their utility is usually limited to certain types of small to medium producing systems. Weirs are typically utilized for long-term population studies and the data they provide can be an important supplement to escapement survey data in assessing stocks. New types and designs, including floating structures, have been developed recently that may increase the utility of weirs on more systems.

In northern Southeast Alaska, coho stocks in several large, glacial mainland rivers such as the Taku and Chilkat typically experience the highest exploitation rates because of their close proximity to drift gillnet fisheries. However, escapement assessment in these systems using tributary weirs and surveys counts has been only marginally successful and doubts exist among staff about both the quality and representativeness of the data. The feasibility of a system-wide escapement estimation approach is being investigated as potentially more cost effective and useful. Two techniques that have been considered are sonar and tagging. Efforts are currently being focused on mark-recapture estimation because of some potential drawbacks and limitations of sonar which include high equipment cost, lack of suitable sites for deployment and difficulty in accurately and precisely apportioning counts by species. Escapement estimation programs are under development for both the Taku and Chilkat Rivers using fishwheels to capture fish for marking. Recovery sampling in the Taku system is accomplished by inriver commercial and test fisheries while spawning ground sampling is conducted in the Chilkat system. Early results are promising for both systems and indicate that the technique might be usefully applied in other large rivers.

4.1.3. Forecasting

Accurate pre-season forecasts of abundance of the various stock groups would be very useful

for fisheries management. Unfortunately, all forecasts of Pacific salmon runs tend to have large average errors and the utility of most is surpassed by early season fishery performance data.

There are fewer useful indicators with which to predict run strength of northern boundary coho salmon compared to most other stocks for which pre-season forecasts are made. Sibling returns have proven to be a useful predictor for Oregon coho stocks but returns of age .0 jack coho are estimated in very few northern systems. Some of the larger mainland rivers have very few jacks while many smaller jacks pass uncounted through adult salmon weirs with wide picket spacing. Environmental variables that may correlate positively with regional coho salmon abundance include summer streamflow and coastal upwelling indices. Multiple freshwater age classes and an overall long freshwater rearing period complicates prediction of returns based on freshwater environmental variables. In addition, the highly mixed-stock nature of the fisheries and an absence of stock composition estimates confounds prediction of most individual stock groups.

A more promising avenue to achieving management objectives for northern boundary coho stocks may be through development of inseason abundance estimation models based on commercial and test fishery performance data. While an inseason abundance estimation approach will likely produce more accurate inseason assessments, feedback and improvement of fishery performance models will be impaired by severely limited escapement data.

4.1.4. Stock Identification

Coded wire tagging is currently the coastwide standard for obtaining information on the catch distribution and migration patterns of coho salmon stocks. Analytical work directed at using this data to estimate stock composition in the Southern Panel area has been on-going for the last two years within the Coho Technical Committee. The applicability of the mathematical techniques (linear and non-linear programming) under investigation should be investigated for Northern Panel area stocks and fisheries.

Genetic stock identification research on coho salmon has not yet proven to be very successful. Nuclear DNA polymorphisms may prove to be more fruitful than traditional electrophoretic techniques. Unlike traditional electrophoretic techniques which can potentially distinguish between stocks, the nuclear DNA technique can distinguish between families within a stock.

The feasibility of mass marking hatchery production to estimate fishery contributions using calcium substituting elements and rare earth elements is being investigated in Canada. Results to date are encouraging but preliminary. Advantages of this approach over coded wire tagging include lower cost and improved statistical confidence in hatchery contribution and survival estimates. An evaluation of some of the potential biases in the coded wire tagging program can also be assessed, e.g. differential survival and straying of marked and unmarked fish, poor detection of marked fish, etc..

Scale pattern analysis to differentiate hatchery and wild coho stocks has been investigated in Southeast Alaska with some promising results, however, existing coded wire tagging was found to provide sufficient information for fishery management purposes.

4.1.5. Indicator Stock Monitoring Programs

Indicator stocks have been used effectively in the coastwide management of chinook salmon under the Pacific Salmon Treaty (PST). Since, for practical reasons, all chinook stocks cannot be monitored intensively, a subset of representative stocks has been selected for coded wire tagging and escapement monitoring. The harvest pattern data for these stocks are then assumed to represent these attributes in other stocks with similar migration and life history characteristics. Hatchery indicator

stocks may also be useful for coho if their catch distribution is representative of wild stocks and if the escapement of tags can be adequately accounted for.

Given the large number of coho stocks in the PST area, an indicator stock approach to data collection is the only practical way to monitor stock specific harvest patterns. In fact, this approach is used extensively in Washington and Oregon and in parts of B.C. and southeast Alaska.

For many stocks in the U.S. and Canada, coded wire tagging is associated with hatcheries where tagging is part of the production assessment program. In northern B.C., coded wire tagging of many hatchery stocks has been conducted since 1986, but escapement data is lacking so that fishery exploitation rates cannot be calculated. Wild stock tagging is conducted in relatively few locations because of the high cost of trapping and tagging juvenile coho in the wild. Monitoring the escapement of coded wire tagged fish is also more difficult and costly for wild stocks where temporary fences or mark-recapture estimates are used. In northern B.C., the Lachmach River is the only location where wild coho harvest patterns and escapement are being intensively monitored. In southeast Alaska there are currently four wild indicator stocks.

4.2. RESEARCH AND ANALYTICAL PRIORITIES

The following priorities for research and analysis are not listed in any particular order. Further discussion with the Northern Panel is required to determine what the order of priority should be to address PSC issues of concern.

1) Research needs to be continued on improving our understanding of stock productivities as they relate to estimating stock-recruit parameters for several stocks. Emphasis on more types of stocks: small non-lake systems, large river systems, interior tributary populations is required.

2) The quality and representativeness of escapement data needs to be evaluated. A subset of key stocks needs to be surveyed on a consistent basis using effective enumeration techniques. Research on improving the quality and representativeness of escapement estimates should be strongly supported.

3) Research on developing pre-season and inseason indices of abundance should be supported. Management systems that are responsive to abundance should better meet the needs of both fishermen and stock conservation.

4) The feasibility of applying the mathematical stock composition models currently under development for Southern Panel area fisheries to Northern Panel area fisheries should be investigated. This approach provides the most immediate opportunity for estimating stock composition. Other approaches under investigation are in various stages of research and are many years away from becoming useful for estimating stock composition.

5) To improve the effectiveness of coho management in the Northern Panel area additional indicator stock programs need to be implemented in northern British Columbia and smaller Southeast Alaska island systems. As a first step, the feasibility of monitoring escapements to northern British Columbia hatchery systems should be explored as a means of estimating fishery exploitations rates.

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PACIFIC SALMON COMMISSION

COHO TECHNICAL COMMITTEE

NORTHERN PANEL AREA COHO SALMON STATUS REPORT

TABLES, FIGURES AND APPENDICES

DECEMBER, 1991

Table 1. North Coast British Columbia Commercial Coho Salmon Catch

	QCI			Nass/Skeena			North Central			South Central		All Areas			
Year	Gillnet	Seine	Troll	Gillnet	Seine	Troll	Gillnet	Seine	Troll	Gillnet	Seine	Gillnet	Seine	Troll	Total
1953	1131	10918	312704	119620	21384	78393	97562	54177	176076	22510	1676	240823	88155	567173	896151
1954	3582	66012	330537	168736	22394	132170	120651	70534	72813	35034	592	328003	159532	535520	1023055
1955	2694	26037	531619	200709	17887	120631	106486	45138	107910	48782	1737	358671	90799	760160	1209630
1956	10270	23919	328710	146112	36671	154080	161206	129518	132704	45154	1705	362742	191813	615494	1170049
1957	5613	7081	441571	127546	18902	137648	149818	33869	180608	28028	12	311005	59864	759827	1130696
1958	7136	4272	227286	109234	36301	135272	126108	72227	211507	31489	458	273967	113258	574065	961290
1959	1550	786	203783	99718	12188	98405	107258	19273	134462	35524	220	244050	32467	436650	713167
1960	3731	2776	192173	108600	12323	98589	112431	67841	141783	49691	1404	274453	84344	432545	791342
1961	5315	10883	277747	98459	24548	101977	163997	109021	141720	85871	2182	353642	146634	521444	1021720
1962	20320	10355	414306	219326	30960	198243	164773	128542	208304	52373	1651	456792	171508	820853	1449153
1963	18429	11538	402918	190803	18034	175910	216807	118007	222636	32196	203	458235	147782	801464	1407481
1964	50166	26481	456853	210671	50170	286059	190768	153053	279892	72054	1392	523659	231096	1022804	1777559
1965	44252	16323	276008	198203	41970	212929	215323	160165	143732	262137	663	719915	219121	632669	1571705
1966	45311	14814	465149	301869	74521	434037	194761	142336	194291	131822	30	673763	231701	1093477	1998941
1967	48276	13831	257269	79115	21641	118303	41166	23810	115558	230314	273	398871	59555	491130	949556
1968	103887	10026	416443	190098	55269	494497	176264	172072	279484	126758	8105	597007	245472	1190424	2032903
1969	45202	2499	274211	80762	13088	82929	51182	19671	98980	48791	3599	225937	38857	456120	720914
1970	87651	16897	312803	176326	29324	101666	209469	106156	237317	45457	1541	518903	153918	651786	1324607
1971	66213	10826	298270	137464	25476	110896	66519	31570	310984	29468	1012	299664	68884	720150	1088698
1972	61415	24094	387708	149488	19482	284933	176731	141692	294778	44150	11840	431784	197108	967419	1596311
1973	15052	3736	226553	63088	7793	138554	111970	62673	253664	46047	9041	236157	83243	618771	938171
1974	14251	4602	265716	65999	9895	83993	134824	94707	189066	12681	4150	227755	113354	538775	879884
1975	17539	6382	169042	61133	15844	58597	101583	32080	57795	24259	1578	204514	55884	285434	545832
1976	5381	12914	257898	56935	11233	78768	65487	92561	229680	50342	8575	178145	125283	566346	869774
1977	6608	12260	137717	85382	25790	63432	18799	30326	114534	49875	4271	160664	72647	315683	548994
1978	8680	10897	440638	111197	64347	75071	59165	91365	159448	24339	3008	203381	169617	675157	1048155
1979	1341	39924	402101	69063	29917	46903	31348	100237	131863	10658	0	112410	170078	580867	863355
1980	22617	29081	464213	52305	26191	70745	42596	102371	113425	3999	0	121517	157643	648383	927543
1981	9373	18787	316095	43103	14750	59519	29954	78538	84676	4479	1	86909	112076	460290	659275
1982	953	13681	284027	74001	98650	110284	34740	68040	64002	7900	0	117594	180371	458313	756278
1983	657	9340	488780	72682	134090	245434	24239	122614	144572	6549	0	104127	266044	878786	1248957
1984	2439	16986	394959	70114	73586	136224	12492	39924	134843	7959	0	93004	130496	666026	889526
1985	13166	35886	411161	69090	58268	116602	25356	58532	45970	13058	0	120670	152686	573733	847089
1986	7898	32380	800606	76043	96240	288879	56790	203183	163294	17545	0	158276	331803	1252779	1742858
1987	2989	15186	507900	24813	57347	87833	13474	69968	73441	9818	0	51094	142501	669174	862769
1988	3316	7769	285910	30231	20417	62129	20471	77224	38493	10107	0	64125	105410	386532	556067
1989	3128	17244	453795	61086	84073	119671	11628	12304	28376	5610	0	81452	113621	601842	796915
53-59 AVG	4568	17244	339459	138811	23675	122371	124156	60677	145154	35217	914	302752	102510	606984	1012246
60-69 AVG	38489	19861	343308	167791	34252	220347	152747	109452	182638	109201	1950	468227	165515	746293	1380036
70-79 AVG	28413	11953	289845	97608	23910	104281	97590	78337	197913	33728	4502	257338	118701	592039	968078
80-84 AVG	7208	14253	389615	62441	69453	124441	28804	82297	108304	6177	0	104630	166004	622360	892994
85-89 AVG	6099	17575	491874	52253	63269	135023	25544	84242	69915	11228	0	95123	165086	696812	957022

Note: The vast majority of the south central troll coho salmon catch is taken in Southern Panel waters and is therefore, not included in this table.

Table 2. North Coast British Columbia Gillnet Coho Salmon Catch

	Statistical Area															
Year	1	2E	2W	3	4	5	6	7	8	9	10	QCI	Nass/ Skeena	North Central	South Central	Total
1953	364	426	341	33484	54175	31961	11881	16822	68859	17478	5032	1131	119620	97562	22510	240823
1954	243	3279	60	46736	85160	36840	23520	21119	76012	27802	7232	3582	168736	120651	35034	328003
1955	36	2512	146	69210	92453	39046	30374	25237	50875	38800	9982	2694	200709	106486	48782	358671
1956	8283	1986	1	58062	61146	26904	33369	28369	99468	33315	11839	10270	146112	161206	45154	362742
1957	5476	137	0	52181	52143	23222	45601	25678	78539	20296	7732	5613	127546	149818	28028	311005
1958	4704	2184	248	39920	59995	9319	34626	19246	72236	26259	5230	7136	109234	126108	31489	273967
1959	1526	4	20	20896	47111	31711	27095	22143	58020	30538	4986	1550	99718	107258	35524	244050
1960	3169	562	0	37081	36076	35443	37620	33366	41445	34691	15000	3731	108600	112431	49691	274453
1961	2600	2690	25	40500	37271	20688	46869	47724	69404	45268	40603	5315	98459	163997	85871	353642
1962	15463	4739	118	43570	70980	104776	59785	42253	62735	33969	18404	20320	219326	164773	52373	456792
1963	13324	5105	0	19477	48646	122680	112821	47673	56313	21916	10280	18429	190803	216807	32196	458235
1964	39688	10229	249	31736	82495	96440	83508	43522	63738	46349	25705	50166	210671	190768	72054	523659
1965	37320	5859	1073	70863	53708	73632	130803	50766	33754	57577	204560	44252	198203	215323	262137	719915
1966	41819	2862	630	88233	124952	88684	74235	50086	70440	41984	89838	45311	301869	194761	131822	673763
1967	36489	11546	241	22876	49496	6743	19954	7611	13601	25989	204325	48276	79115	41166	230314	398871
1968	88667	14434	786	62165	74444	53489	77210	33168	65886	44904	81854	103887	190098	176264	126758	597007
1969	39952	5074	176	16960	40779	23023	17402	14537	19243	18933	29858	45202	80762	51182	48791	225937
1970	70182	16825	644	61976	63597	50753	81752	92631	35086	31487	13970	87651	176326	209469	45457	518903
1971	52306	13800	107	42614	83458	11392	16952	21665	27902	24494	4974	66213	137464	66519	29468	299664
1972	54025	6427	963	55005	69394	25089	68810	76948	30973	31820	12330	61415	149488	176731	44150	431784
1973	7463	7322	267	12916	39128	11044	16937	69607	25426	32939	13108	15052	63088	111970	46047	236157
1974	9833	3918	500	17550	24225	24224	33122	80534	21168	6103	6578	14251	65999	134824	12681	227755
1975	15564	183	1792	24680	23123	13330	11002	60706	29875	17837	6422	17539	61133	101583	24259	204514
1976	2693	2582	106	12287	26262	18386	10743	14775	39969	35164	15178	5381	56935	65487	50342	178145
1977	1127	5161	320	30989	34732	19661	2328	11066	5405	39844	10031	6608	85382	18799	49875	160664
1978	410	8202	68	30340	55328	25529	15244	23954	19967	16597	7742	8680	111197	59165	24339	203381
1979	1164	0	177	13960	42218	12885	2997	10328	18023	5523	5135	1341	69063	31348	10658	112410
1980	16614	5094	909	17657	21001	13647	14440	16336	11820	1506	2493	22617	52305	42596	3999	121517
1981	5953	3163	257	8232	29062	5809	8590	12310	9054	2848	1631	9373	43103	29954	4479	86909
1982	90	676	187	20147	43486	10368	14049	12865	7826	1302	6598	953	74001	34740	7900	117594
1983	642	0	15	25770	38710	8202	7133	1431	15675	2743	3806	657	72682	24239	6549	104127
1984	221	2160	58	28101	34694	7319	2575	2642	7275	6465	1494	2439	70114	12492	7959	93004
1985	114	12981	71	11562	55445	2083	6857	8108	10391	3982	9076	13166	69090	25356	13058	120670
1986	914	6943	41	20036	44876	11131	6940	6766	43084	10654	6891	7898	76043	56790	17545	158276
1987	304	2685	0	4716	18452	1645	3084	3803	6587	4570	5248	2989	24813	13474	9818	51094
1988	538	2776	2	3413	24286	2532	6942	3274	10255	6201	3906	3316	30231	20471	10107	64125
1989	370	2732	26	13383	39494	8209	375	3610	7643	2042	3568	3128	61086	11628	5610	81452
53-59 AVG	2947	1504	117	45784	64598	28429	29495	22659	72001	27784	7433	4568	138811	124156	35217	302752
60-69 AVG	31849	6310	330	43346	61885	62560	66021	37071	49656	37158	72043	38489	167791	152747	109201	468227
70-79 AVG	21477	6442	494	30232	46147	21229	25989	46221	25379	24181	9547	28413	97608	97590	33728	257338
80-84 AVG	4704	2219	285	19981	33391	9069	9357	9117	10330	2973	3204	7208	62441	28804	6177	104630
85-89 AVG	448	5623	28	10622	36511	5120	4840	5112	15592	5490	5738	6099	52253	25544	11228	95123

Table 3. North Coast British Columbia Seine Coho Salmon Catch

	Statistical Area															
Year	1	2E	2W	3	4	5	6	7	8	9	10	QCI	Nass/ Skeena	North Central	South Central	Total
53	492	4506	5920	5771	174	15439	17445	9495	27237	1451	225	10918	21384	54177	1676	88155
54	18359	24653	23000	5872	1056	15466	42824	8942	18768	570	22	66012	22394	70534	592	159532
55	9452	12199	4386	4230	125	13532	17382	15134	12622	1737	0	26037	17887	45138	1737	90799
56	2216	13252	8451	14495	120	22056	77230	16959	35329	1701	4	23919	36671	129518	1705	191813
57	3036	3239	806	14900	355	3647	18800	6513	8556	12	0	7081	18902	33869	12	59864
58	349	3805	118	22562	14	13725	50176	2377	19674	458	0	4272	36301	72227	458	113258
59	0	786	0	3273	115	8800	8871	3007	7395	220	0	786	12188	19273	220	32467
60	102	2508	166	1117	209	10997	33593	5504	28744	1308	96	2776	12323	67841	1404	84344
61	248	10567	68	7781	301	16466	44923	16344	47754	1752	430	10883	24548	109021	2182	146634
62	1386	8969	0	3007	45	27908	48102	14001	66439	1119	532	10355	30960	128542	1651	171508
63	2200	9338	0	677	390	16967	64860	13023	40124	119	84	11538	18034	118007	203	147782
64	6830	16119	3532	11208	248	38714	59975	19097	73981	379	1013	26481	50170	153053	1392	231096
65	5393	7688	3242	16685	100	25185	89796	39372	30997	653	10	16323	41970	160165	663	219121
66	3532	6994	4288	19926	0	54595	67683	25306	49347	15	15	14814	74521	142336	30	231701
67	1005	10977	1849	18217	67	3357	16485	3827	3498	273	0	13831	21641	23810	273	59555
68	1416	7151	1459	24291	761	30217	70724	20522	80826	7833	272	10026	55269	172072	8105	245472
69	541	966	992	9770	122	3196	9094	4314	6263	3483	116	2499	13088	19671	3599	38857
70	1290	5583	10024	14539	162	14623	62426	14876	28854	1532	9	16897	29324	106156	1541	153918
71	2386	5344	3096	15340	1773	8363	14749	10086	6735	1012	0	10826	25476	31570	1012	68884
72	7731	4662	11701	8950	2650	7882	92562	28394	20736	11108	732	24094	19482	141692	11840	197108
73	986	1940	810	3502	2028	2263	23118	21359	18196	8886	155	3736	7793	62673	9041	83243
74	1494	1662	1446	3999	3654	2242	32892	21432	40383	3995	155	4602	9895	94707	4150	113354
75	3359	274	2749	5261	4804	5779	2397	16476	13207	1577	1	6382	15844	32080	1578	55884
76	1409	6987	4518	6289	1142	3802	23424	23842	45295	8561	14	12914	11233	92561	8575	125283
77	2666	5701	3893	17039	3080	5671	9596	12120	8610	3934	337	12260	25790	30326	4271	72647
78	2751	1705	6441	57358	3863	3126	58033	16212	17120	2993	15	10897	64347	91365	3008	169617
79	14710	0	25214	23395	5208	1314	33294	37288	29655	0	0	39924	29917	100237	0	170078
80	11886	1145	16050	20789	1105	4297	68587	17446	16338	0	0	29081	26191	102371	0	157643
81	10869	488	7430	10288	3926	536	33776	27998	16764	0	1	18787	14750	78538	1	112076
82	9734	97	3850	71554	21713	5383	36667	27565	3808	0	0	13681	98650	68040	0	180371
83	4763	0	4577	130341	0	3749	87489	7855	27270	0	0	9340	134090	122614	0	266044
84	7233	2284	7469	49316	11598	12672	24260	9681	5983	0	0	16986	73586	39924	0	130496
85	20789	11426	3671	40276	14838	3154	29552	13579	15401	0	0	35886	58268	58532	0	152686
86	19702	10276	2402	72631	6811	16798	90786	25256	87141	0	0	32380	96240	203183	0	331803
87	13205	1511	470	47094	4725	5528	33646	18207	18115	0	0	15186	57347	69968	0	142501
88	3163	3859	747	15035	2055	3327	36671	5791	34762	0	0	7769	20417	77224	0	105410
89	7731	4259	5254	78331	2645	3097	1297	5027	5980	0	0	17244	84073	12304	0	113621
53-59 AVG	4843	8920	6097	10158	280	13238	33247	8918	18512	878	36	17244	23675	60677	914	102510
60-69 AVG	2265	8128	1560	11268	224	22760	50524	16131	42797	1693	257	19861	34252	109452	1950	165515
70-79 AVG	3878	3386	6989	15567	2836	5507	35249	20209	22879	4360	142	11953	23910	78337	4502	118701
80-84 AVG	8897	803	7875	56458	7668	5327	50156	18109	14033	0	0	14253	69453	82297	0	166004
85-89 AVG	12918	6266	2509	50673	6215	6381	38390	13572	32280	0	0	17575	63269	84242	0	165086

Table 4. North Coast British Columbia Troll Coho Salmon Catch

Year	QCI	Nass/ Skeena	North Central	South Central	Total	Total Minus SCTR
1953	312704	78393	176076	204387	771560	567173
1954	330537	132170	72813	175673	711193	535520
1955	531619	120631	107910	176953	937113	760160
1956	328710	154080	132704	239582	855076	615494
1957	441571	137648	180608	309474	1069301	759827
1958	227286	135272	211507	218386	792451	574065
1959	203783	98405	134462	224905	661555	436650
1960	192173	98589	141783	117342	549887	432545
1961	277747	101977	141720	183920	705364	521444
1962	414306	198243	208304	195385	1016238	820853
1963	402918	175910	222636	239434	1040898	801464
1964	456853	286059	279892	280902	1303706	1022804
1965	276008	212929	143732	302008	934677	632669
1966	465149	434037	194291	756496	1849973	1093477
1967	257269	118303	115558	347779	838909	491130
1968	416443	494497	279484	476336	1666760	1190424
1969	274211	82929	98980	177758	633878	456120
1970	312803	101666	237317	262330	914116	651786
1971	298270	110896	310984	134687	854837	720150
1972	387708	284933	294778	194910	1162329	967419
1973	226553	138554	253664	171408	790179	618771
1974	265716	83993	189066	179855	718630	538775
1975	169042	58597	57795	115696	401130	285434
1976	257898	78768	229680	372286	938632	566346
1977	137717	63432	114534	159925	475608	315683
1978	440638	75071	159448	205822	880979	675157
1979	402101	46903	131863	186351	767218	580867
1980	464213	70745	113425	212457	860840	648383
1981	316095	59519	84676	196917	657207	460290
1982	284027	110284	64002	145783	604096	458313
1983	488780	245434	144572	351635	1230421	878786
1984	394959	136224	134843	226130	892156	666026
1985	411161	116602	45970	89266	662999	573733
1986	800606	288879	163294	430083	1682862	1252779
1987	507900	87833	73441	141049	810223	669174
1988	285910	62129	38493	145363	531895	386532
1989	453795	119671	28376	94888	696730	601842
53-59 AVG	339459	122371	145154	221337	828321	606984
60-69 AVG	343308	220347	182638	307736	1054029	746293
70-79 AVG	289845	104281	197913	198327	790366	592039
80-84 AVG	389615	124441	108304	226584	848944	622360
85-89 AVG	491874	135023	69915	180130	876942	696812

Note: Most of the south central troll (SCTR) catch occurs in Southern Panel waters.

Table 5. North coast British Columbia coho catch by gear type, 1953-89.

	CATCH				PROPORTION BY GEAR		
Year	Gillnet	Seine	Troll	Total	Gillnet	Seine	Troll
53	240823	88155	567173	896151	0.27	0.10	0.63
54	328003	159532	535520	1023055	0.32	0.16	0.52
55	358671	90799	760160	1209630	0.30	0.08	0.63
56	362742	191813	615494	1170049	0.31	0.16	0.53
57	311005	59864	759827	1130696	0.28	0.05	0.67
58	273967	113258	574065	961290	0.28	0.12	0.60
59	244050	32467	436650	713167	0.34	0.05	0.61
60	274453	84344	432545	791342	0.35	0.11	0.55
61	353642	146634	521444	1021720	0.35	0.14	0.51
62	456792	171508	820853	1449153	0.32	0.12	0.57
63	458235	147782	801464	1407481	0.33	0.10	0.57
64	523659	231096	1022804	1777559	0.29	0.13	0.58
65	719915	219121	632669	1571705	0.46	0.14	0.40
66	673763	231701	1093477	1998941	0.34	0.12	0.55
67	398871	59555	491130	949556	0.42	0.06	0.52
68	597007	245472	1190424	2032903	0.29	0.12	0.59
69	225937	38857	456120	720914	0.31	0.05	0.63
70	518903	153918	651786	1324607	0.39	0.12	0.49
71	299664	68884	720150	1088698	0.28	0.06	0.66
72	431784	197108	967419	1596311	0.27	0.12	0.61
73	236157	83243	618771	938171	0.25	0.09	0.66
74	227755	113354	538775	879884	0.26	0.13	0.61
75	204514	55884	285434	545832	0.37	0.10	0.52
76	178145	125283	566346	869774	0.20	0.14	0.65
77	160664	72647	315683	548994	0.29	0.13	0.58
78	203381	169617	675157	1048155	0.19	0.16	0.64
79	112410	170078	580867	863355	0.13	0.20	0.67
80	121517	157643	648383	927543	0.13	0.17	0.70
81	86909	112076	460290	659275	0.13	0.17	0.70
82	117594	180371	458313	756278	0.16	0.24	0.61
83	104127	266044	878786	1248957	0.08	0.21	0.70
84	93004	130496	666026	889526	0.10	0.15	0.75
85	120670	152686	573733	847089	0.14	0.18	0.68
86	158276	331803	1252779	1742858	0.09	0.19	0.72
87	51094	142501	669174	862769	0.06	0.17	0.78
88	64125	105410	386532	556067	0.12	0.19	0.70
89	81452	113621	601842	796915	0.10	0.14	0.76
53-59 AVG	302752	105127	606984	1014863	0.30	0.10	0.60
60-69 AVG	468227	157607	746293	1372127	0.35	0.11	0.55
70-79 AVG	257338	121002	592039	970378	0.26	0.13	0.61
80-84 AVG	104630	169326	622360	896316	0.12	0.19	0.69
85-89 AVG	95123	169204	696812	961140	0.10	0.17	0.72

Table 6. North coast B.C. Indian food fishery coho catch, Areas 1 to 10, 1980 to 1989.

Year	1	2E	2W	3	4	5	6	7	8	9	10	Total
1980	UNK	125	0	2494	4915	200	1210	200	2079	10		11233
1981	250	30	70	1832	5325	300	2550	96	1674			12127
1982	UNK	50	25	3921	24500	100	1500	200	1505			31801
1983	UNK	30	100	4299	26690	200	1800	400	2930	200		36649
1984	UNK	20	UNK	4900	25164	150	5500	1400	1940	150		39224
1985	280	200	0	312	10600	296	2750	1400	1316	8		17162
1986	50	224	UNK	2298	21266	400	2845	597	2330	4		30014
1987	328	292	400	689	7616	200	2300	459	1559			13843
1988	250	485	500	331	1161	110	2465	400	528		6	6236
1989	240	200	295	69	2714	600	3150	177	2264	34		9743
Averag	233	166	174	2115	12995	256	2607	533	1813	68	6	20803

UNK - Unknown
Indian food fishery catch data is preliminary and is under review.

Table 7. North coast B.C. sport fishery coho catch, Areas 1 to 10, 1980 to 1989.

Year	1	2E	2W	3	4	5	6	7	8	9	10	Total
1980	UNK	550	UNK	UNK	550	115	800	500	1742	600		4857
1981	1000	1330	UNK	UNK	650	170	275	800	2450	3950	50	10675
1982	UNK	3405	UNK	235	1000	200	1760	850	2610	3850	50	13960
1983	UNK	1670	UNK	980	1685	225	2100	900	3912	5100	75	16647
1984	UNK	1855	UNK	1100	3000	200	1200	2000	7582	5668	75	22680
1985	280	3100	0	1000	2500	200	750	2300	2085	2757	100	15072
1986	1031	2708	UNK	1000	4000	200	2000	1591	3247	3805	75	19657
1987	2040	5752	1000	UNK	2500	250	2000	3431	2401	3928	100	23402
1988	796	6520	UNK	UNK	1500	300	1421	2100	3651	3000	100	19388
1989	3854	1995	2580	UNK	3500	500	2724	1750	4391	3372	100	24766
Average	1500	2889	1193	863	2089	236	1503	1622	3407	3603	81	17110

UNK: Unknown
Sport catch data is preliminary and is under review.

Table 8. Transboundary river commercial coho salmon catches by inriver fisheries, 1964-89.

	U.S.	Canada		
Year	Alsek	Lower Stikine	Upper Stikine	Taku
1964	9,760			
1965	9,638			
1966	2,688			
1967	10,090			
1968	10,586			
1969	2,493			
1970	2,188			
1971	4,730			
1972	7,296			
1973	4,395			
1974	7,046			
1975	2,230		45	
1976	4,883		13	
1977	11,817		0	
1978	13,913		0	
1979	6,158	10,720 [a]		6,006
1980	7,863	6,629	40	6,405
1981	10,232	2,667	0	3,607
1982	6,534	15,904	0	51
1983	5,253	6,170	0	8,390
1984	7,867	[b]	[b]	5,357
1985	5,490	2,172	0	1,770
1986	1,344	2,278	0	1,783
1987	2,517	5,728	0	5,599
1988	4,986	2,112	0	3,123
1989	5,972	6,092	0	2,876

[a] The lower Stikine River commercial catch in 1979 was combined with the upper river catch.

[b] There was no commercial fishery in the Stikine River in 1984.

Table 9. Southeast Alaska annual coho catch by commercial fisheries by gear type, 1960-89.

	Total Region Catch							
Year	Purse Seine	Drift Gillnet	Set Gillnet	Trap	Hand Troll	Power Troll	Total Troll	Total
1960	125,871	36,587	119149	2387	0	0	396,211	677,818
1961	246,524	51,725	128670	5740	0	0	399,932	826,851
1962	239,382	97,082	170776	3975	0	0	643,740	1,150,980
1963	316,491	112,770	141365	1646	0	0	693,050	1,263,676
1964	506,505	172,367	169780	6796	0	0	730,766	1,579,418
1965	557,005	166,452	122207	2256	0	0	695,887	1,541,551
1966	452,057	155,534	66252	15975	0	0	528,621	1,202,464
1967	188,965	133,989	97211	368	0	0	443,677	863,842
1968	463,553	202,232	92005	1663	0	0	779,500	1,537,290
1969	109,881	65,018	32262	400	0	0	388,441	595,602
1970	294,524	163,776	29748	2499	0	0	267,633	755,681
1971	326,264	159,132	37420	0	0	0	391,278	914,094
1972	389,862	275,393	45704	4688	0	0	791,941	1,502,900
1973	129,255	124,343	41213	324	0	0	540,101	834,912
1974	166,364	186,583	77556	1006	0	0	845,109	1,275,612
1975	70,201	102,321	37403	562	40,920	172,295	213,215	423,140
1976	87,604	156,460	51743	1223	88,671	436,011	524,682	820,489
1977	160,499	182,852	92214	1374	155,812	351,029	506,841	942,406
1978	245,074	221,134	137408	4371	378,927	721,972	1,100,899	1,704,515
1979	176,542	81,324	95873	3684	244,775	674,022	918,797	1,272,536
1980	185,463	109,456	119648	2005	179,122	517,161	696,283	1,110,850
1981	238,044	114,500	132127	1647	181,466	679,406	860,872	1,345,543
1982	431,415	193,638	148994	4576	260,696	1,055,307	1,316,003	2,090,050
1983	360,227	210,332	81517	6270	235,685	1,040,678	1,276,363	1,928,439
1984	361,287	190,788	182256	5595	178,390	954,237	1,132,627	1,866,958
1985	422,586	309,599	203193	3540	260,691	1,339,531	1,600,222	2,535,600
1986	588,561	336,474	87871	1410	339,423	1,788,499	2,127,922	3,140,828
1987	131,458	165,135	124357	734	183,222	857,940	1,041,162	1,462,112
1988	154,124	157,970	182520	97	92,258	408,174	500,432	995,046
1989	331,360	231,251	167281	477	220,159	1,194,334	1,414,493	2,144,385
60-69 AVG	320,623	119,376	113,968	4,121	0	0	569,983	1,123,949
70-79 AVG	204,619	165,332	64,628	1,973	90,911	235,533	610,050	1,044,629
80-84 AVG	315,287	163,743	132,908	4,019	207,072	849,358	1,056,430	1,668,368
85-89 AVG	325,618	240,086	153,044	1,252	219,151	1,117,696	1,336,846	2,055,594

Table 10. Southeast Alaska annual coho catch by commercial fisheries by area and gear type, 1960-89.

	Area 1					Area 2					Area 3				
Year	Setnet	Hand Troll	Power Troll	Total Troll	Total	Purse Seine	Hand Troll	Power Troll	Total Troll	Total	Purse Seine	Hand Troll	Power Troll	Total Troll	Total
1960	119,149	0	0	32,319	151,468	2,290	0	0	68,372	70,662	58,493	0	0	46,879	105,372
1961	128,670	0	0	31,016	159,686	12,688	0	0	70,208	82,896	68,483	0	0	60,782	129,265
1962	170,776	0	0	33,525	204,301	3,048	0	0	132,452	135,500	75,673	0	0	120,664	196,337
1963	141,365	0	0	49,775	191,140	12,373	0	0	216,048	228,421	110,870	0	0	92,893	203,763
1964	169,780	0	0	25,863	195,643	3,643	0	0	196,148	199,791	131,963	0	0	149,520	281,483
1965	122,207	0	0	71,598	193,805	25,553	0	0	164,020	189,573	196,596	0	0	108,650	305,246
1966	66,252	0	0	26,319	92,571	2,788	0	0	104,161	106,949	101,726	0	0	95,360	197,086
1967	97,211	0	0	131,162	228,373	3,097	0	0	41,775	44,872	59,401	0	0	33,504	92,905
1968	92,005	0	0	136,013	228,018	2,448	0	0	78,815	81,263	112,376	0	0	96,481	208,857
1969	32,262	0	0	97,819	130,081	6,503	0	0	38,262	44,765	13,706	0	0	34,155	47,861
1970	29,748	0	0	16,921	46,669	3,478	0	0	24,477	27,955	49,691	0	0	31,280	80,971
1971	37,420	0	0	20,539	57,959	2,181	0	0	50,244	52,425	58,217	0	0	77,519	135,736
1972	45,704	0	0	108,674	154,378	682	0	0	93,723	94,405	88,884	0	0	191,960	280,844
1973	41,213	0	0	97,695	138,908	444	0	0	69,452	69,896	29,652	0	0	133,013	162,665
1974	77,556	0	0	136,462	214,018	3,469	0	0	96,423	99,892	76,329	0	0	274,367	350,696
1975	37,403	517	9,977	10,494	47,897	819	1,293	12,677	13,970	14,789	18,677	7,040	51,487	58,527	77,204
1976	51,743	3,963	96,293	100,256	151,999	226	13,326	124,590	137,916	138,142	32,350	11,533	66,543	78,076	110,426
1977	92,214	10,330	79,432	89,762	181,976	2,613	13,086	64,471	77,557	80,170	29,088	15,315	40,174	55,489	84,577
1978	137,408	23,520	113,656	137,176	274,584	4,770	41,455	303,776	345,231	350,001	83,511	34,276	74,456	108,732	192,243
1979	95,873	13,687	104,530	118,217	214,090	10,105	34,634	280,597	315,231	325,336	116,729	55,516	173,638	229,154	345,883
1980	119,648	9,109	51,895	61,004	180,652	2,387	11,862	211,222	223,084	225,471	128,770	53,330	148,968	202,298	331,068
1981	132,127	11,337	85,475	96,812	228,939	20,097	13,814	201,336	215,150	235,247	165,937	49,867	201,148	251,015	416,952
1982	148,994	23,680	174,394	198,074	347,068	4,434	28,213	447,369	475,582	480,016	157,522	48,066	127,924	175,990	333,512
1983	81,517	23,933	165,853	189,786	271,303	23,336	28,398	445,010	473,408	496,744	211,656	55,648	133,431	189,079	400,735
1984	182,256	32,421	148,474	180,895	363,151	3,345	24,685	495,548	520,233	523,578	180,421	35,516	120,629	156,145	336,566
1985	203,193	46,791	285,362	332,153	535,346	15,735	45,095	586,978	632,073	647,808	177,291	64,481	205,575	270,056	447,347
1986	87,871	19,217	225,580	244,797	332,668	761	100,300	1,023,810	1,124,110	1,124,871	348,813	75,081	256,736	331,817	680,630
1987	124,357	17,852	145,257	163,109	287,466	7,784	29,115	250,473	279,588	287,372	69,241	56,994	264,326	321,320	390,561
1988	182,520	13,232	103,296	116,528	299,048	488	9,442	86,677	96,119	96,607	106,725	25,648	90,103	115,751	222,476
1989	167,281	18,367	225,457	243,824	411,105	3,710	34,198	430,224	464,422	468,132	182,631	59,994	194,249	254,243	436,874
60-69 AVG	113,968	0	0	63,541	177,509	7,443	0	0	111,026	118,469	92,929	0	0	83,889	176,818
70-79 AVG	64,628	5,202	40,389	83,620	148,248	2,879	10,379	78,611	122,422	125,301	58,313	12,368	40,630	123,812	182,125
80-84 AVG	132,908	20,096	125,218	145,314	278,223	10,720	21,394	360,097	381,491	392,211	168,861	48,485	146,420	194,905	363,767
85-89 AVG	153,044	23,092	196,990	220,082	373,127	5,696	43,630	475,632	519,262	524,958	176,940	56,440	202,198	258,637	435,578

- Continued -

Table 10. Southeast Alaska annual coho catch by commercial fisheries, 1960-89 (continued).

	Area 4						Area 5					
Year	Purse Seine	Drift Gillnet	Hand Troll	Power Troll	Total Troll	Total	Purse Seine	Drift Gillnet	Hand Troll	Power Troll	Total Troll	Total
1960	34,749	33,338	0	0	105,419	173,506	5,608	336	0	0	42,513	48,457
1961	70,186	33,742	0	0	105,313	209,241	32,137	14,934	0	0	31,052	78,123
1962	38,490	40,097	0	0	103,646	182,233	31,278	46,197	0	0	79,594	157,069
1963	127,287	45,951	0	0	221,641	394,879	24,964	63,715	0	0	75,321	164,000
1964	152,064	62,662	0	0	154,100	368,826	68,385	94,042	0	0	102,023	264,450
1965	196,676	71,748	0	0	208,289	476,713	62,828	84,029	0	0	117,099	263,956
1966	132,978	66,859	0	0	125,367	325,204	78,533	79,316	0	0	113,207	271,056
1967	107,225	106,500	0	0	144,541	358,266	12,567	24,417	0	0	79,690	116,674
1968	169,598	82,365	0	0	228,842	480,805	56,357	103,558	0	0	101,451	261,366
1969	80,254	45,795	0	0	151,525	277,574	2,313	16,069	0	0	29,726	48,108
1970	134,405	93,478	0	0	127,165	355,048	39,008	53,873	0	0	26,758	119,639
1971	109,182	91,004	0	0	129,476	329,662	70,566	62,958	0	0	59,997	193,521
1972	132,504	107,751	0	0	134,297	374,552	46,756	131,947	0	0	83,588	262,291
1973	51,490	61,606	0	0	122,583	235,679	10,873	44,278	0	0	56,655	111,806
1974	14,689	103,548	0	0	136,951	255,188	14,200	61,708	0	0	102,990	178,898
1975	549	58,728	6,348	13,613	19,961	79,238	11,935	30,962	5,978	23,014	28,992	71,889
1976	1,504	113,704	31,012	57,726	88,738	203,946	17,878	25,182	15,531	42,089	57,620	100,680
1977	0	146,262	77,570	64,627	142,197	288,459	38,530	24,417	22,853	37,424	60,277	123,224
1978	2,913	85,109	171,174	76,936	248,110	336,132	21,219	88,228	51,774	43,321	95,095	204,542
1979	1,613	43,209	29,052	8,369	37,421	82,243	16,326	31,688	81,702	50,291	131,993	180,007
1980	4,964	70,515	28,145	7,552	35,697	111,176	5,228	19,612	52,566	36,067	88,633	113,473
1981	20,130	71,361	43,657	66,254	109,911	201,402	9,847	24,014	50,729	71,801	122,530	156,391
1982	68,861	101,347	63,518	94,684	158,202	328,410	64,237	64,276	62,302	92,536	154,838	283,351
1983	26,470	90,965	48,284	83,935	132,219	249,654	22,754	77,811	55,443	99,596	155,039	255,604
1984	21,844	101,889	43,725	84,838	128,563	252,296	33,987	53,385	29,851	58,125	87,976	175,348
1985	30,113	153,842	44,263	90,912	135,175	319,130	41,273	102,691	39,947	73,499	113,446	257,410
1986	9,220	112,623	37,876	40,235	78,111	199,954	15,261	160,474	84,688	151,589	236,277	412,012
1987	13,432	88,847	38,018	55,318	93,336	195,615	7,479	38,165	31,987	83,366	115,353	160,997
1988	13,722	126,503	26,052	63,340	89,392	229,617	9,649	14,431	14,636	44,799	59,435	83,515
1989	25,738	102,119	57,416	159,815	217,231	345,088	34,250	96,647	44,719	119,273	163,992	294,889
60-69 AVG	110,951	58,906	0	0	154,868	324,725	37,497	52,661	0	0	77,168	167,326
70-79 AVG	44,885	90,440	31,518	22,127	118,690	254,015	28,729	55,524	17,784	19,614	70,397	154,650
80-84 AVG	28,454	87,215	45,466	67,453	112,918	228,588	27,211	47,820	50,178	71,625	121,803	196,833
85-89 AVG	18,445	116,787	40,725	81,924	122,649	257,881	21,582	82,482	43,195	94,505	137,701	241,765

- Continued -

Table 10. Southeast Alaska annual coho catch by commercial fisheries, 1960-89 (continued).

	Area 6						Annette Island			
Year	Purse Seine	Drift Gillnet	Hand Troll	Power Troll	Total Troll	Total	Purse Seine	Drift Gillnet	Trap	Total
1960	24,731	2,913	0	0	100,709	27,644	0	0	2,387	2,387
1961	63,030	3,049	0	0	101,561	66,079	0	0	5,740	5,740
1962	90,893	10,788	0	0	173,859	101,681	0	0	3,975	3,975
1963	40,955	3,104	0	0	37,372	44,059	42	0	1,646	1,688
1964	150,286	15,663	0	0	103,112	165,949	164	0	6,796	6,960
1965	75,328	10,675	0	0	26,231	86,003	24	0	2,256	2,280
1966	135,863	9,359	0	0	64,207	145,222	169	0	15,975	16,144
1967	6,669	3,072	0	0	13,005	9,741	6	0	368	374
1968	122,491	16,309	0	0	137,898	138,800	283	10	1,663	1,956
1969	7,105	3,154	0	0	36,954	10,259	0	0	400	400
1970	67,942	16,425	0	0	41,032	84,367	0	0	2,499	2,499
1971	86,118	5,170	0	0	53,503	91,288	0	0	0	0
1972	121,018	35,695	0	0	179,699	156,713	18	0	4,688	4,706
1973	36,796	18,459	0	0	60,703	55,255	0	0	324	324
1974	57,677	21,327	0	0	97,916	79,004	0	0	1,006	1,006
1975	38,213	12,631	19,744	61,527	81,271	50,844	8	0	562	570
1976	35,515	17,574	13,306	48,770	62,076	53,089	131	0	1,223	1,354
1977	80,284	12,173	16,658	64,901	81,559	92,457	9,984	768	1,374	12,126
1978	130,548	47,797	56,728	109,827	166,555	178,345	2,113	2,187	4,371	8,671
1979	31,530	6,427	30,184	56,597	86,781	37,957	239	1,720	3,684	5,643
1980	43,213	19,329	24,110	61,457	85,567	62,542	901	2,565	2,005	5,471
1981	20,933	19,125	12,062	53,392	65,454	40,058	1,100	5,069	1,647	7,816
1982	133,257	28,015	34,917	118,400	153,317	161,272	3,104	6,665	4,576	14,345
1983	72,670	41,556	23,979	112,853	136,832	114,226	3,341	7,887	6,270	17,498
1984	110,402	35,514	12,192	46,623	58,815	145,916	11,288	8,240	5,595	25,123
1985	154,263	53,066	20,114	97,205	117,319	207,329	3,911	23,227	3,540	30,678
1986	194,197	63,377	22,261	90,549	112,810	257,574	20,309	52,834	1,410	74,553
1987	24,318	38,123	9,256	59,200	68,456	62,441	9,204	24,033	734	33,971
1988	22,109	17,036	3,248	19,959	23,207	39,145	1,431	7,112	97	8,640
1989	82,904	32,485	5,465	65,316	70,781	115,389	2,127	21,266	477	23,870
60-69 AVG	71,735	7,809	0	0	79,491	79,544	69	1	4,121	4,190
70-79 AVG	68,564	19,368	13,662	34,162	91,110	87,932	1,249	468	1,973	3,690
80-84 AVG	76,095	28,708	21,452	78,545	99,997	104,803	3,947	6,085	4,019	14,051
85-89 AVG	95,558	40,817	12,069	66,446	78,515	136,376	7,396	25,694	1,252	34,342

Table 11. Purse seine catch in Southeast Alaska Districts 101-104, 1960-89.

	District			
Year	101	102	103	104
1960	13,415	11,316	4,091	54,402
1961	23,171	39,859	40,461	28,022
1962	44,448	46,445	16,366	59,307
1963	11,420	29,577	37,409	73,461
1964	46,690	103,760	28,153	103,810
1965	5,190	70,162	71,836	124,760
1966	40,431	95,601	44,868	56,858
1967	509	6,166	2,915	56,486
1968	70,033	52,741	30,708	81,668
1969	905	6,200	995	13,177
1970	33,292	35,782	43,815	5,876
1971	27,768	58,350	30,000	28,217
1972	72,168	49,395	18,156	71,198
1973	4,807	32,218	8,045	21,673
1974	22,632	35,045	25,300	51,029
1975	4,175	34,046	10,880	7,797
1976	4,935	30,711	17,666	14,684
1977	38,539	51,748	5,565	23,523
1978	60,425	72,236	11,994	71,517
1979	4,252	27,517	14,178	102,596
1980	31,602	15,705	20,701	113,123
1981	18,511	19,460	48,663	131,095
1982	84,091	55,438	18,621	153,743
1983	44,923	31,524	29,385	215,279
1984	78,945	48,151	39,539	144,102
1985	105,994	50,686	48,108	129,183
1986	152,658	61,934	75,503	273,253
1987	17,136	16,386	20,249	48,992
1988	8,344	16,550	12,466	94,259
1989	33,738	52,167	24,369	158,720
Years		Average		
60-69	25,621	46,183	27,780	65,195
70-79	27,299	42,705	18,560	39,811
80-84	51,614	34,056	31,382	151,468
85-89	63,574	39,545	36,139	140,881

Table 12. Annual Southeast Alaska drift gill net catch by fishery, 1960-89.

Year	Tree Point (101-11)	Prince of Wales (106)	Stikine (108)	Taku-Snettisham (111)	Lynn Canal (115)
			Fishery (District)		
1960	2,913	336	27,479	22,374	10,964
1961	3,049	14,934	36,858	15,486	18,256
1962	10,788	42,276	38,386	15,661	24,436
1963	3,104	52,103	11,697	10,855	35,096
1964	15,663	64,654	29,388	29,315	33,347
1965	10,675	75,728	8,301	32,667	39,081
1966	9,359	62,823	16,493	26,065	40,794
1967	3,072	17,670	6,747	40,391	66,109
1968	16,309	67,151	36,407	39,103	43,262
1969	3,247	10,748	5,823	10,802	35,027
1970	16,420	35,470	18,403	44,960	48,643
1971	5,170	48,085	14,876	41,830	49,182
1972	35,660	93,427	38,520	49,780	57,971
1973	18,448	38,447	5,837	35,453	26,153
1974	21,327	45,714	16,021	38,661	64,809
1975	12,155	30,962	0	1,185	57,543
1976	16,275	19,126	6,056	41,729	71,984
1977	12,143	8,401	14,405	54,917	91,426
1978	47,766	55,578	32,650	31,944	53,165
1979	6,427	31,454	234	16,192	27,015
1980	19,990	16,580	2,946	41,515	28,845
1981	18,353	22,611	1,403	26,803	44,546
1982	28,201	45,251	19,971	29,072	72,247
1983	41,668	62,430	15,484	21,443	69,223
1984	35,416	48,244	5,141	33,836	68,210
1985	51,043	97,637	5,132	55,597	98,355
1986	61,592	205,598	14,324	30,512	82,121
1987	36,644	37,151	1,015	35,219	53,630
1988	16,823	14,419	12	44,966	81,537
1989	31,931	93,778	4,261	51,812	50,307
Years			Average		
60-69	7,818	40,842	21,758	24,272	34,637
70-79	19,179	40,666	14,700	35,665	54,789
80-84	28,726	39,023	8,989	30,534	56,614
85-89	39,607	89,717	4,949	43,621	73,190

Table 13. Annual sport catch of coho salmon by fishery in Southeast Alaska, 1977-89.

Year	Saltwater Catch				
	Juneau Marine	Ketchikan Marine	Sitka Marine	Other Marine	Marine Total
1977	17,703	4,210	2,855	7,054	31,822
1978	22,312	7,177	2,188	10,998	42,675
1979	9,726	2,281	1,554	5,326	18,887
1980	12,252	6,604	1,876	5,284	26,016
1981	8,921	4,643	3,122	4,613	21,299
1982	22,542	10,804	3,741	9,277	46,364
1983	15,787	12,969	4,312	11,744	44,812
1984	13,509	19,918	2,389	10,037	45,853
1985	16,757	17,005	3,332	11,720	48,814
1986	11,150	20,688	3,962	11,486	47,286
1987	16,639	13,146	2,673	10,304	42,762
1988	17,862	7,440	2,437	6,455	34,194
1989	34,161	13,060	8,030	20,825	76,076
Average	16,871	10,765	3,267	9,625	40,528

Year	Freshwater Catch					
	Prince of Wales	Haines-Skagway	Yakutat	Other	Freshwater Total	Grand Total
1977	869	987	1,223	1,251	4,330	36,152
1978	716	1,056	2,502	1,559	5,833	48,508
1979	481	282	2,645	817	4,225	23,112
1980	1,920	448	1,876	2,548	6,792	32,808
1981	1,194	1,740	2,149	1,776	6,859	28,158
1982	1,725	1,724	1,939	1,684	7,072	53,436
1983	3,324	1,976	1,730	3,561	10,591	55,403
1984	3,267	1,114	5,847	3,731	13,959	59,812
1985	1,206	2,475	5,502	1,913	11,096	59,910
1986	1,077	2,351	6,085	1,523	11,036	58,322
1987	2,937	1,195	1,973	1,417	7,522	50,284
1988	1,310	1,329	3,257	3,598	9,494	43,688
1989	3,347	1,468	6,973	2,925	14,713	90,789
Average	1,798	1,396	3,362	2,177	8,732	49,260

Table 14. Southeast Alaska and Yakutat reported subsistence and personal use coho salmon harvest, 1975-89.

Year	Catch (Number of Fish)		
	Southeast Alaska	Yakutat	Total
1975	96	40	136
1976	9	55	64
1977	68	781	849
1978	57	912	969
1979	60	720	780
1980	10	982	992
1981	129	1,701	1,830
1982	99	2,180	2,279
1983	211	360	571
1984	721	572	1,293
1985	363	59	422
1986	277	586	863
1987	113	883	996
1988	118	176	294
1989	528	866	1,394

Table 15. Number of licenced vessels in the B.C. commercial salmon fleet reporting landings by gear category.

Year	Gillnet	Seine	Troll	GN/TR Comb.
1967	2647	413	2271	1143
1968	2659	391	2292	1101
1969	2735	370	2330	687
1970	2537	425	2224	953
1971	2312	405	2133	900
1972	2269	393	2029	750
1973	2045	456	1669	838
1974	2101	486	1659	794
1975	1711	514	1485	1284
1976	1849	507	1709	1002
1977	1843	492	1792	946
1978	1613	514	1807	1095
1979	1429	520	1943	902
1980	1165	548	1648	1323
1981	1268	641	1503	1211
1982	1363	541	1673	1020
1983	1263	528	1702	990
1984	1164	518	1472	1112
1985	1617	533	1541	708
1986	1554	529	1457	912
1987	1692	515	1398	865
1988	1766	523	1291	891
1989*	1966	536	1221	785

Note: Vessels are assigned to gear categories on the basis of reported landings,
vessels with any seine landings are seiner and vessels with landings on both gillnet and troll are combinations.

* Preliminary

Table 16. The number of limited entry permits fished in the Southeast Alaska and Yakutat salmon fisheries, 1975 to 1989.

Year	Purse Seine	Drift Gill Net	Set Gill Net	Hand Troll	Power Troll
1975	293	457	141	1,092	758
1976	282	442	133	1,235	746
1977	326	446	143	1,834	758
1978	379	485	155	2,624	823
1979	319	459	155	2,204	829
1980	333	450	158	1,667	849
1981	364	454	158	1,147	800
1982	373	444	147	1,067	814
1983	340	438	145	951	826
1984	386	445	140	859	801
1985	366	452	148	892	833
1986	372	463	156	795	824
1987	385	468	155	765	830
1988	396	471	160	776	848
1989	368	467	160	687	841
Average	352	484	150	1,240	812

Table 17. North coast British Columbia hatchery coho releases.

Brood Year	Unfed Fry	Fed Fry	Smolts
1979	14000	980	0
1980	190	6000	0
1981	18750	116200	0
1982	32000	256109	0
1983	49000	252472	602022
1984	20000	206322	872803
1985	17635	517591	662874
1986	103000	487855	766939
1987	41200	264217	868628
1988	60500	290275	832075

Table 18. B.C. hatchery coho contribution to north coast B.C. troll and net fisheries.

	Northern Net (Areas 1 to 10)		Northern Troll (Areas 1 to 12, 30)	
Year	Number	Percent	Number	Percent
1977	6384	2.7%	9348	2.0%
1978	2961	0.8%	26031	3.0%
1979	2908	1.0%	11929	1.6%
1980	3071	1.1%	29248	3.4%
1981	1041	0.5%	35177	5.4%
1982	1959	0.7%	21149	3.5%
1983	2666	0.7%	71299	5.8%
1984	550	0.2%	35201	4.0%
1985	2097	0.8%	20645	3.1%
1986	7448	1.5%	81380	4.8%
1987	3683	1.9%	41229	5.1%
1988	5069	3.0%	30853	5.8%
Average	3320	1.2%	34457	4.0%

Note: For hatchery contribution and CWT reporting purposes the northern troll fishery includes Areas 11 and 12.

Table 19. Coho salmon peak escapement survey counts for three streams in the Yakutat area, 1973-89.

Year	System (number of fish) Situk River	Tawah Creek	Tsiu River
1973	1,719	1,978	30,000
1974	4,260	2,500	15,000
1975	4,500	2,100	8,150
1976	3,280	2,000	30,000
1977	3,750	3,000	25,000
1978	3,850	2,200	40,000
1979	7,000	4,050	25,000
1980	8,100	3,200	18,000
1981	8,430	7,183	20,000
1982	9,180	2,500	40,000
1983	5,300	6,730	16,500
1984	14,000	6,500	30,000
1985	6,490	3,300	52,350
1986	3,162	3,300	14,100
1987	2,000	5,000	8,500
1988	11,000	1,600	16,000
1989	3,900	1,300	26,000

Table 20 Coho salmon peak escapement survey counts and weir counts for selected streams in Lynn Canal, 1974-89.

Year	System (method) Berners River (Survey)	Chilkoot River (Weir)	Tahini River (Survey)	Kelsall River (Survey)
1974	4,121	NS	NS	NS
1975	4,342	NS	249	93
1976	1,820	942	489	NS
1977	2,200	NS	647	140
1978	3,108	1,178	148	5
1979	3,460	1,008	124	6
1980	2,820	NS	30	113
1981	4,420	1,579	700	176
1982	7,505	NS	130	161
1983	9,840	1,839	NS	NS
1984	2,825	NS	NS	NS
1985	6,169	1,891	268	132
1986	1,752	2,009	120	70
1987	3,260	NS	696	184
1988	2,724	NS	539	152
1989	7,509	3,830	987	650

NS - no survey during peak period or weir was not operated throughout the migration.

Table 21. Coho salmon peak escapement survey counts and weir counts for streams in the Juneau area, 1980-89.

Year	System (method)					
	Montana Creek (Survey)	Steep Creek (Survey)	Jordan Creek (Survey)	Switzer Creek (Survey)	Wilms Cr. (Taku) (Survey)	Auke Creek (Weir)
1980	NS	NS	NS	NS	NS	698
1981	227	515	482	109	NS	647
1982	545	232	368	80	NS	447
1983	636	168	184	80	NS	694
1984	581	171	251	123	1,480	651
1985	810	186	72	122	2,320	942
1986	60	250	163	54	1,095	453
1987	314	128	251	48	2,100	668
1988	164	155	215	51	1,307	756
1989	566	222	133	78	1,464	502

NS - no survey during the peak period or weir was not operated throughout the migration.

Table 22.

Coho salmon peak escapement survey counts and total weir counts for six systems on the central outside coast of Southeast Alaska near Sitka, 1981-89.

	System (method)					
Year	Starrigavan Creek (Survey)	Sinitsin Creek (Survey)	St. Johns Creek (Survey)	Nakwasina River (Survey)	Salmon Lake (Weir)	Ford Arm Lake (Weir)
1981	170	85	51	780	NS	NS
1982	317	46	NS	NS	NS	2,662
1983	45	31	12	217	NS	1,944
1984	385	160	154	715	1,514	NS
1985	193	144	109	408	1,388	2,324
1986	57	4	9	275	837	1,546
1987	36	21	4	47	616	1,694
1988	45	56	69	104	680	3,028
1989	101	76	89	129	210	2,177

NS - no survey count during peak period or weir was not operated throughout the migration.

Table 23. Coho salmon peak escapement survey counts and weir counts for four systems in southern inside districts (101 and 102) of Southeast Alaska, 1982-89.

	System (method)			
	Carroll River (Survey)	Indian River (Survey)	Eulachon River (Survey)	Hugh Smith Lake (Weir)
1982	NS	NS	NS	2,144
1983	524	828	387	1,490
1984	411	601	1,211	1,408
1985	1,550	812	1,883	903
1986	NS	NS	865	1,783
1987	180	154	154	1,118
1988	193	300	205	513
1989	70	925	290	433

NS - no survey count during peak period or weir was not operated throughout the migration.

Table 24 Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to Auke Lake, 1980-1989.

Year	Harvest: Number of fish and percent by gear type					Escapement	Total Return
	Troll	Purse Seine	Drift Gill Net	Sport	Total Catch		
1980	123 (14.0%)	0	30 (3.4%)	26 (3.0%)	179 (20.4%)	698 (79.6%)	877 (100%)
1981	295[a] (29.8%)	2 (0.2%)	32 (3.2%)	15 (1.5%)	344 (34.7%)	647 (65.3%)	991 (100%)
1982	152 (20.1%)	132 (17.5%)	24 (3.2%)	1 (0.1%)	309 (40.9%)	447 (59.1%)	756 (100%)
1983	402 (32.6%)	10 (0.8%)	30 (2.4%)	98 (8.0%)	540 (43.8%)	694 (56.2%)	1,234 (100%)
1984	372 (32.3%)	0	85 (7.4%)	43 (3.7%)	500 (43.4%)	651 (56.6%)	1,151 (100%)
1985	594 (35.1%)	3 (0.2%)	71 (4.2%)	79 (4.7%)	747 (44.2%)	942 (55.8%)	1,689 (100%)
1986	415 (43.0%)	0	60 (6.2%)	38 (3.9%)	513 (53.1%)	453 (46.9%)	966 (100%)
1987	438 (37.2%)	0	47 (4.0%)	24 (2.0%)	509 (43.2%)	668 (56.8%)	1,177 (100%)
1988	302 (25.4%)	9 (0.7%)	72 (6.0%)	52 (4.4%)	435 (36.5%)	756 (63.5%)	1,191 (100%)
1989	565 (49.6%)	7 (0.6%)	11 (1.0%)	54 (4.7%)	637 (55.9%)	502 (44.1%)	1,139 (100%)
Avg. No. of Fish	365	16	47	43	471	646	1,117
Avg. % of Total	31.8	2.0	4.2	3.6	41.6	58.4	100

[a] Estimated troll catch in 1981 includes 6 fish (0.6%) harvested in the northern British Columbia troll fishery.

Table 25. Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to the Berners River, 1982, 1983 and 1985-1989.

Year	Fishery Sample Size[a]	Harvest: Number of fish and percent by gear type					Escapement	Total Return
		Troll	Purse Seine	Drift Gill Net	Sport	Total Catch		
1982	48	12,887 (41.6%)	0	10,568 (34.1%)	0	23,455 (75.7%)	7,505 (24.3%)	30,960 (100%)
1983	125	17,153 (50.4%)	0	6,978 (20.5%)	65 (0.2%)	24,196 (71.1%)	9,840 (28.9%)	34,036 (100%)
1985	93	10,865 (44.8%)	198 (0.8%)	7,015 (28.9%)	0	18,078 (74.5%)	6,169 (25.5%)	24,247 (100%)
1986	157	13,560 (55.1%)	0	8,928 (36.2%)	395 (1.6%)	22,883 (92.9%)	1,752 (7.1%)	24,635 (100%)
1987	53	7,448[b] (53.0%)	0	3,301 (23.5%)	48 (0.3%)	10,798 (76.8%)	3,260 (23.2%)	14,058 (100%)
1988	102	5,926 (39.6%)	181 (1.2%)	6,141 (41.0%)	0	12,248 (81.8%)	2,724 (18.2%)	14,972 (100%)
1989	58	10,515 (53.4%)	0	1,664 (8.5%)	0	12,179 (61.9%)	7,509 (38.1%)	19,688 (100%)
Average Number of Fish		11,193	54	6,371	73	17,691	5,537	23,228
Average Percent of Total		48.3	0.3	27.5	0.3	76.4	23.6	100

[a] Includes only expandable random recoveries.

[b] Estimated troll catch in 1987 includes 242 fish (1.7%) harvested in the northern British Columbia troll fishery. The estimated average number and percent harvested in the Southeast Alaska troll fishery was 11,159 (48.0%).

Table 26. Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to Ford Arm Lake, 1982, 1983 and 1985-1989.

Year	Fishery Sample Size[a]	Harvest: Number of fish and percent by gear type				
		Troll	Purse Seine	Total Catch	Escapement	Total Return
1982	38	1,948 (41.3%)	106 (2.3%)	2,054 (43.6%)	2,662 (56.4%)	4,716 (100%)
1983	93	3,412 (54.3%)	931 (14.8%)	4,343 (69.1%)	1,944 (30.9%)	6,287 (100%)
1985	49	2,438 (51.2%)	0	2,438 (51.2%)	2,324 (48.8%)	4,762 (100%)
1986	87	2,500 (60.9%)	62 (1.5%)	2,562 (62.4%)	1,546 (37.6%)	4,108 (100%)
1987	71	1,456 (45.1%)	79 (2.4%)	1,535 (47.5%)	1,694 (52.5%)	3,229 (100%)
1988	151	2,887[b] (48.4%)	46 (0.8%)	2,933 (49.2%)	3,028 (50.8%)	5,961 (100%)
1989	221	3,777 (61.5%)	185 (3.0%)	3,962 (64.5%)	2,177 (35.5%)	6,139 (100%)
Average Number of Fish		2,631	201	2,832	2,197	5,029
Average Percent of Total		51.8	3.6	55.4	44.6	100

[a] Includes only expandable random recoveries.

[b] Estimated troll catch in 1988 included 30 fish (0.5%) harvested in the northern British Columbia troll fishery. The estimated average number and percent harvested in the Southeast Alaska troll fishery was 2,435 (51.8%).

Table 27 Estimated harvest and percent by gear type, escapement, and total return of coho salmon returning to Hugh Smith Lake, 1982-1989.

Year	Fishery Sample Size[a]	Harvest: Number of fish and percent by gear type									
		Alaska Troll	Alaska Seine	Alaska Gill Net	Alaska Trap	Alaska Sport	B.C. Troll	B.C. Net	Total Catch	Escapement	Total Return
1982	91	2,780 (45.6%)	627 (10.3%)	203 (3.3%)	0	0	264 (4.3%)	78 (1.3%)	3,952 (64.8%)	2,144 (35.2%)	6,096 (100%)
1983	189	1,373 (35.4%)	424 (10.9%)	277 (7.2%)	49 (1.3%)	0	211 (5.4%)	51 (1.3%)	2,385 (61.5%)	1,490 (38.5%)	3,875 (100%)
1984	151	1,260 (31.4%)	501 (12.5%)	470 (11.7%)	18 (0.5%)	0	325 (8.1%)	28 (0.7%)	2,602 (64.9%)	1,408 (35.1%)	4,010 (100%)
1985	212	868 (36.0%)	287 (11.9%)	137 (5.7%)	5 (0.2%)	0	199 (8.3%)	13 (0.5%)	1,509 (62.6%)	903 (37.4%)	2,412 (100%)
1986	257	1,585 (35.4%)	515 (11.5%)	315 (7.0%)	2 (0.1%)	14 (0.3%)	234 (5.2%)	26 (0.6%)	2,691 (60.1%)	1,783 (39.9%)	4,474 (100%)
1987	100	656 (28.0%)	95 (4.1%)	249 (10.6%)	0	23 (1.0%)	153 (6.5%)	50 (2.2%)	1,226 (52.3%)	1,118 (47.7%)	2,344 (100%)
1988	42	408 (26.7%)	230 (15.0%)	122 (8.0%)	0	0	234 (15.3%)	23 (1.5%)	1,017 (66.5%)	513 (33.5%)	1,530 (100%)
1989	91	1,213 (50.0%)	375 (15.5%)	237 (9.8%)	0	41 (1.7%)	105 (4.3%)	20 (0.8%)	1,991 (82.1%)	433 (17.9%)	2,415 (100%)
Average Number of Fish		1,268	382	251	10	9	215	36	2,171	1,224	3,395
Average Percent of Total		36.1	11.4	7.9	0.3	0.4	7.2	1.1	64.4	35.6	100

[a] Includes only expandable random recoveries.

Table 28. Estimated harvest rates for four coded-wire tagged indicator stocks by the Alaska troll fishery and by all fisheries combined, 1982-89.

Troll Fishery

Year	Stock (Troll Harvest Rate in Percent) Auke Lake	Berners River	Ford Arm Lake	Hugh Smith Lake	Average
1982	20.1	41.6	41.3	45.6	37.2
1983	32.6	50.4	54.3	35.4	43.2
1984	32.3			31.4	38.3[1]
1985	35.1	44.8	51.2	36.0	41.8
1986	43.0	55.1	60.9	35.4	48.6
1987	37.2	51.3	45.1	28.0	40.4
1988	25.4	39.6	45.0	26.7	34.2
1989	49.6	53.4	61.5	50.0	53.6
Average	34.4	48.0	51.3	36.1	42.1

All Fisheries

Year	Stock (Total Harvest Rate in Percent) Auke Lake	Berners River	Ford Arm Lake	Hugh Smith Lake	Average
1982	40.9	75.7	43.6	64.8	56.3
1983	43.8	71.1	69.1	61.5	61.4
1984	43.4			64.9	59.7[1]
1985	44.2	74.5	51.2	62.6	58.1
1986	53.1	92.9	62.4	60.1	67.1
1987	43.2	76.8	47.5	52.3	55.0
1988	36.5	81.8	49.2	66.5	58.5
1989	55.9	61.9	64.5	82.1	66.1
Average	45.1	76.4	55.4	64.4	60.3

[1] The average for 1984 is weighted. The sum of estimates for the Auke and Hugh Smith Lake stocks in 1984 was divided by their average proportional contribution to the sum of estimates for all four systems during 1982-83 and 1985-89. That number was then divided by four to get a weighted average for 1984 that is more comparable with other years than a simple average.

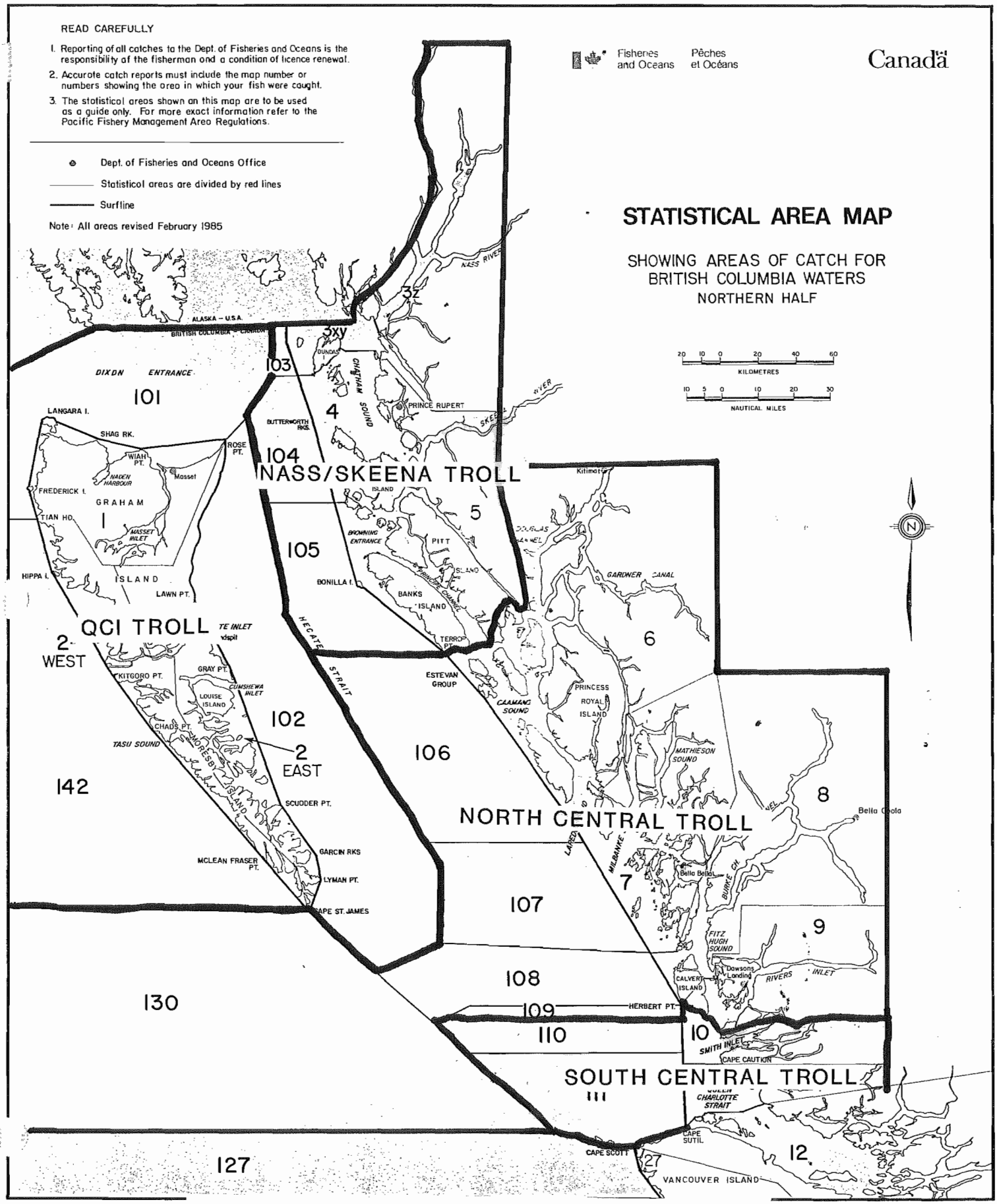

Figure 1. Map of British Columbia troll fishing catch regions.

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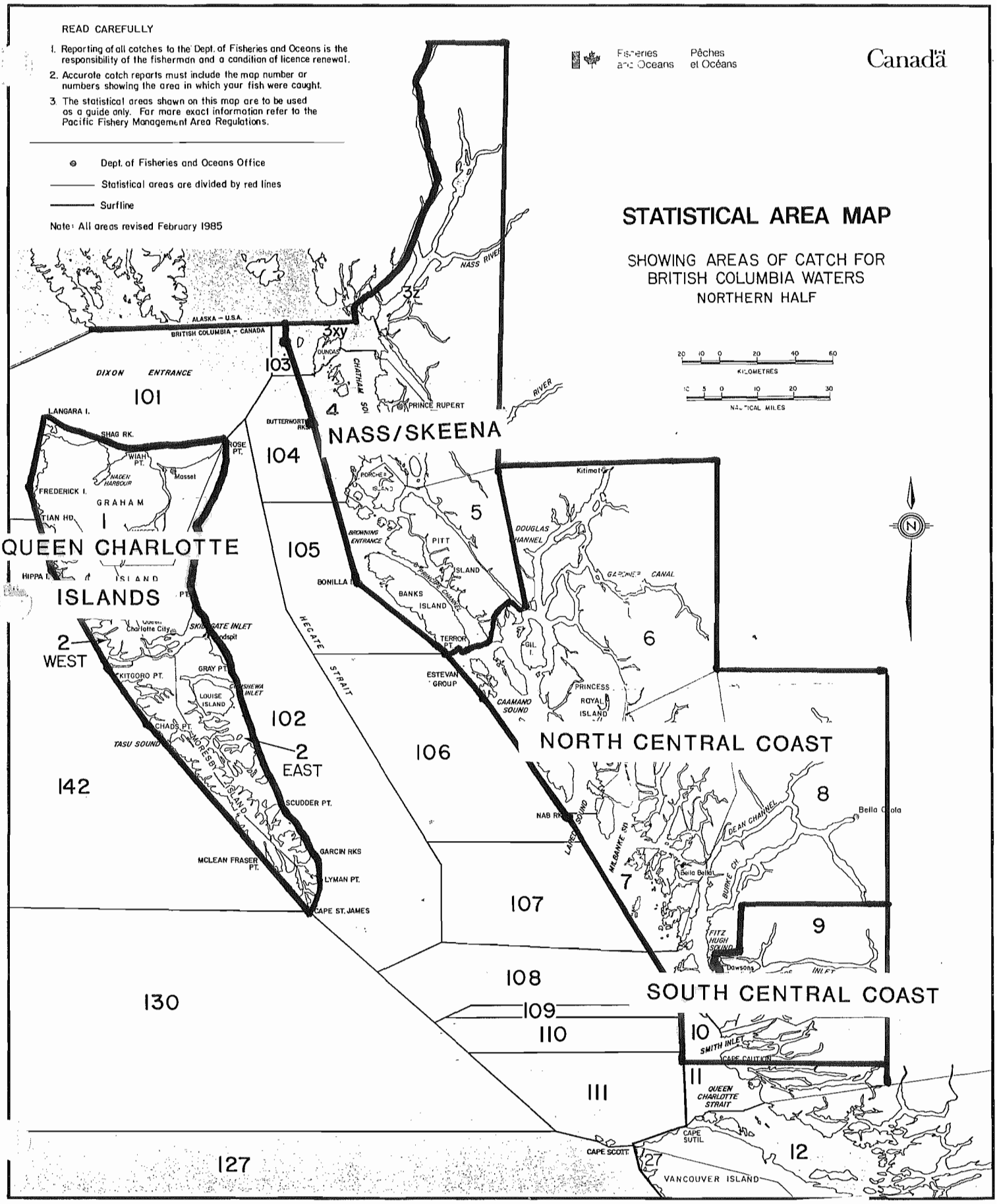


Figure 2. Map of British Columbia gillnet and seine fishing areas and catch regions.

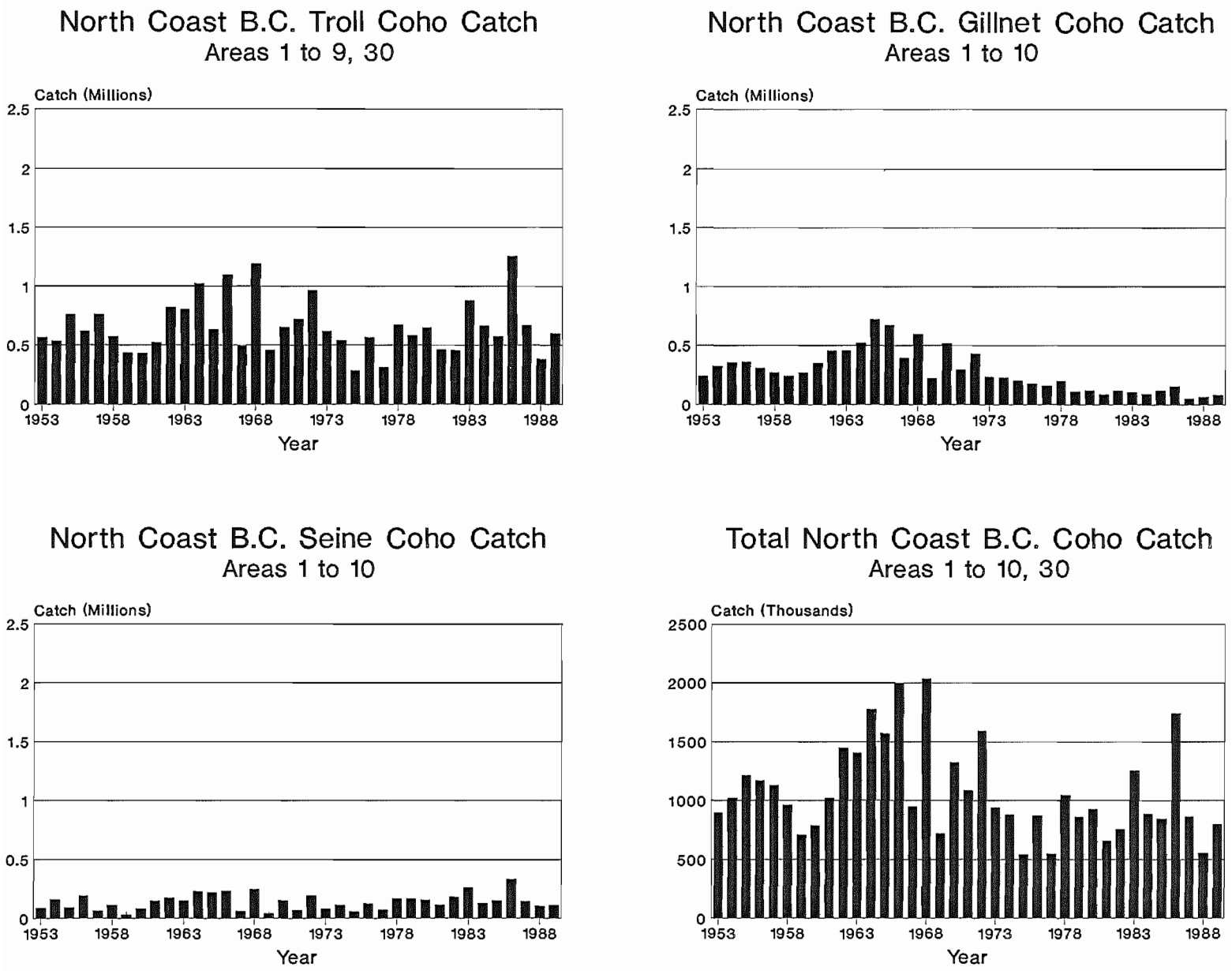


Figure 3. North coast British Columbia total coho catch by gear type, 1953 to 1989.

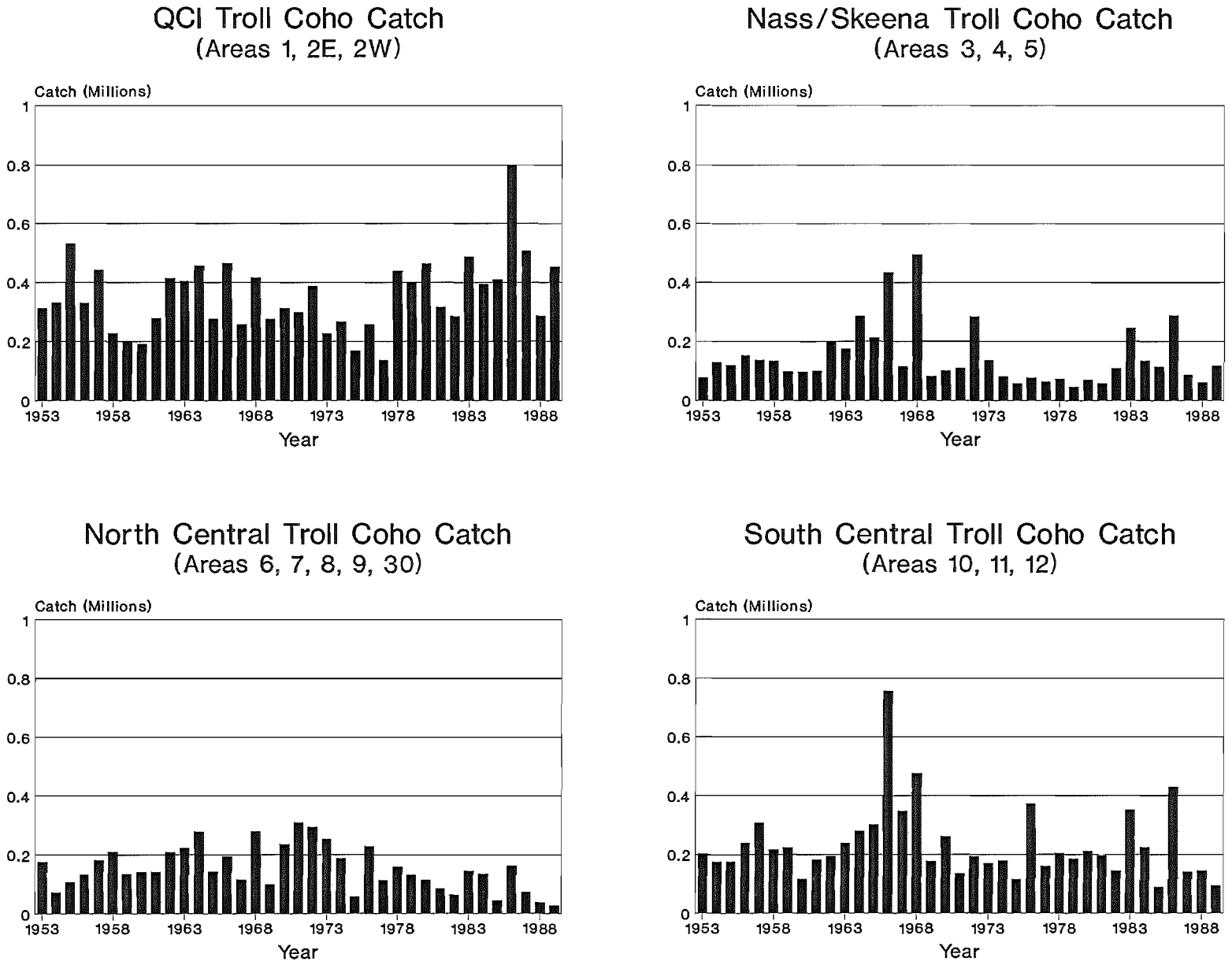
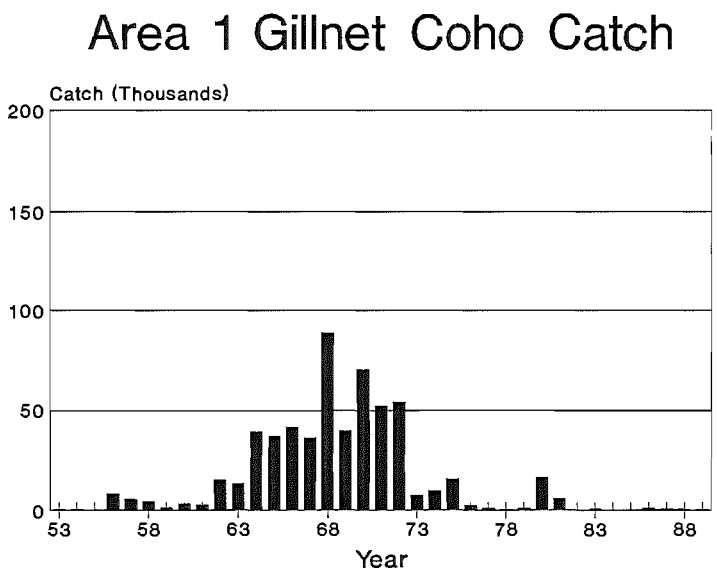
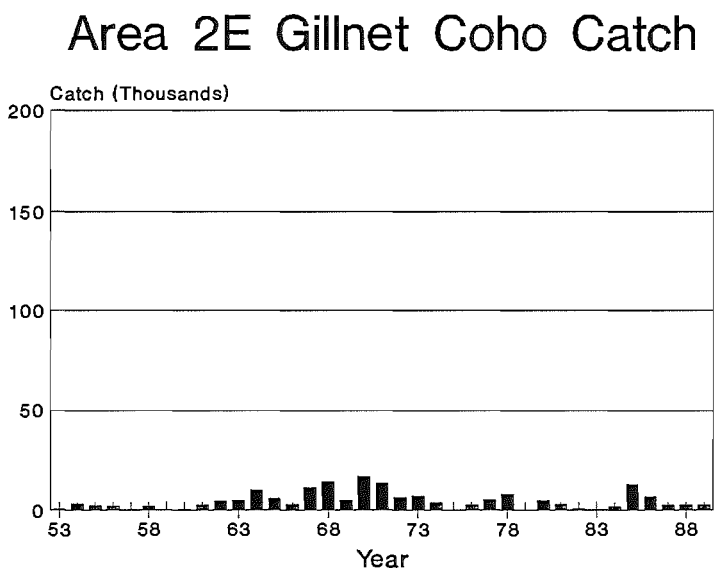
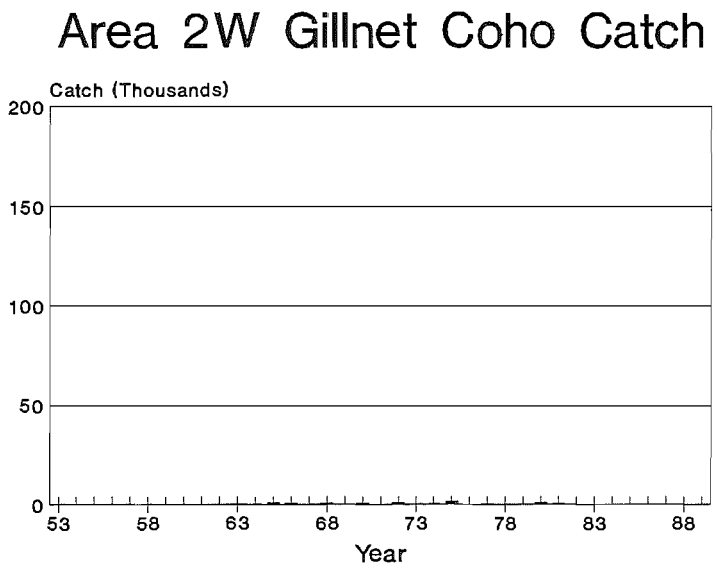


Figure 4. North coast British Columbia troll coho catch by catch regions, 1953 t0 1989.







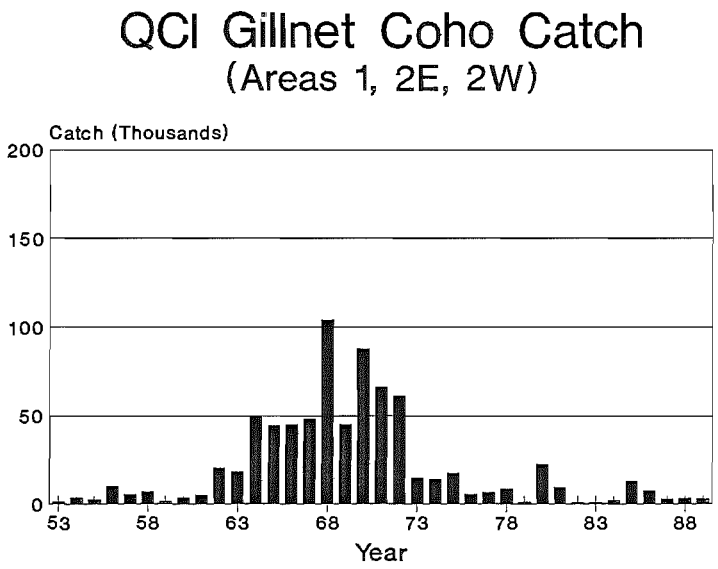
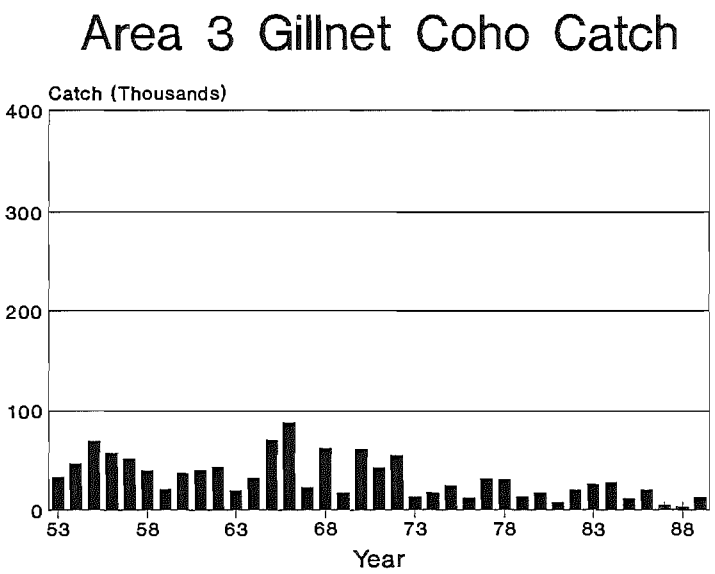
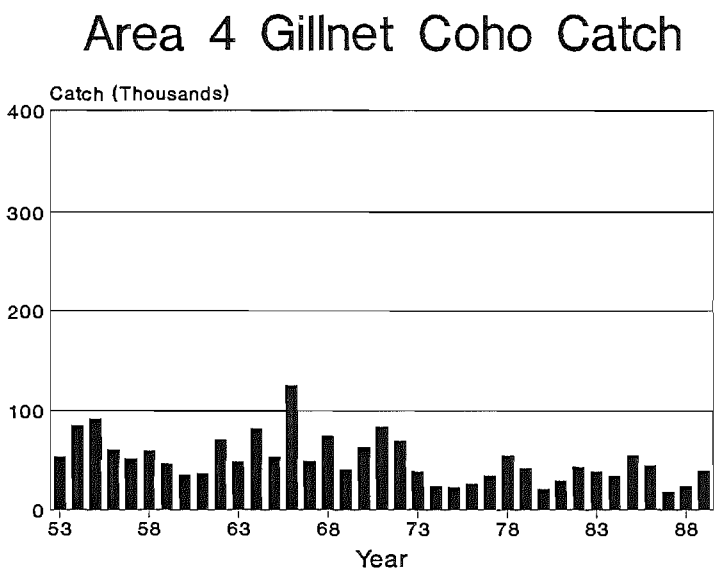
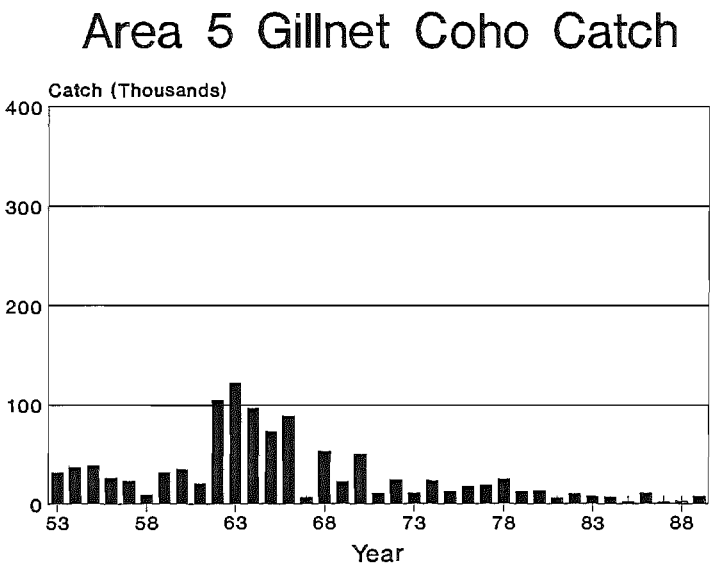


Figure 5. Queen Charlotte Islands gillnet coho catch (Areas 1, 2E and 2W), 1953 to 1989.







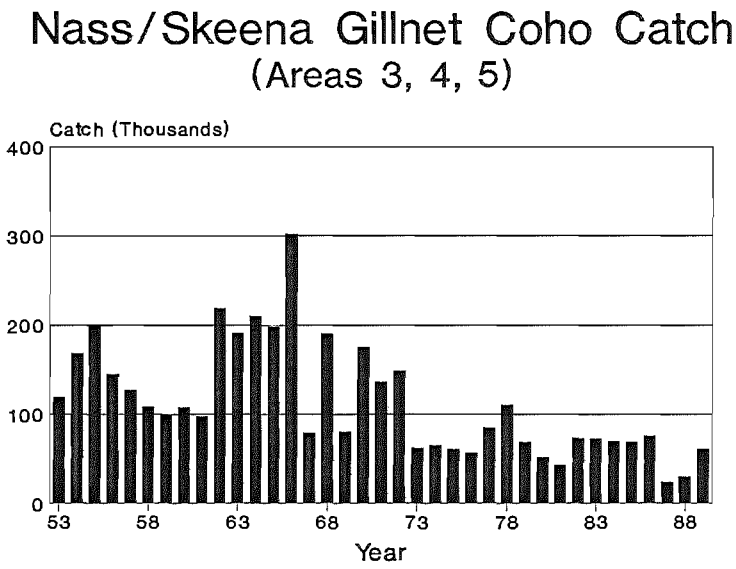


Figure 6. Nass/Skeena gillnet coho catch (Areas 3, 4 and 5), 1953 to 1989.

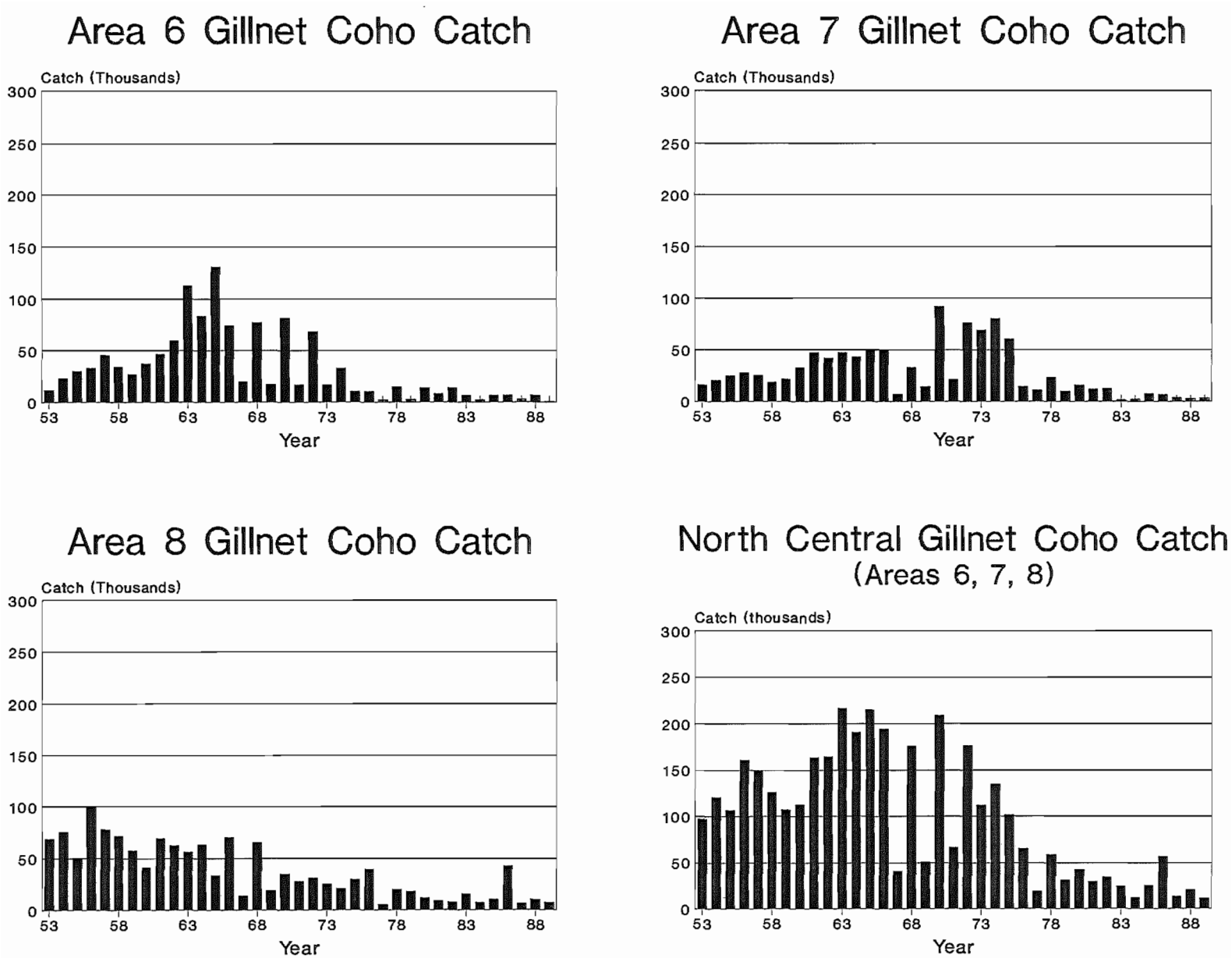
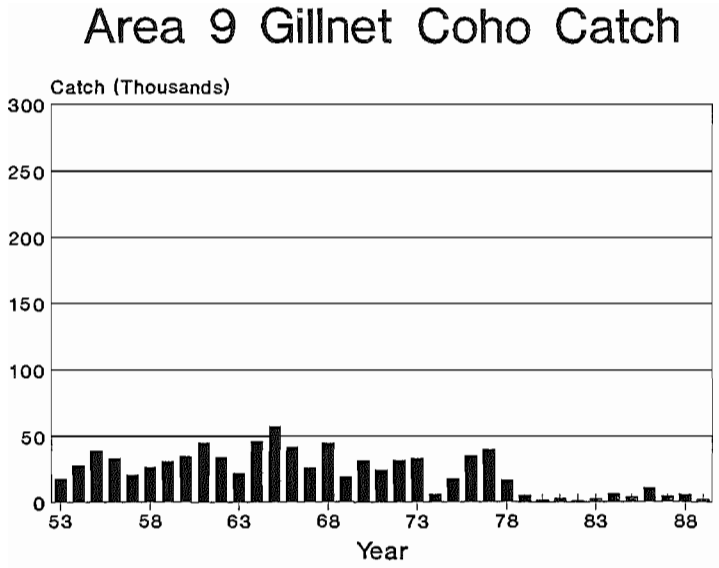
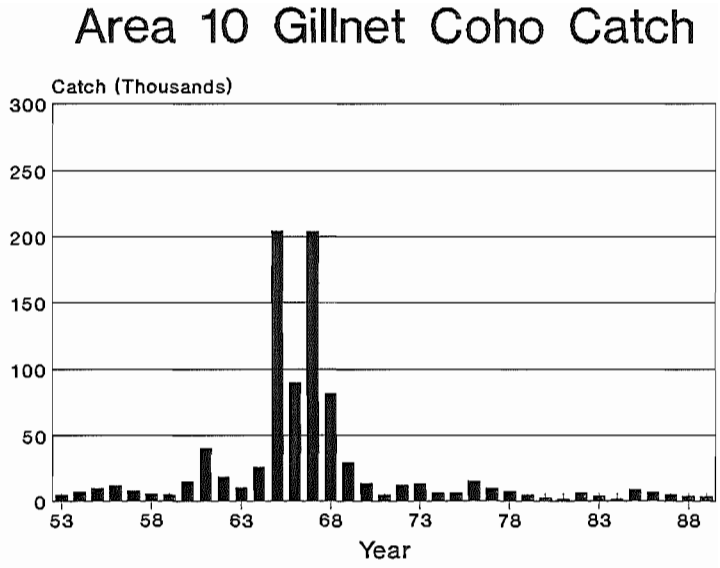


Figure 7. North Central gillnet coho catch (Areas 6, 7 and 8), 1953 to 1989.





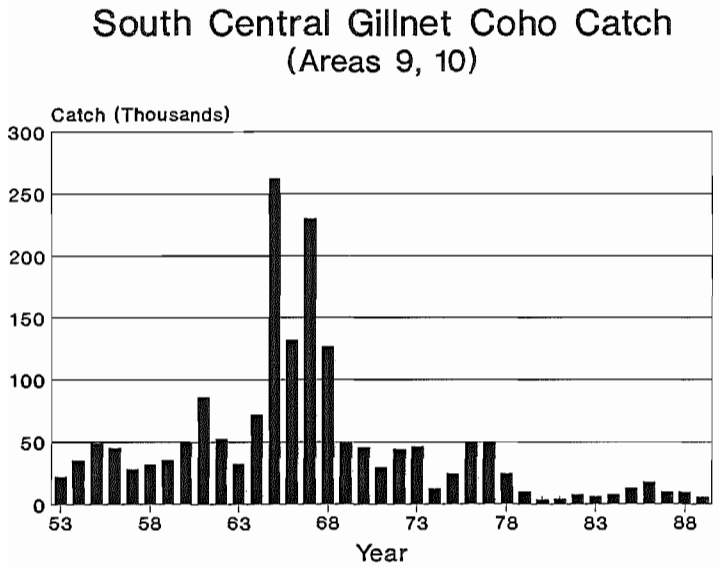


Figure 8. South Central gillnet coho catch (Areas 9 and 10), 1953 to 1989.

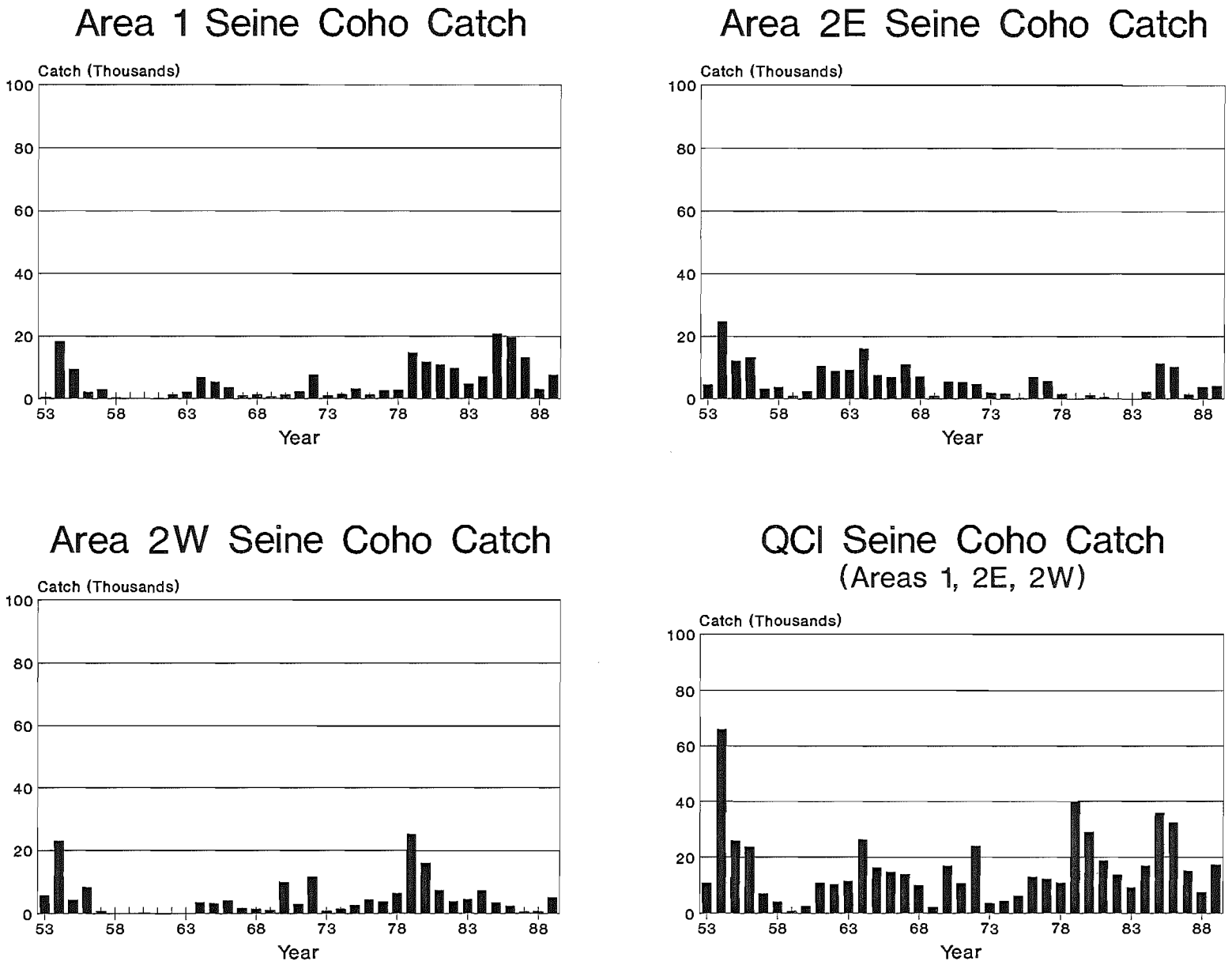
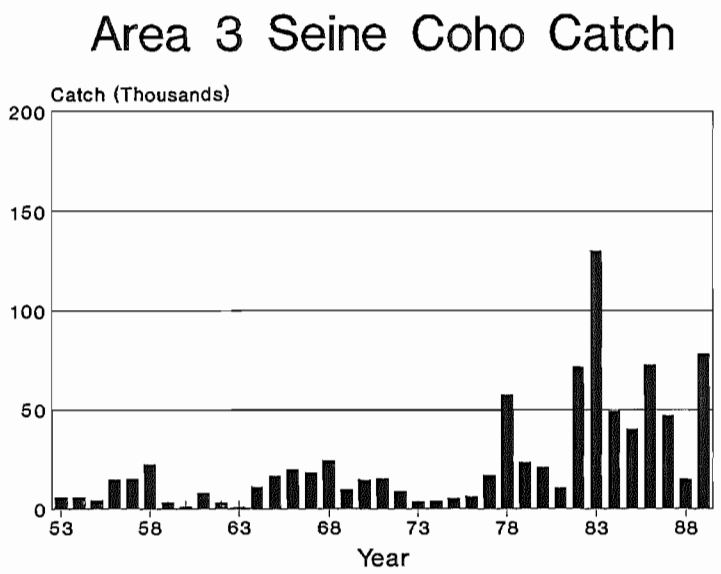
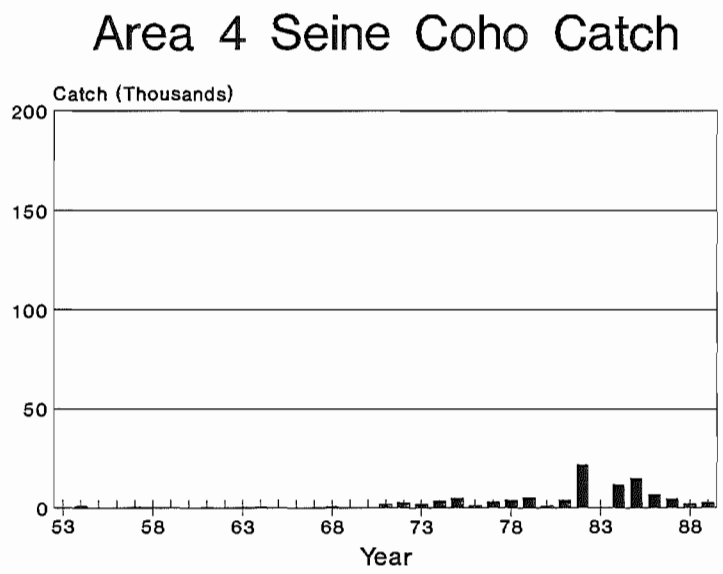
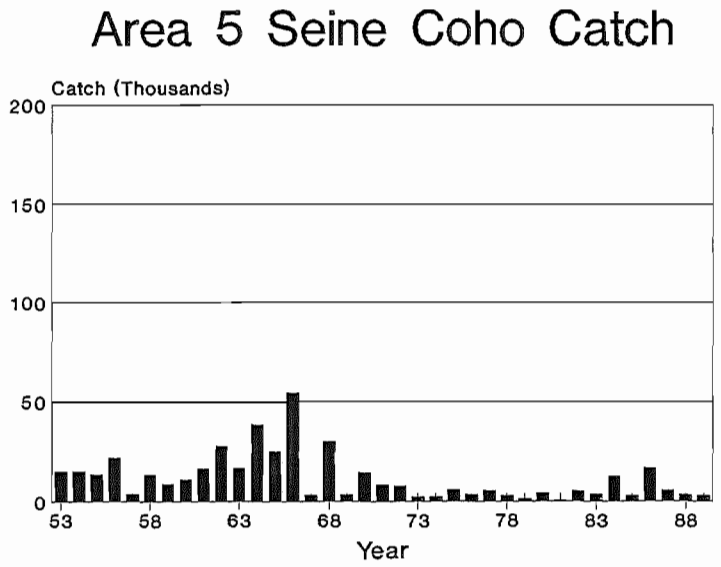


Figure 9. Queen Charlotte Islands seine coho catch (Areas 1, 2E and 2W), 1953 to 1989.







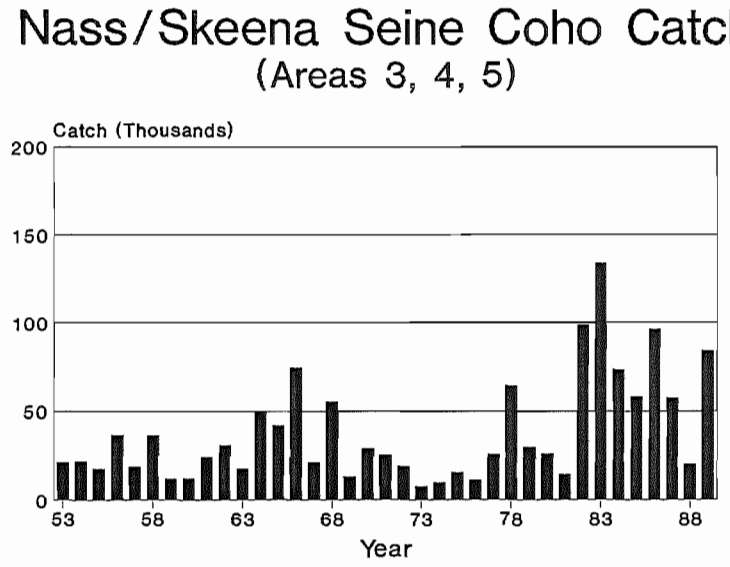
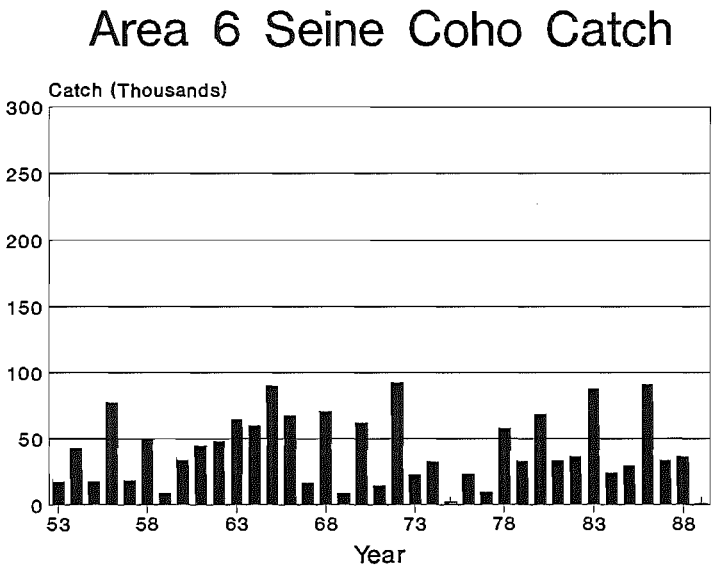
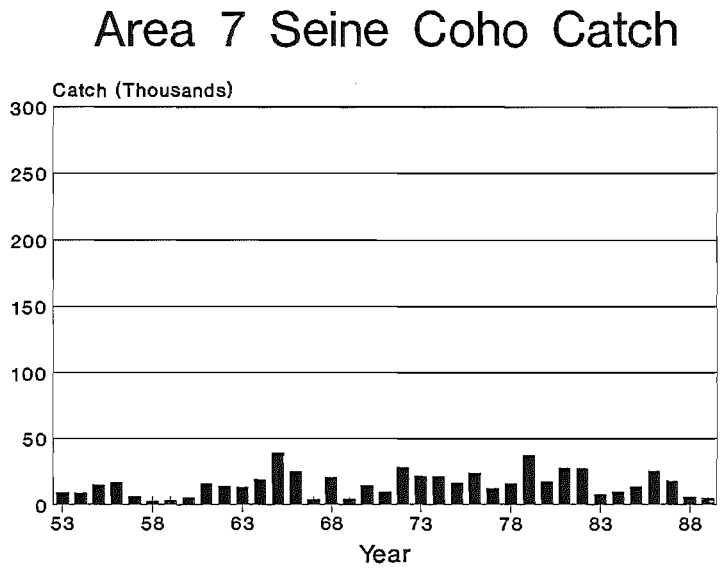
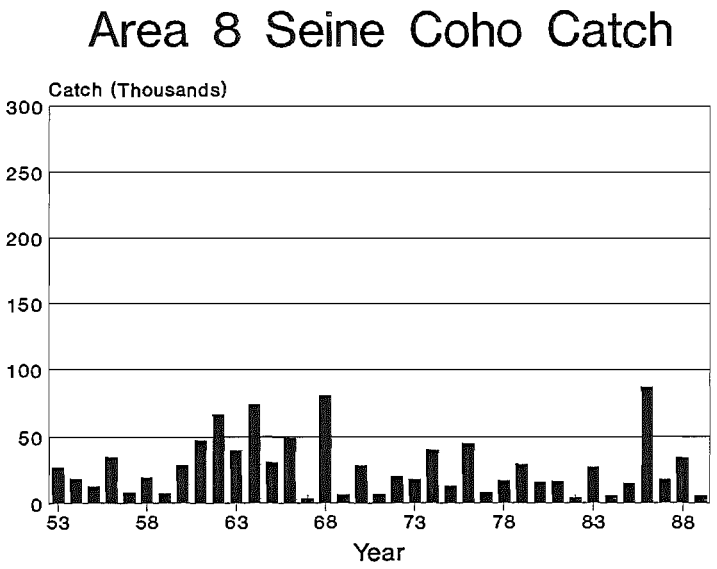


Figure 10. Nass/Skeena seine coho catch (Areas 3, 4 and 5), 1953 to 1989.







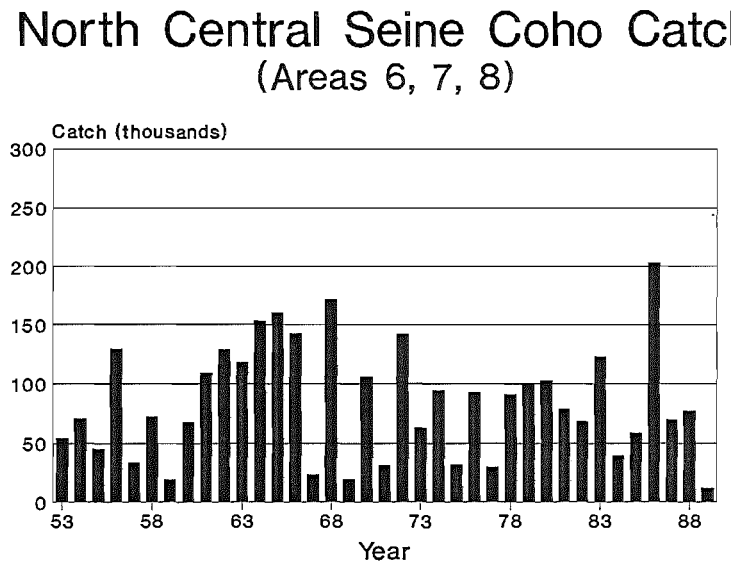
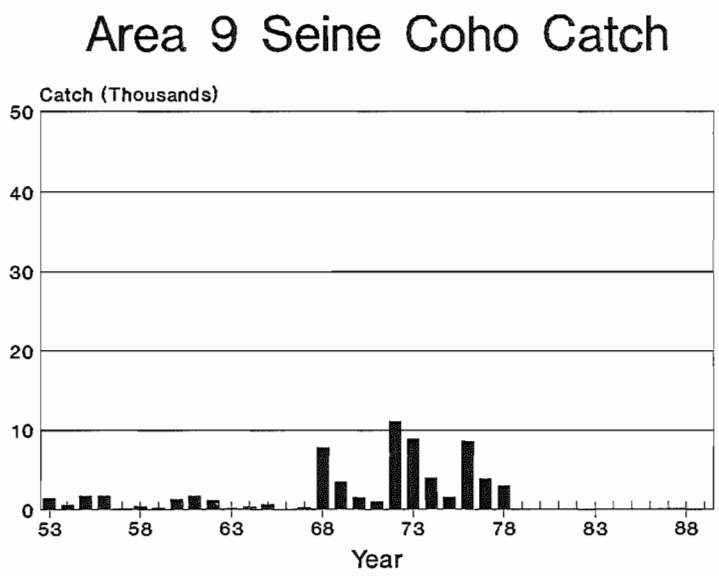
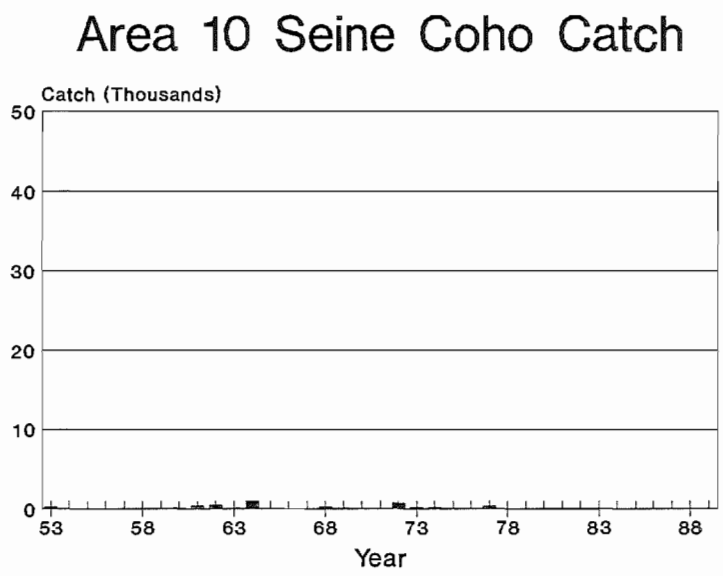


Figure 11. North Central seine coho catch (Areas 6, 7 and 8), 1953 to 1989.





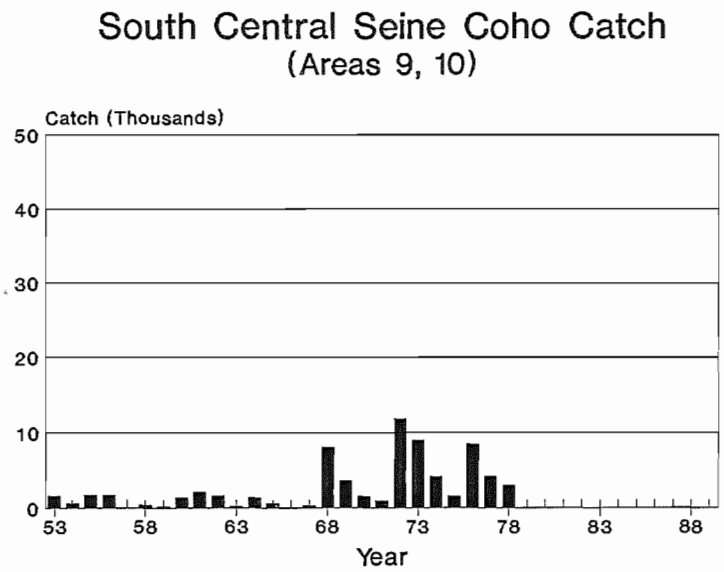
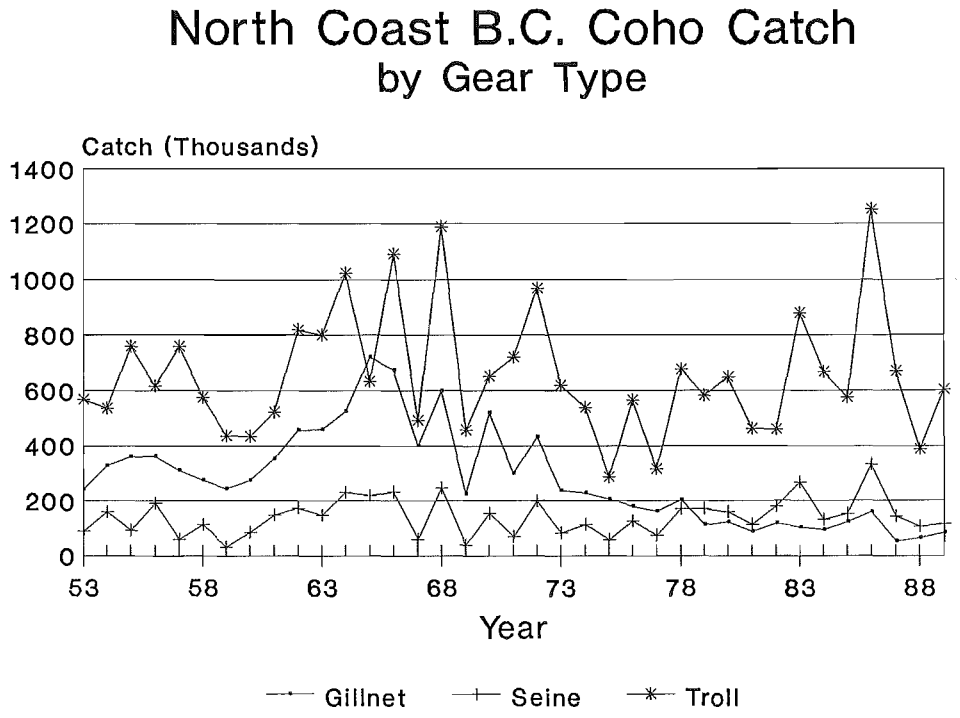


Figure 12. South Central seine coho catch (Areas 9 and 10), 1953 to 1989.



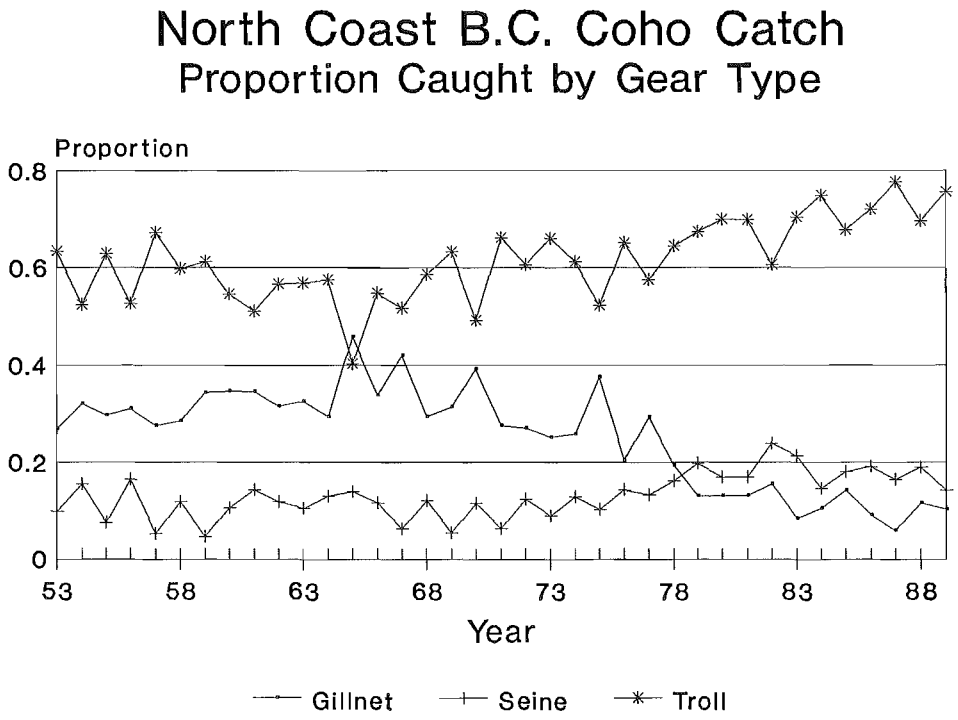


Figure 13. North Coast British Columbia coho catch and proportion of total catch caught by gear type, 1953 to 1989.

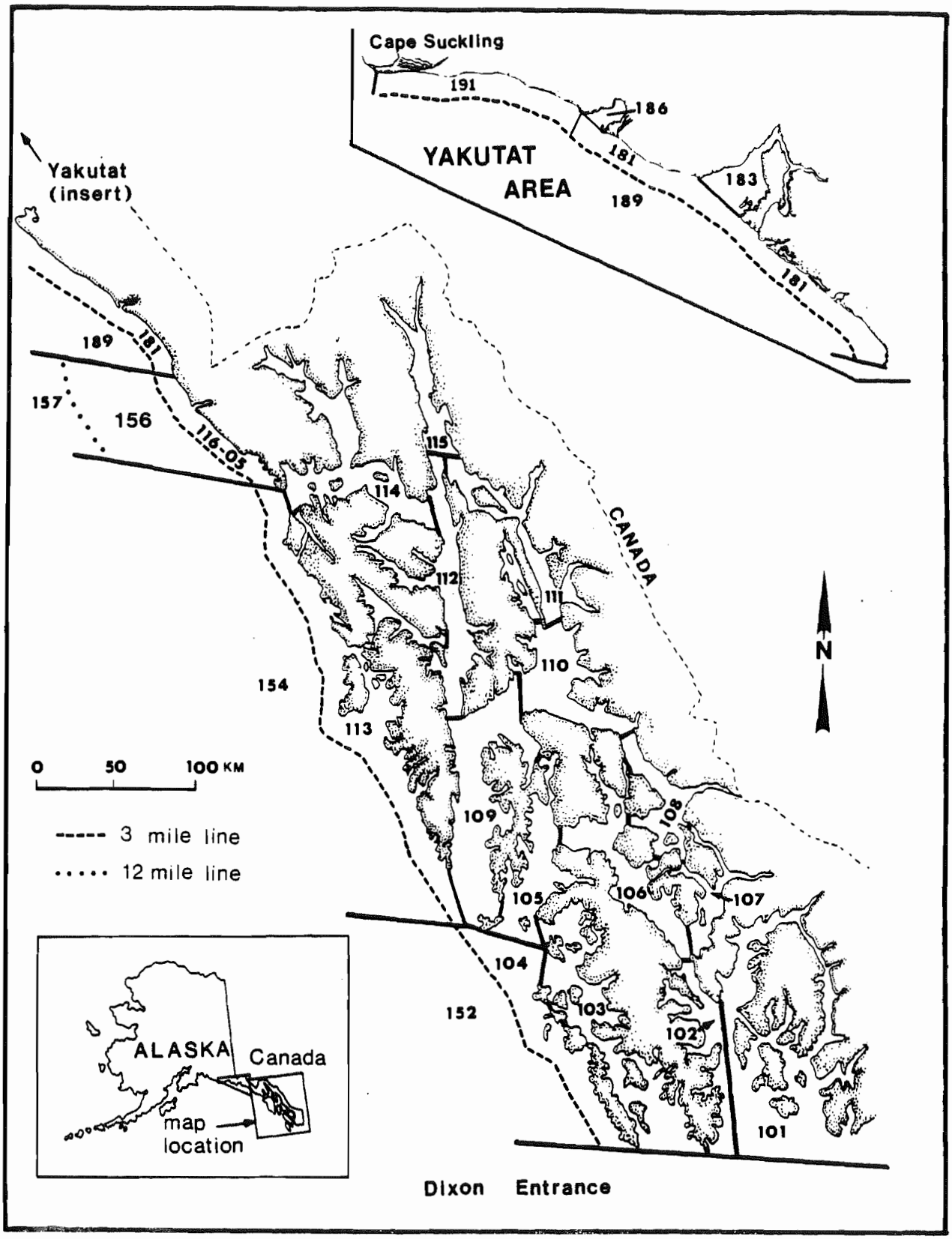


Figure 14. Map of Southeast Alaska statistical fishing districts.

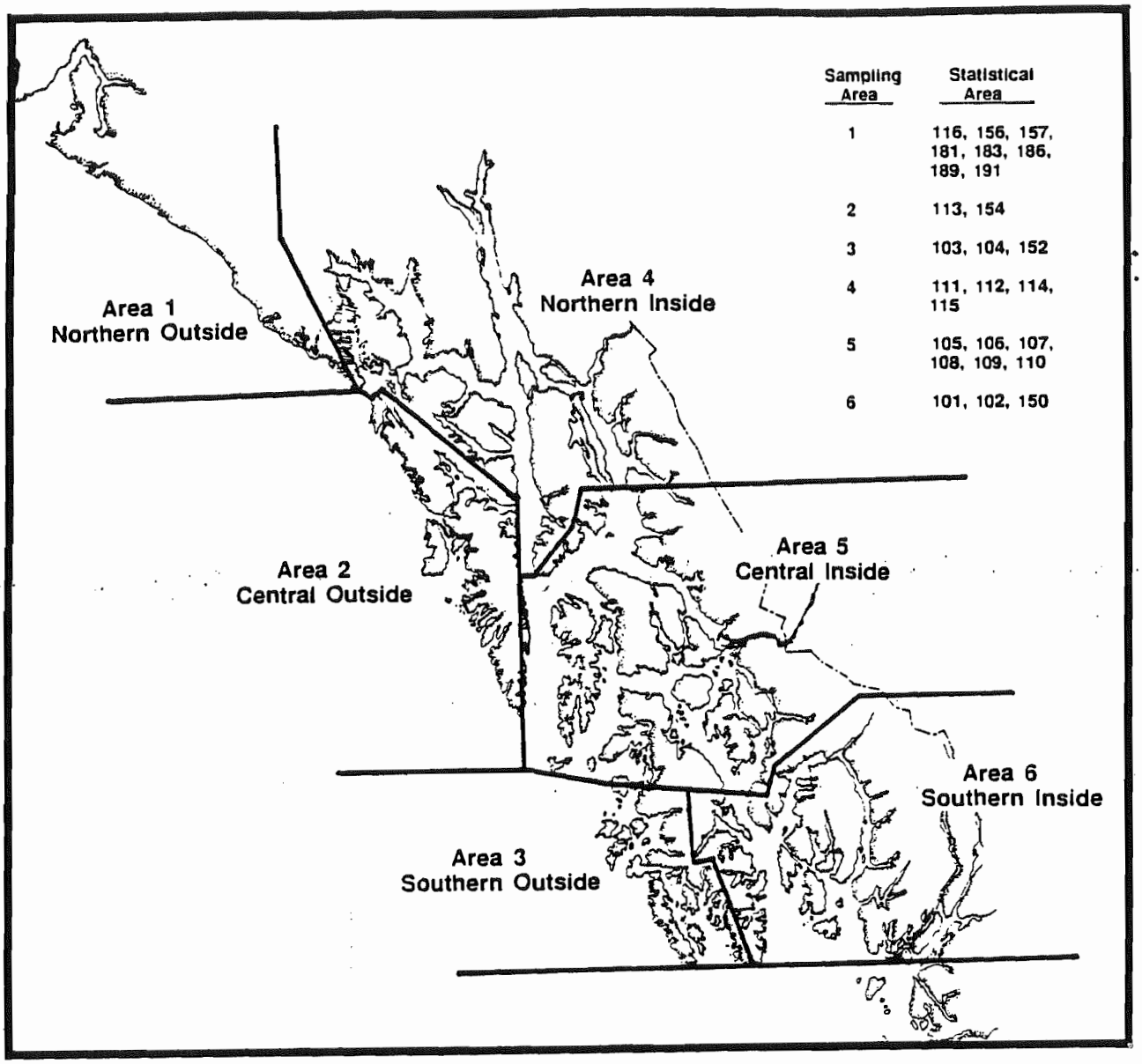


Figure 15. Areas used for reporting catches in Southeast Alaskan fisheries.

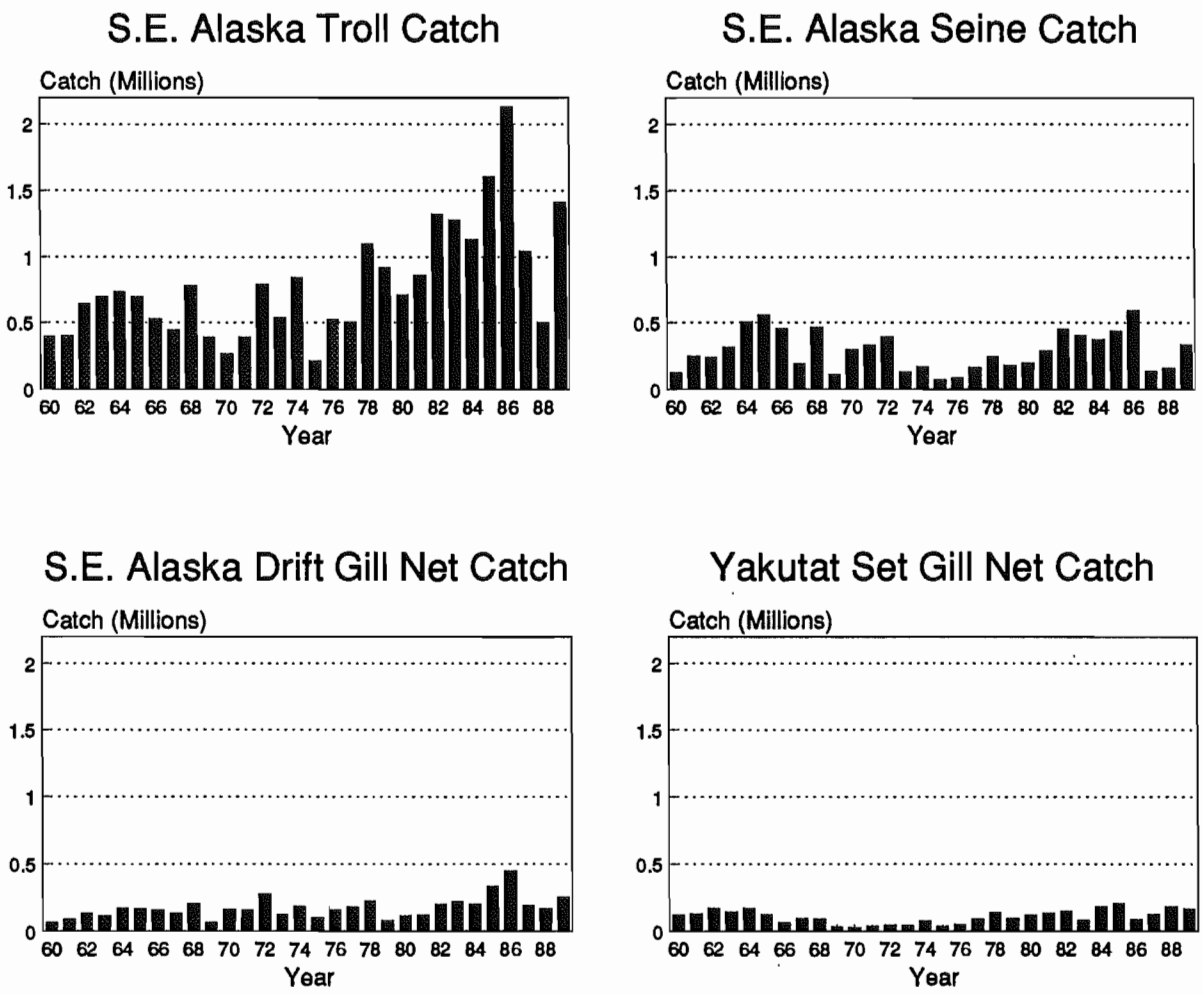


Figure 16. Southeast Alaska coho salmon catch by troll, purse seine, drift gill net, and set gill net gear, 1960-89.

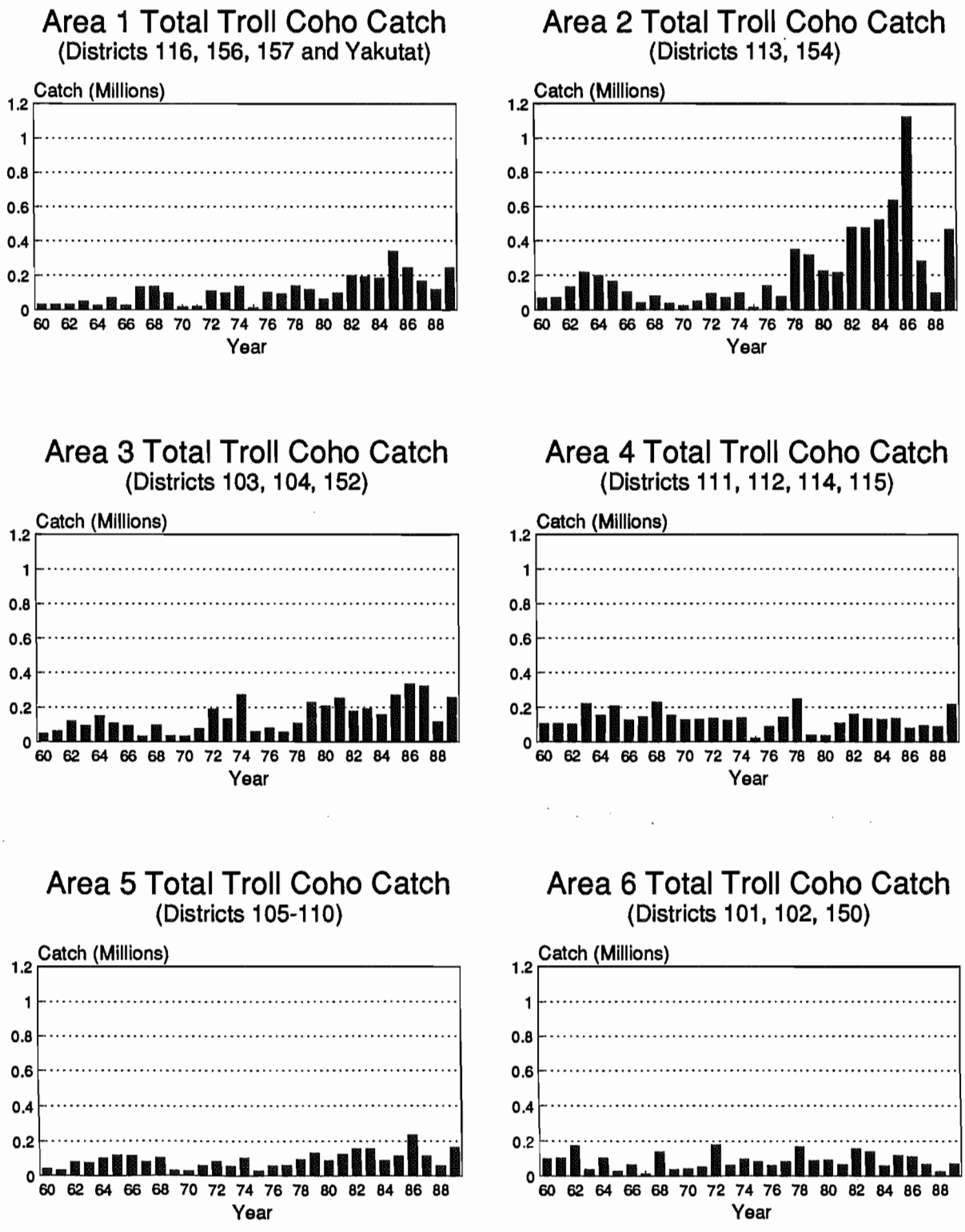


Figure 17. Southeast Alaska troll catch of coho salmon by area, 1960-89.

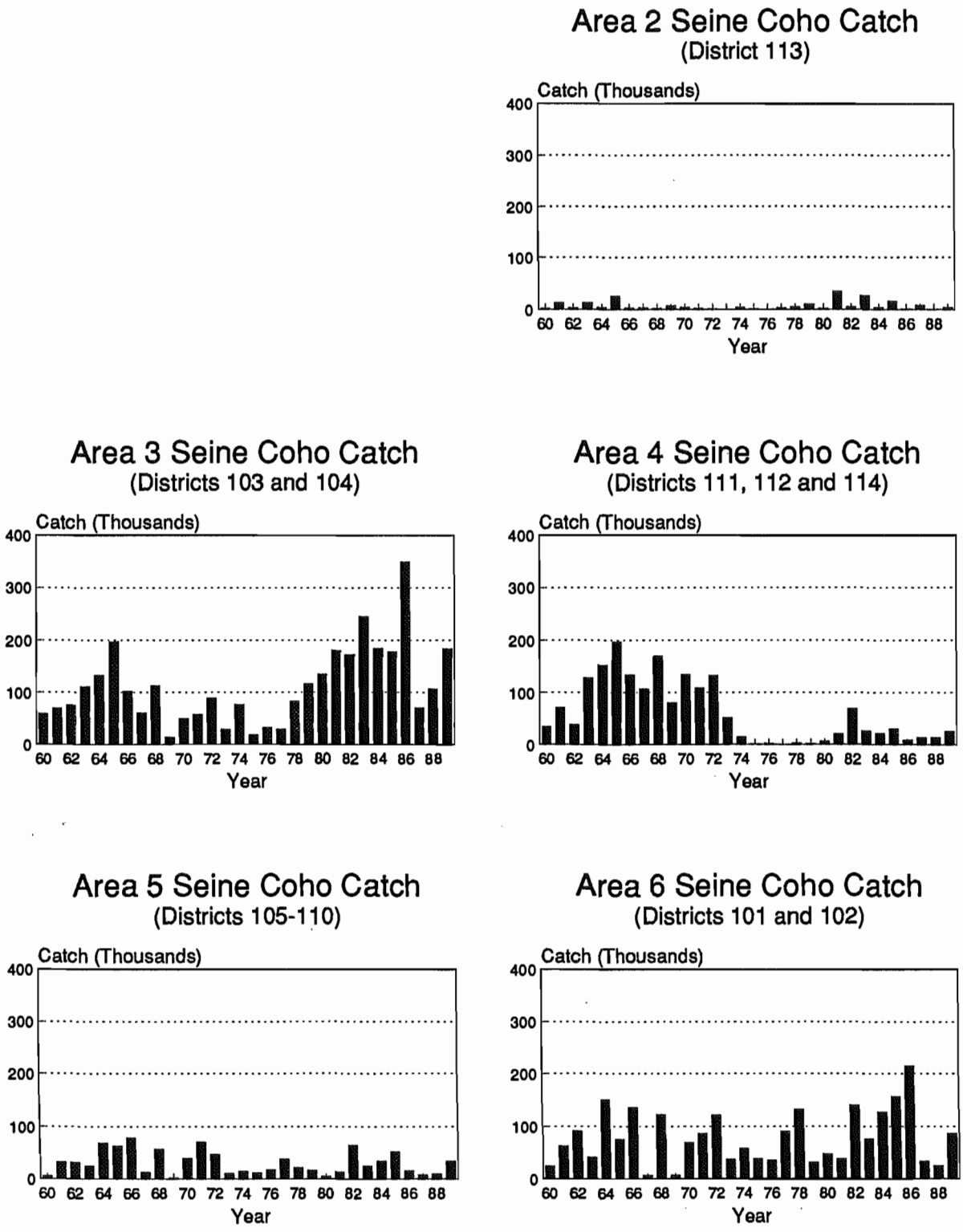


Figure 18. Southeast Alaska purse seine catch of coho salmon by area, 1960-89.

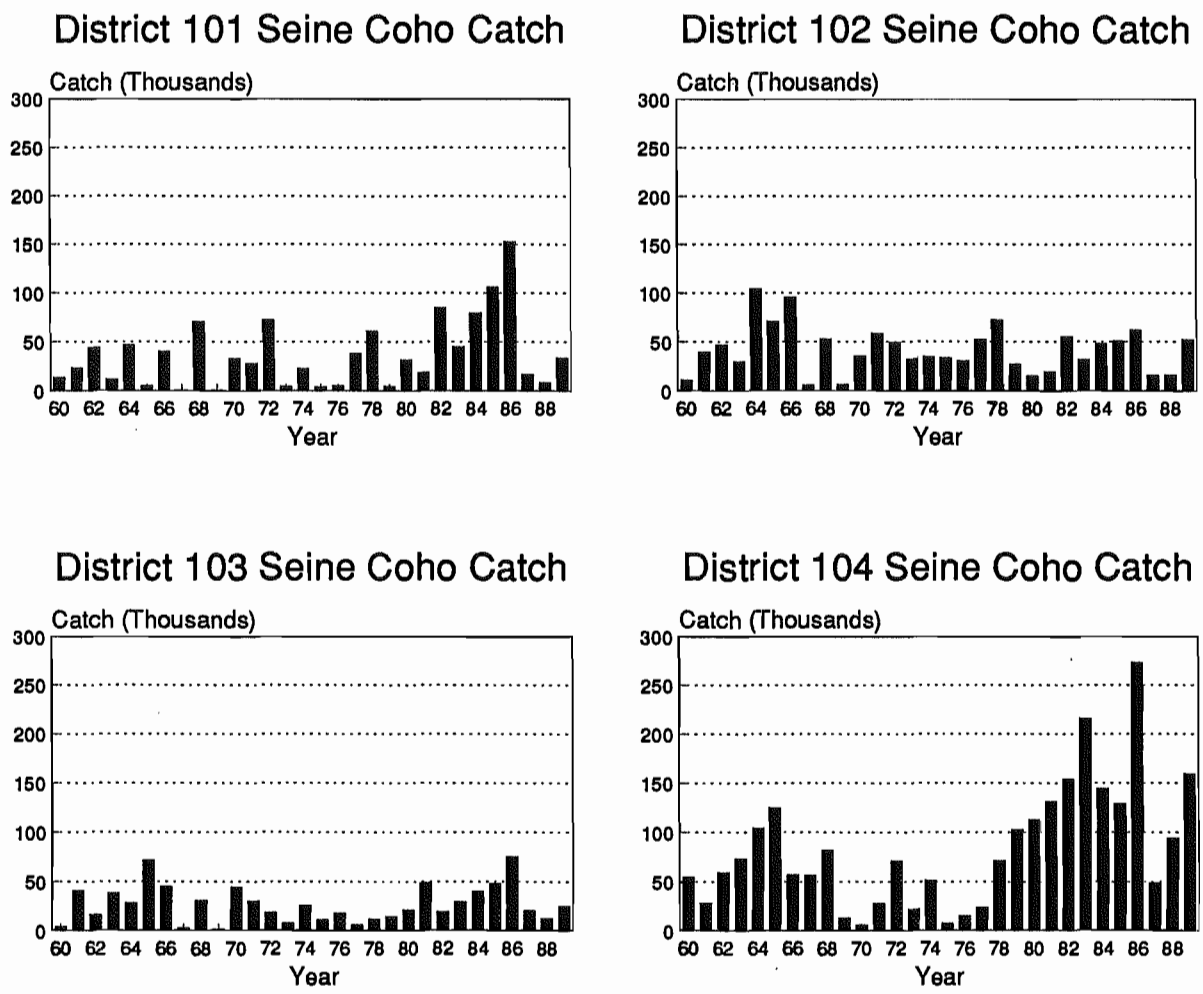


Figure 19. Purse seine catch of coho salmon in Southeast Alaska Districts 101-104, 1960-89.

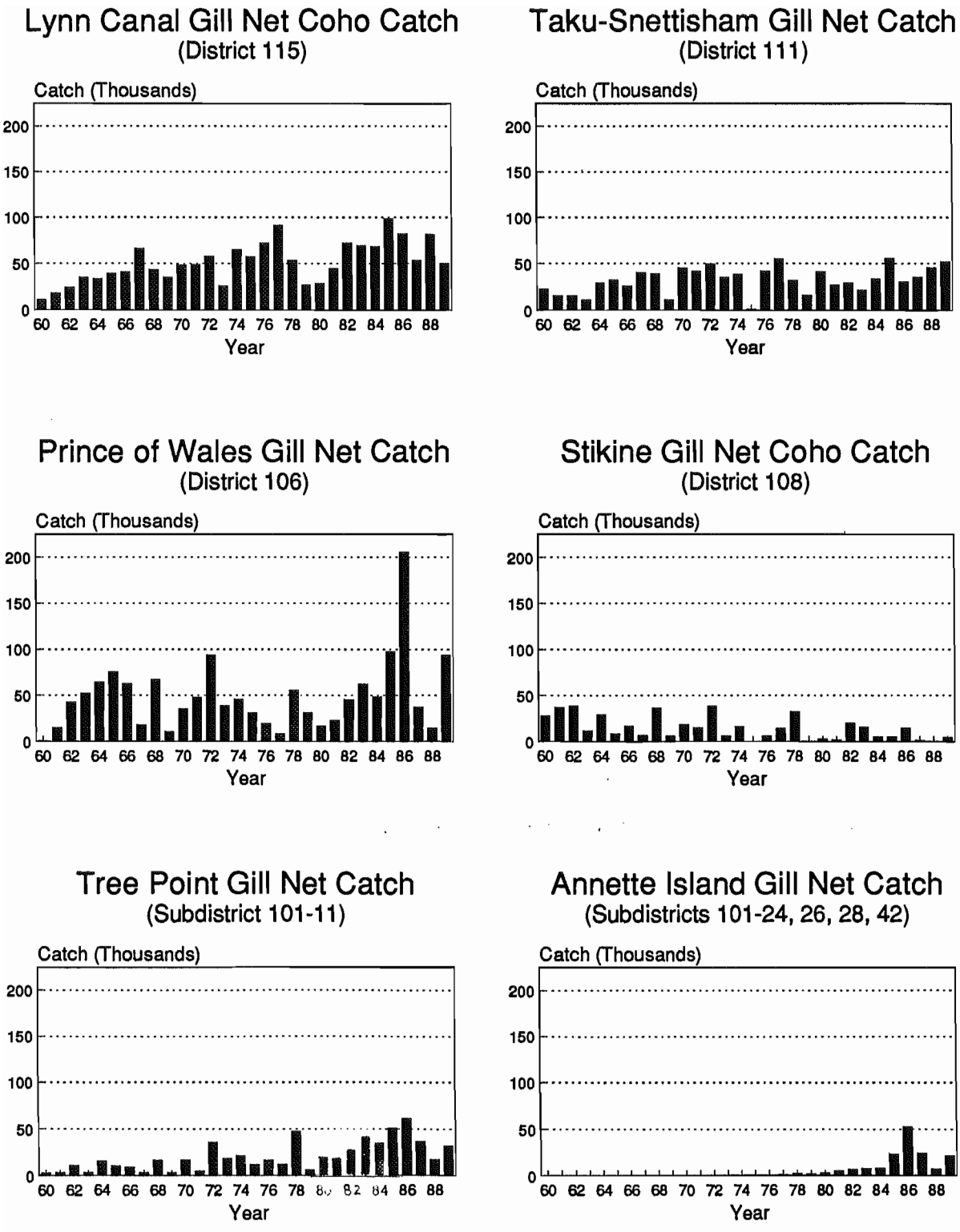


Figure 20. Drift gill net catch of coho salmon in Southeast Alaska by fishery, 1960-89.

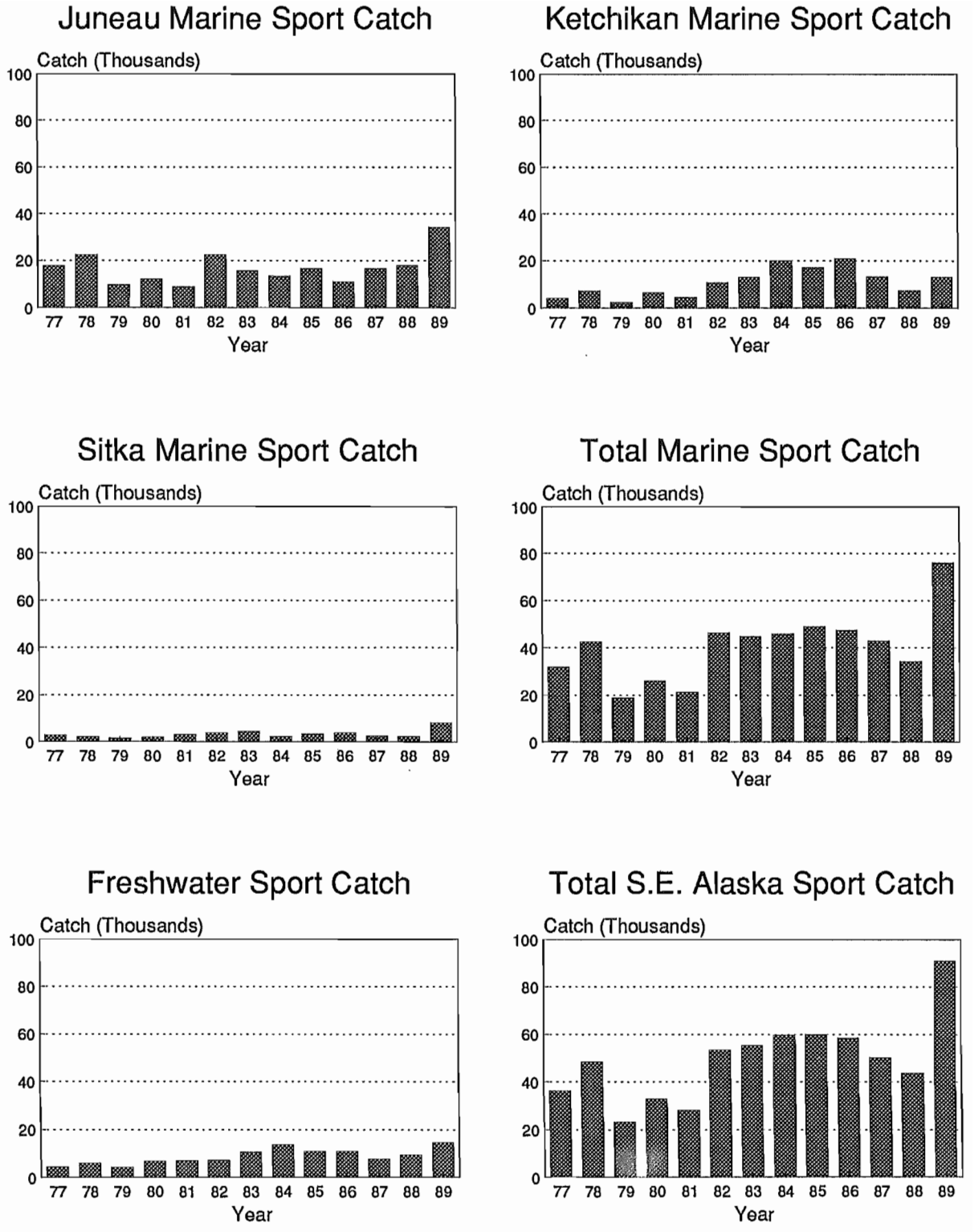


Figure 21. Southeast Alaska sport catch of coho salmon, 1977-89.

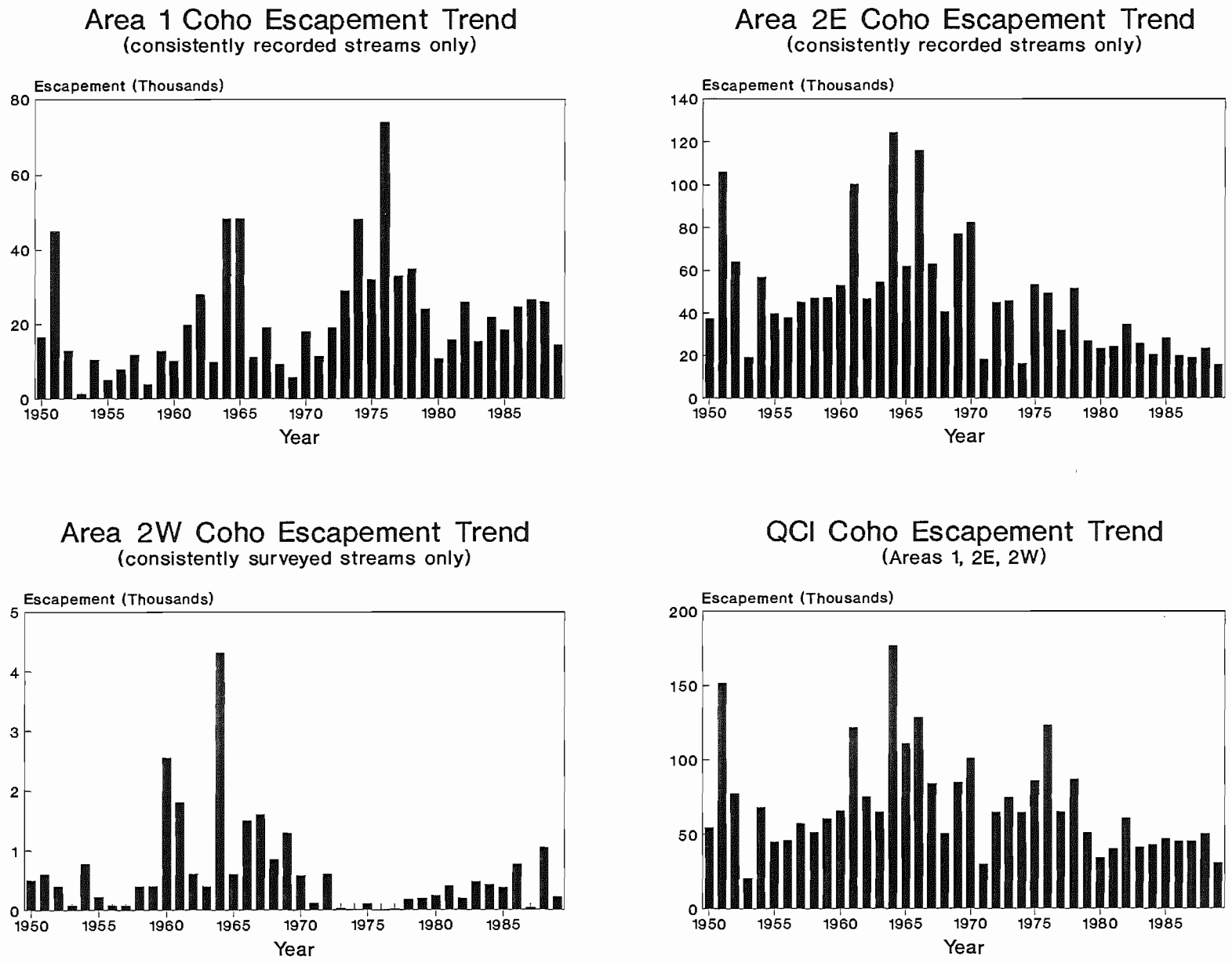


Figure 22. Queen Charlotte Islands (Areas 1, 2E and 2W) coho escapement trends for consistently surveyed streams, 1950 to 1989.

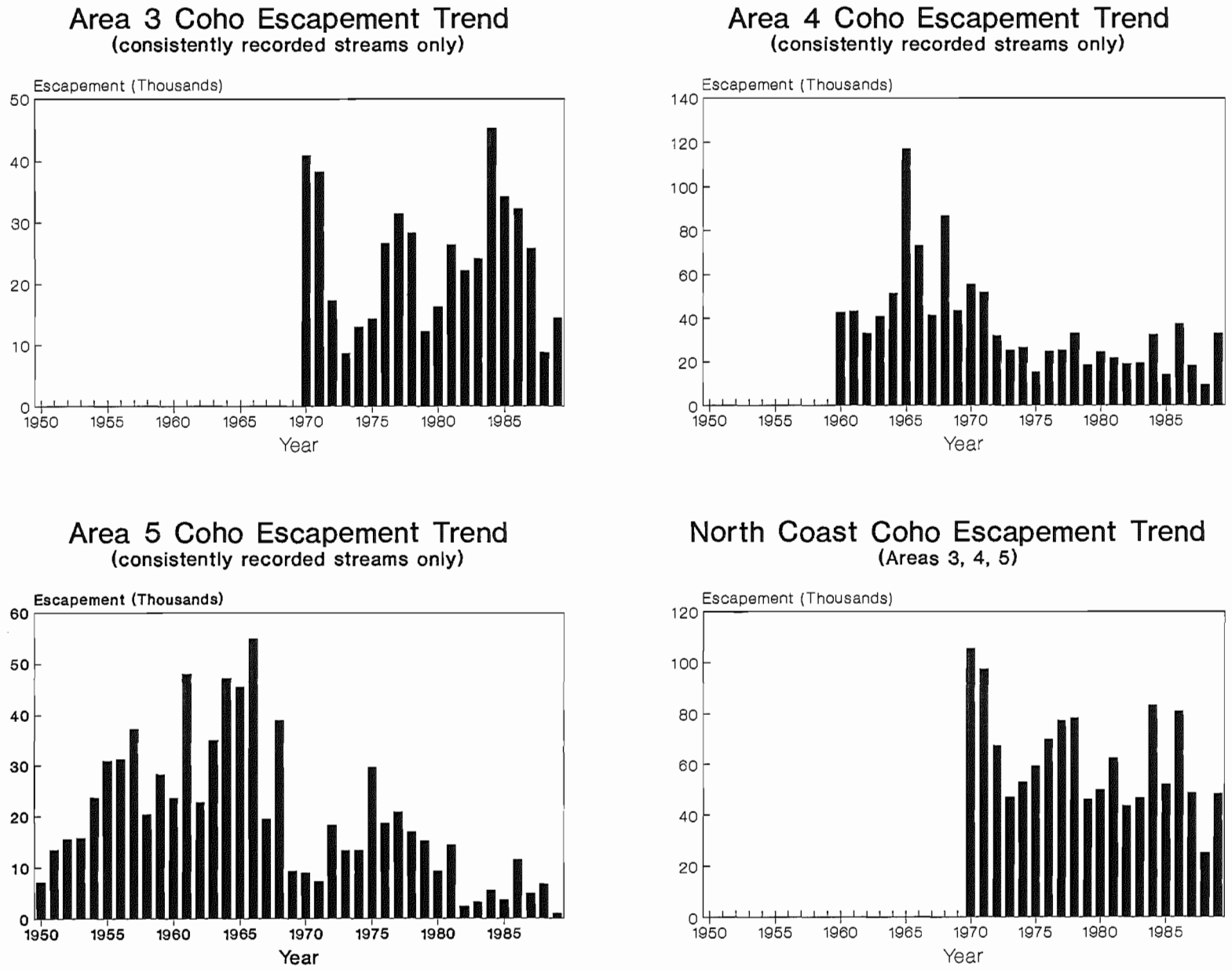


Figure 23. Nass/Skeena (Areas 3, 4 and 5) coho escapement trends for consistently surveyed streams, 1950 to 1989.

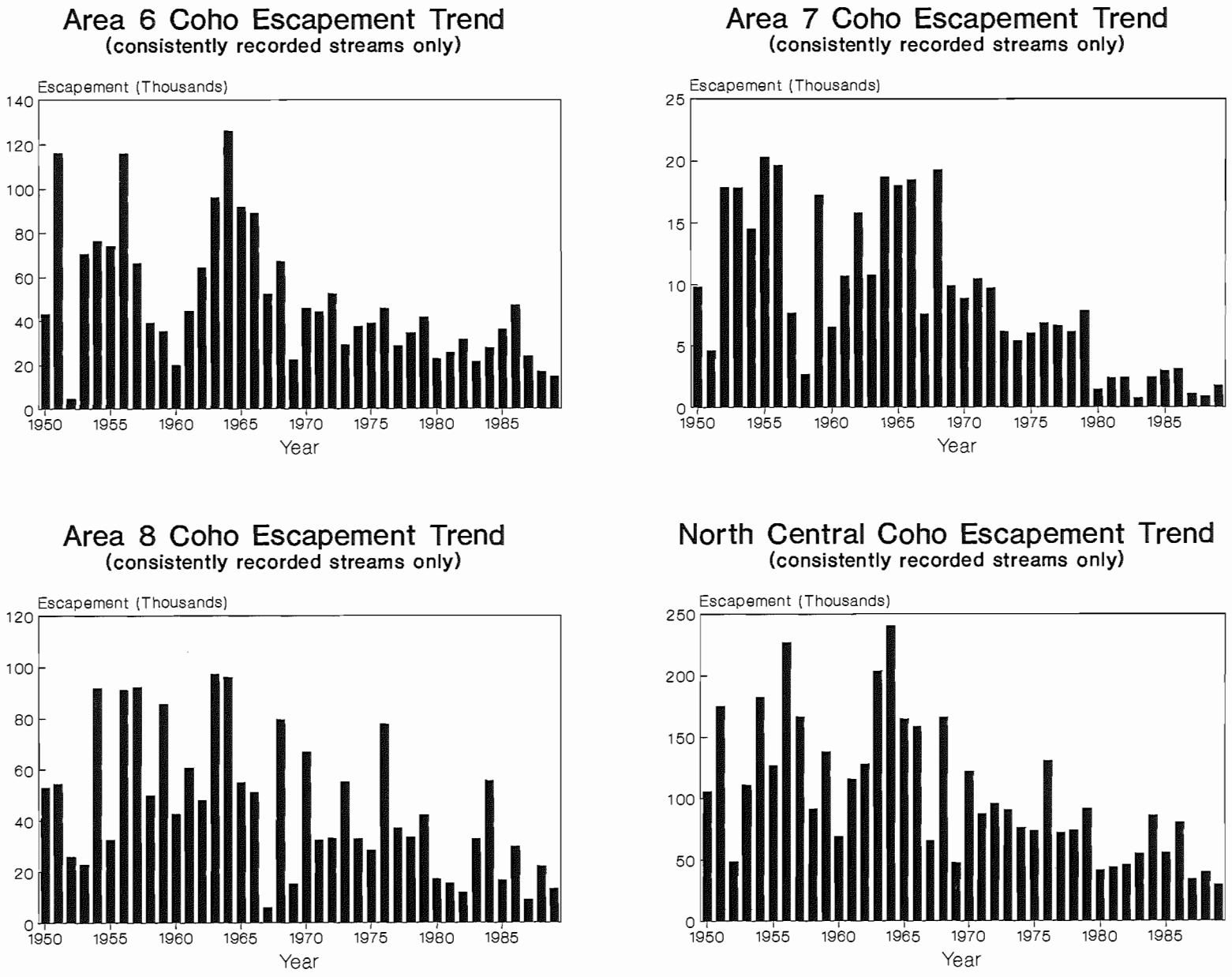
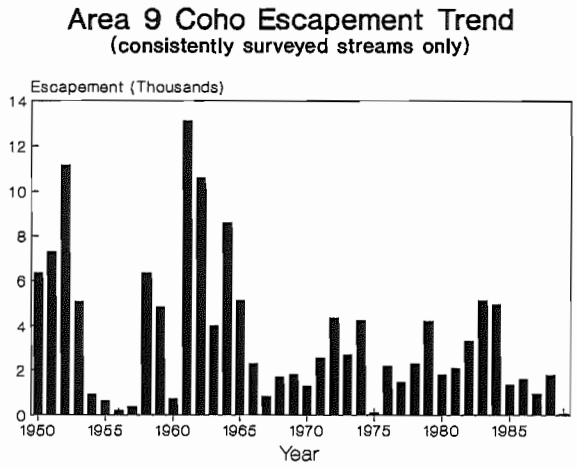
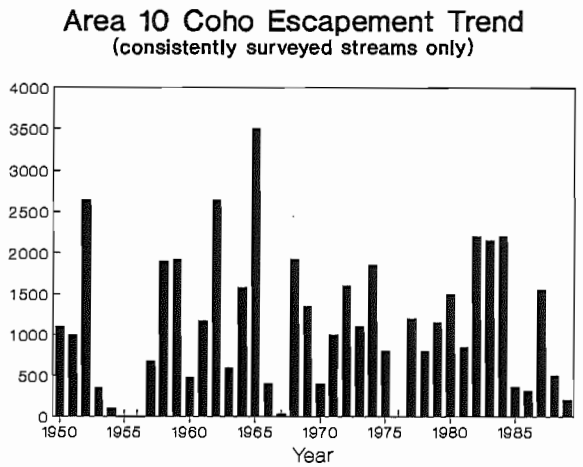


Figure 24. North central (Areas 6, 7 and 8) coho escapement trends for consistently surveyed streams, 1950 to 1989.





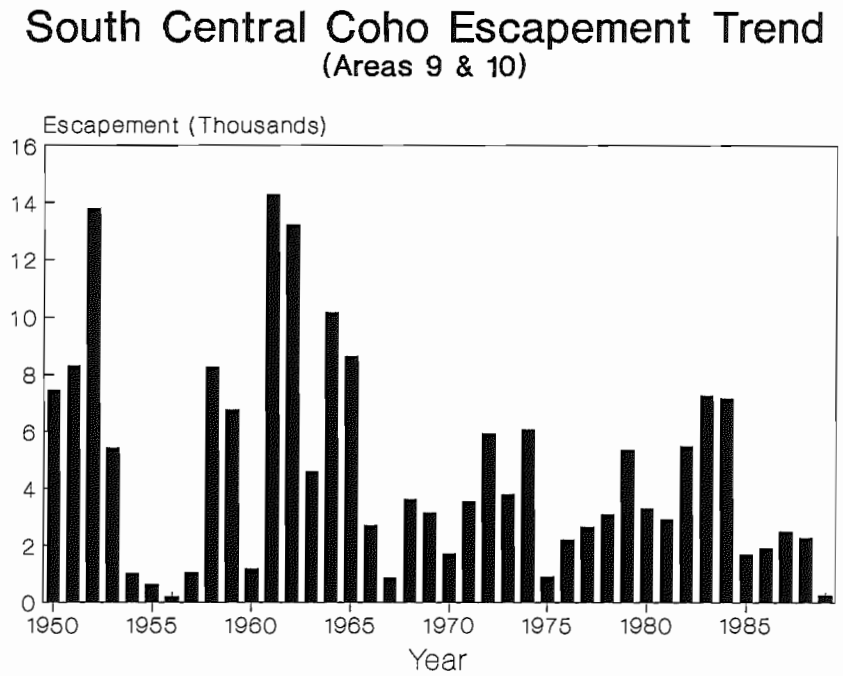


Figure 25. South central (Areas 9 and 10) coho escapement trends for consistently surveyed streams, 1950 to 1989.

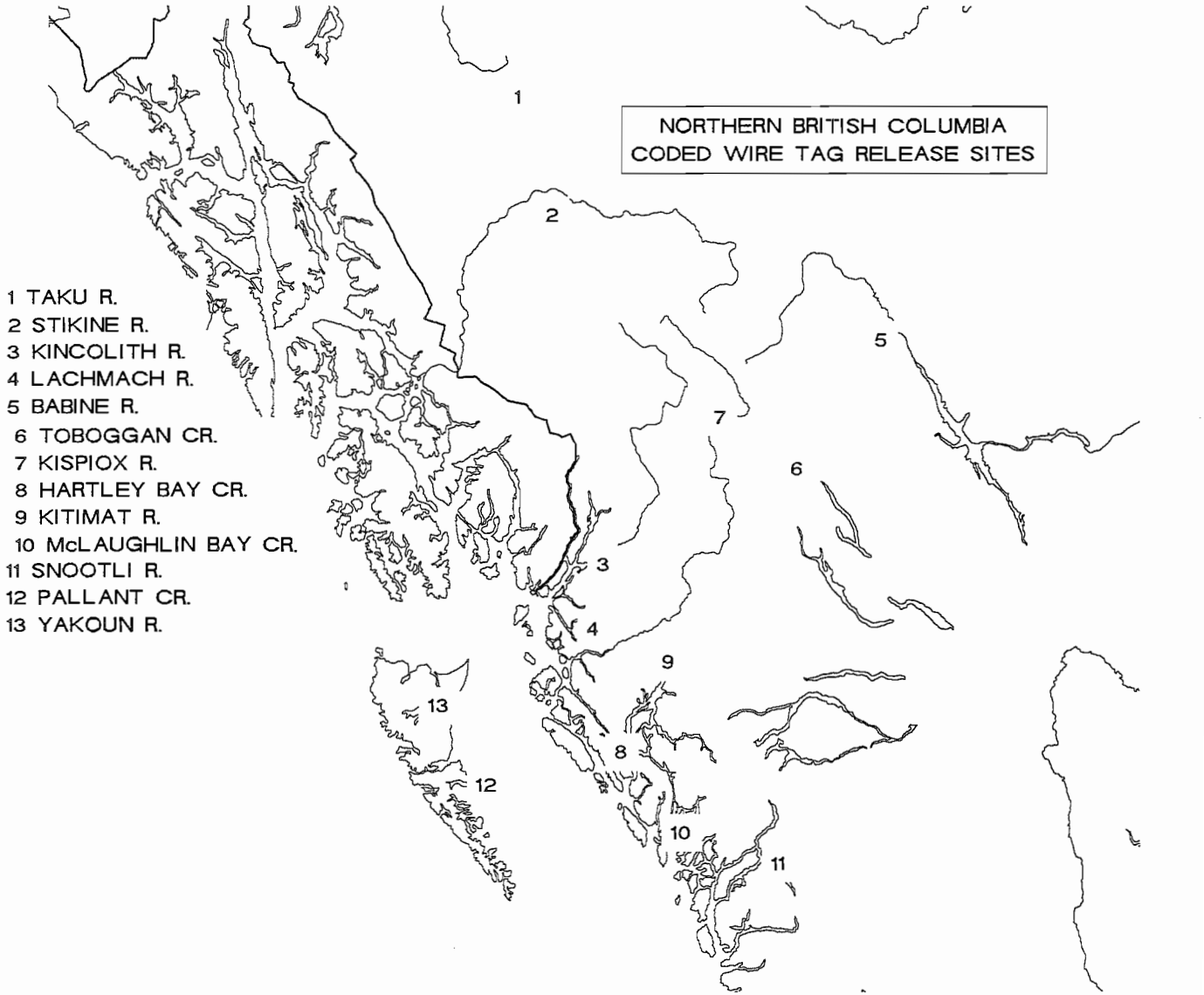


Figure 26. Map of north coast British Columbia coded wire tag release sites.

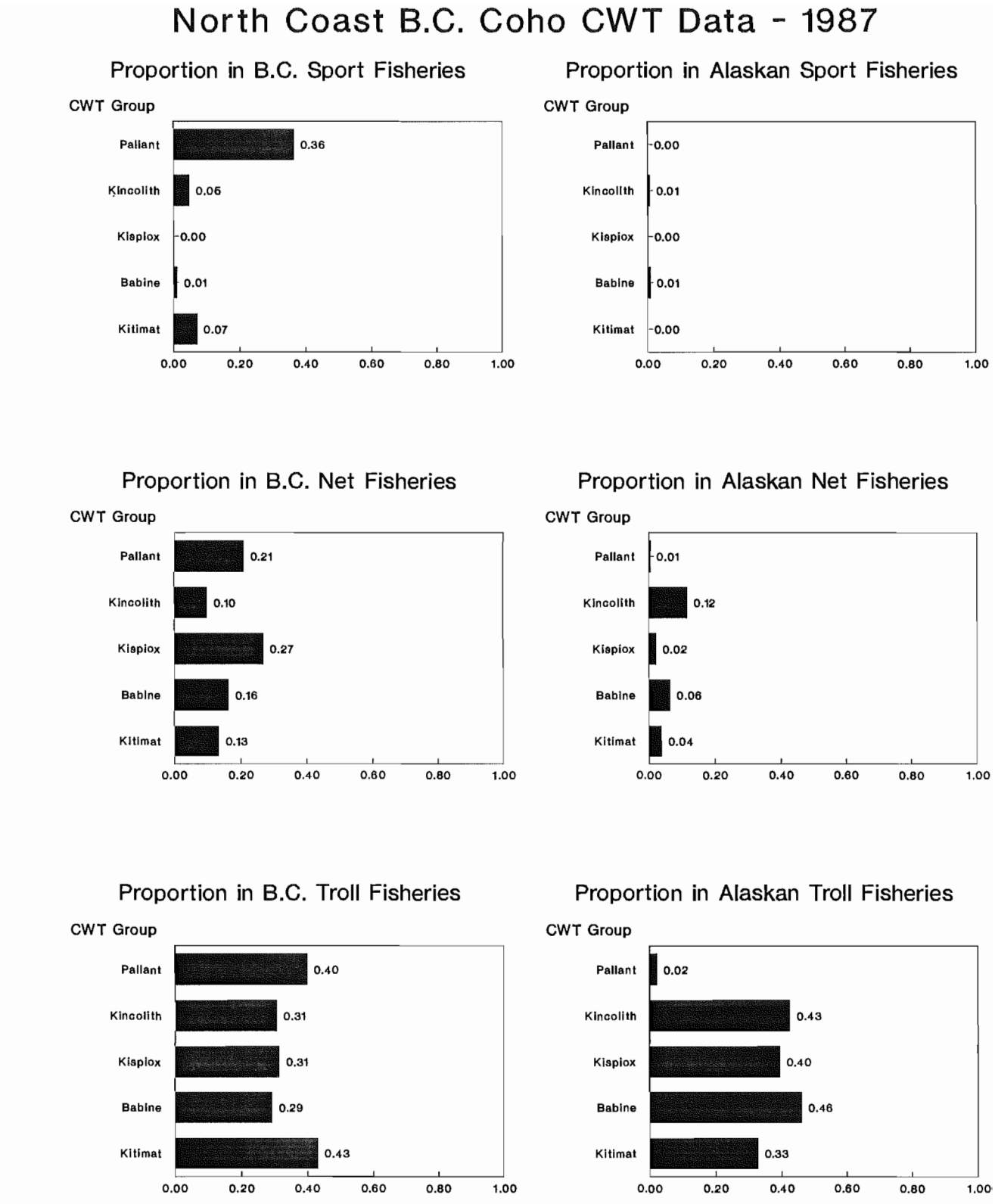


Figure 27. North coast B.C. coho CWT recovery data, 1987.

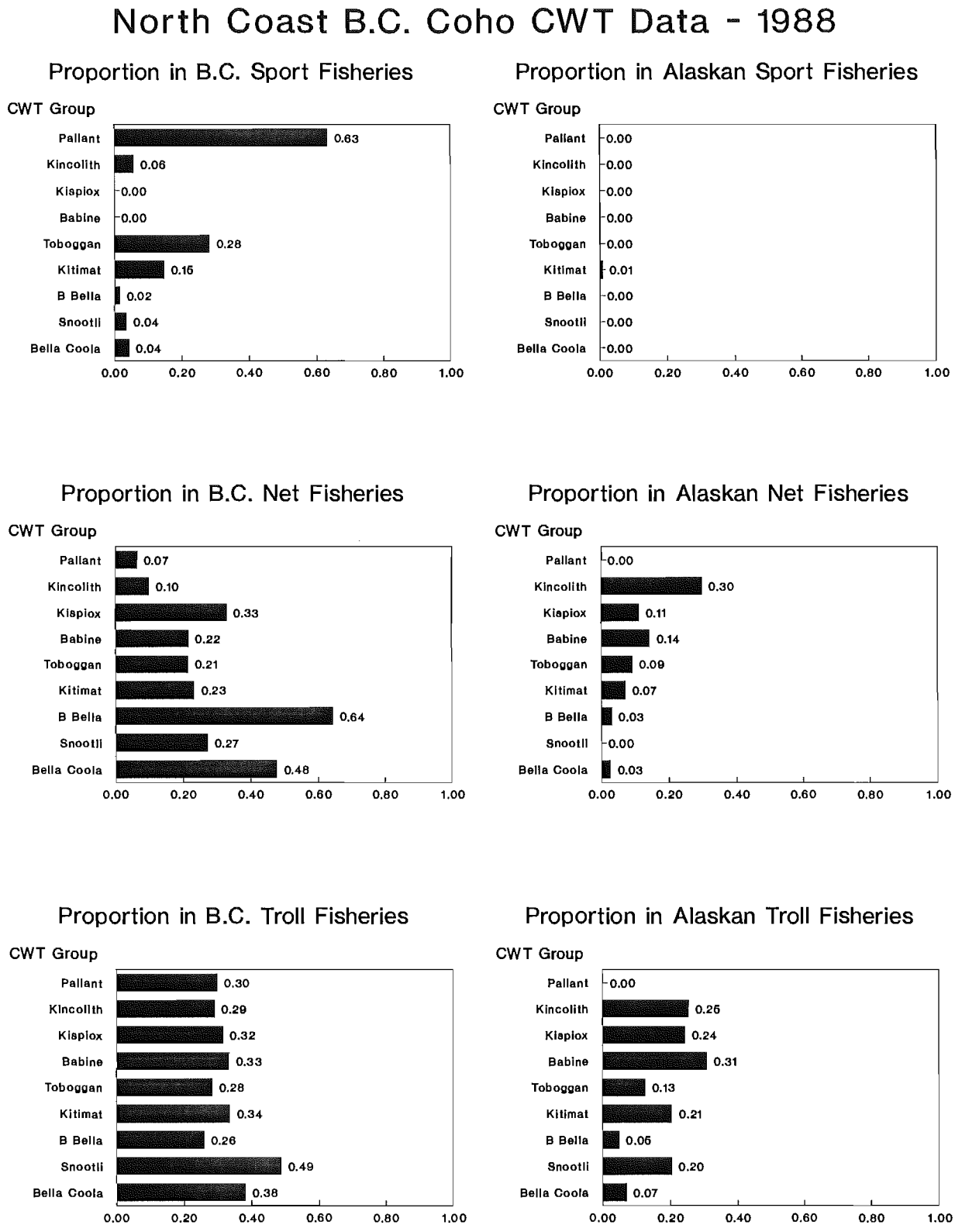


Figure 28. North coast B.C. coho CWT recovery data, 1988.

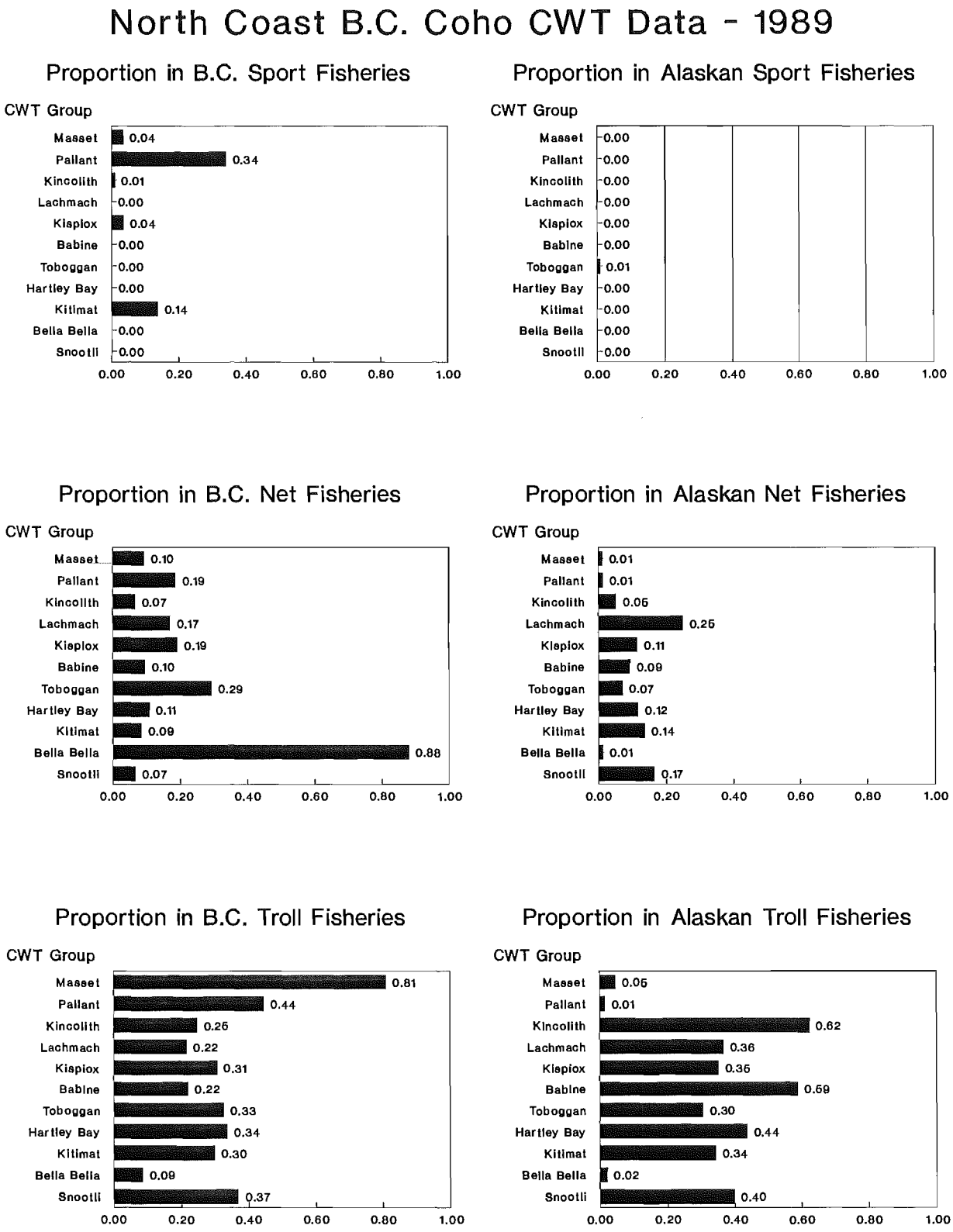


Figure 29. North coast B.C. coho CWT recovery data, 1989.

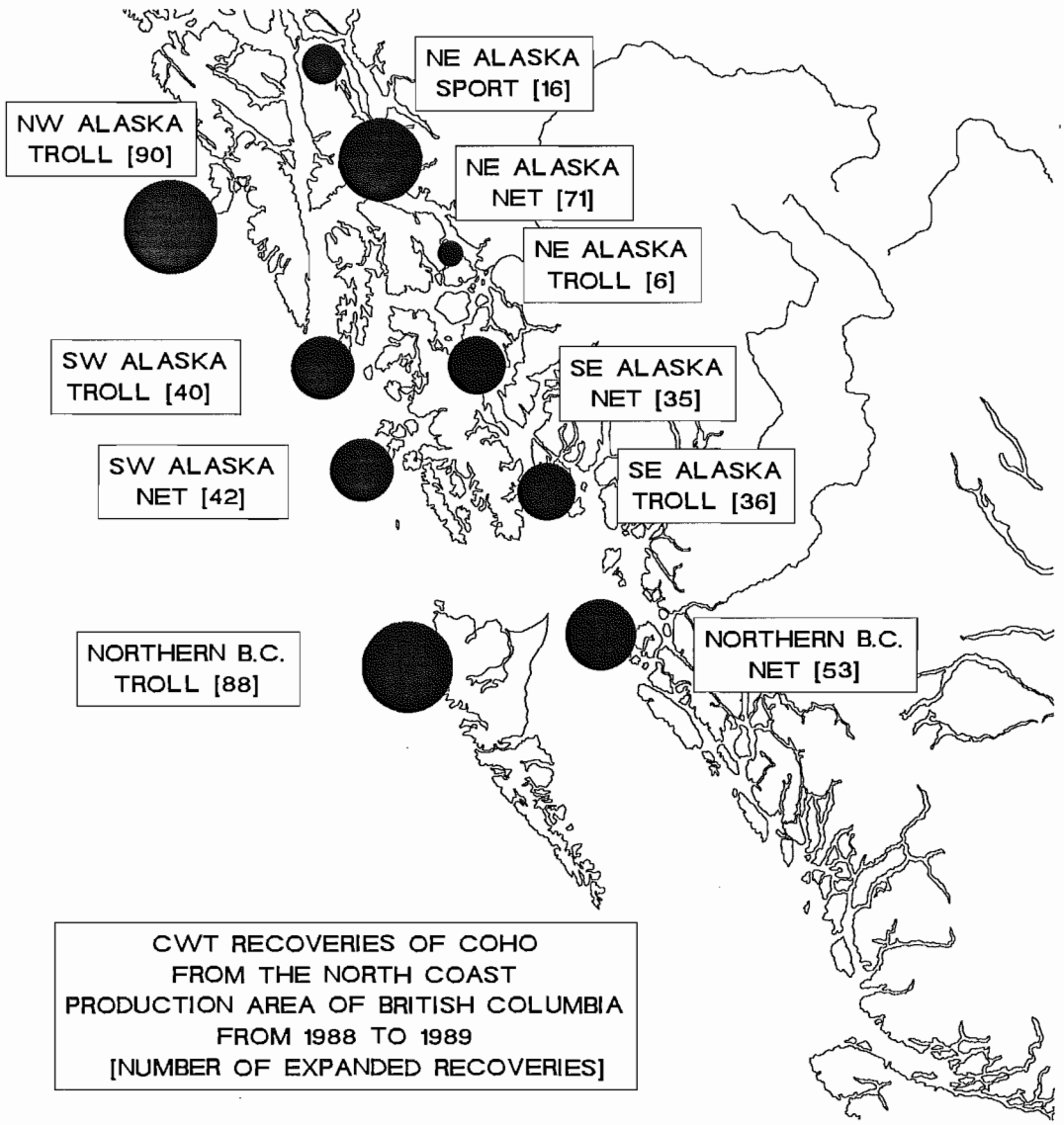


Figure 30. CWT recoveries of coho from the North Coast production area of British Columbia, 1988 to 1989, [number of expanded recoveries in square brackets]. Includes Lachmach River and Oldfield Creek.

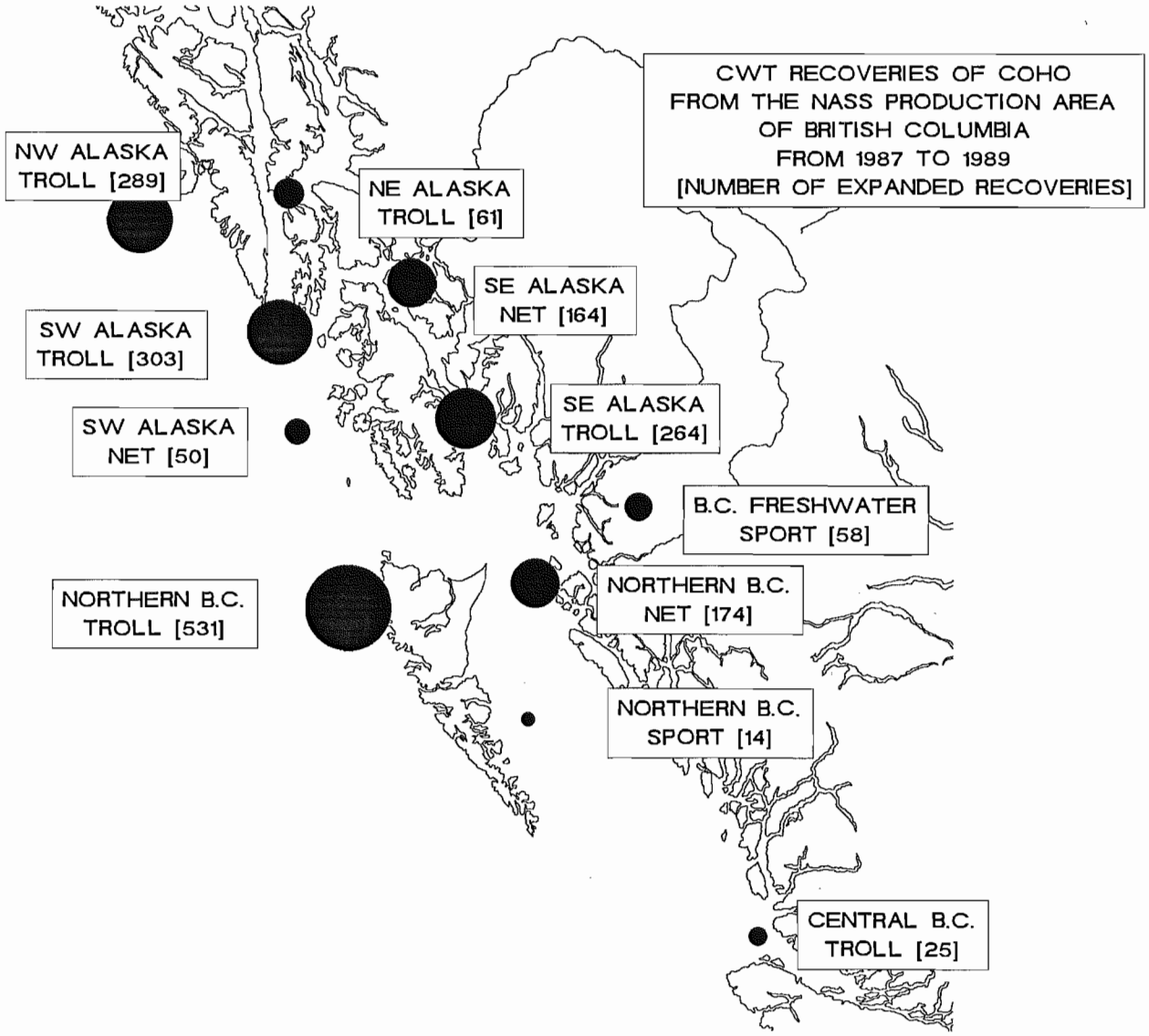


Figure 31. CWT recoveries of coho from the Nass production area of British Columbia, 1987 to 1989, [number of expanded recoveries in square brackets]. Includes Kincolith River.

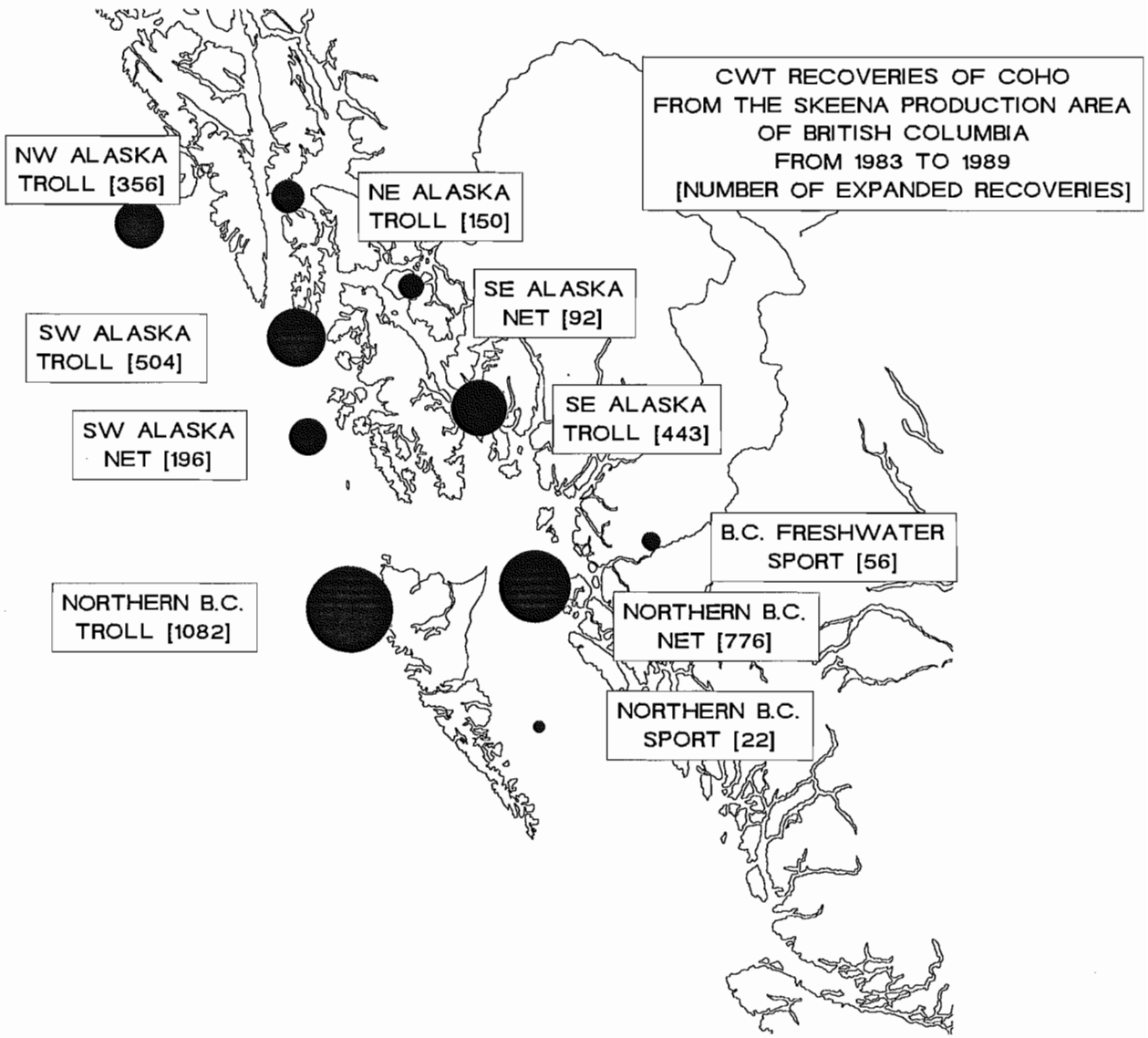


Figure 32. CWT recoveries of coho from the Skeena production area of British Columbia, 1983 to 1989, [number of expanded recoveries in square brackets]. Includes Babine and Kispiox rivers and Toboggan Creek.

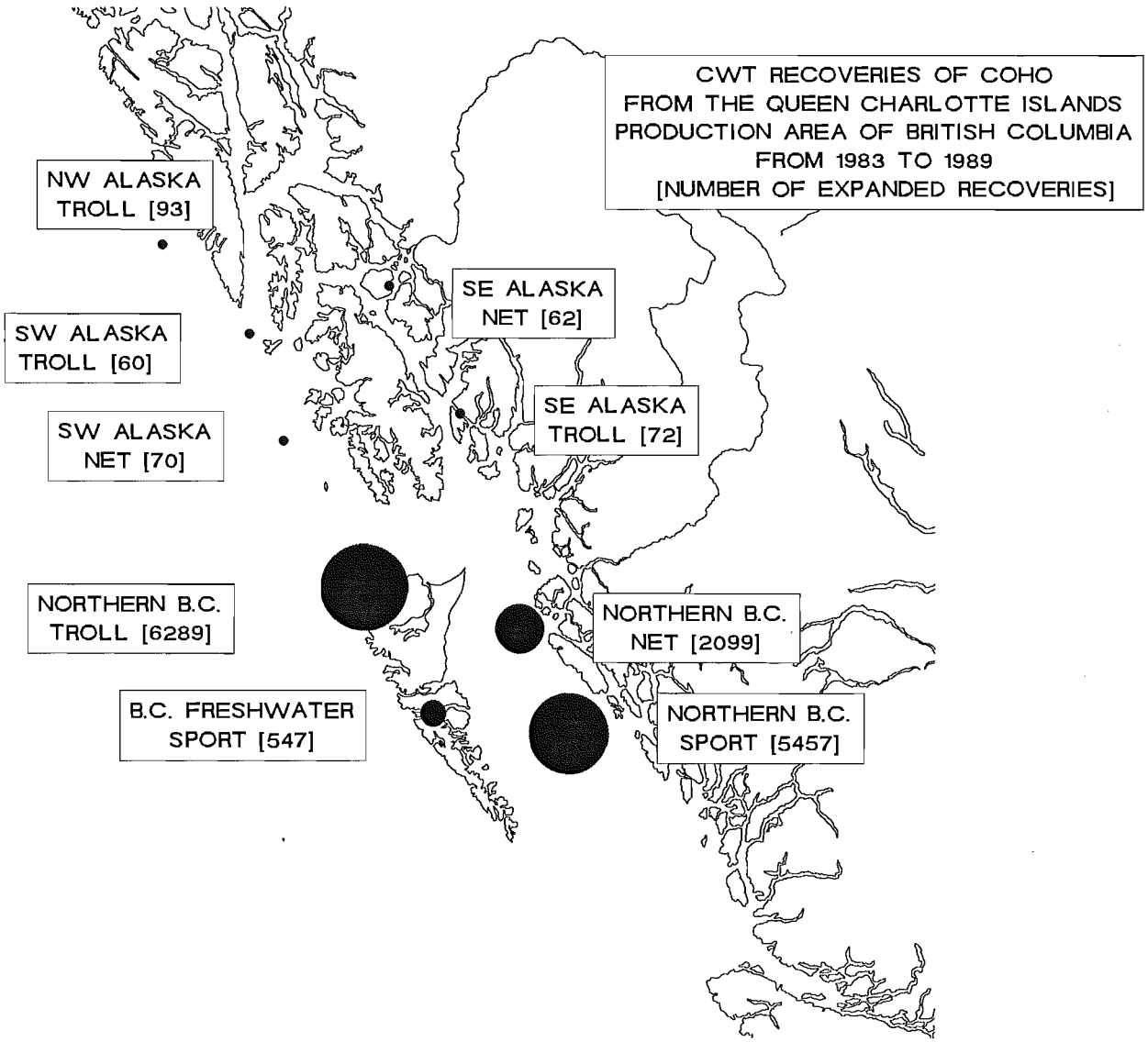


Figure 33. CWT recoveries of coho from the Queen Charlotte Islands production area of British Columbia, 1983 to 1989, [number of expanded recoveries in square brackets]. Includes Pallant Creek, Yakoun River tributaries and Sachs Creek.

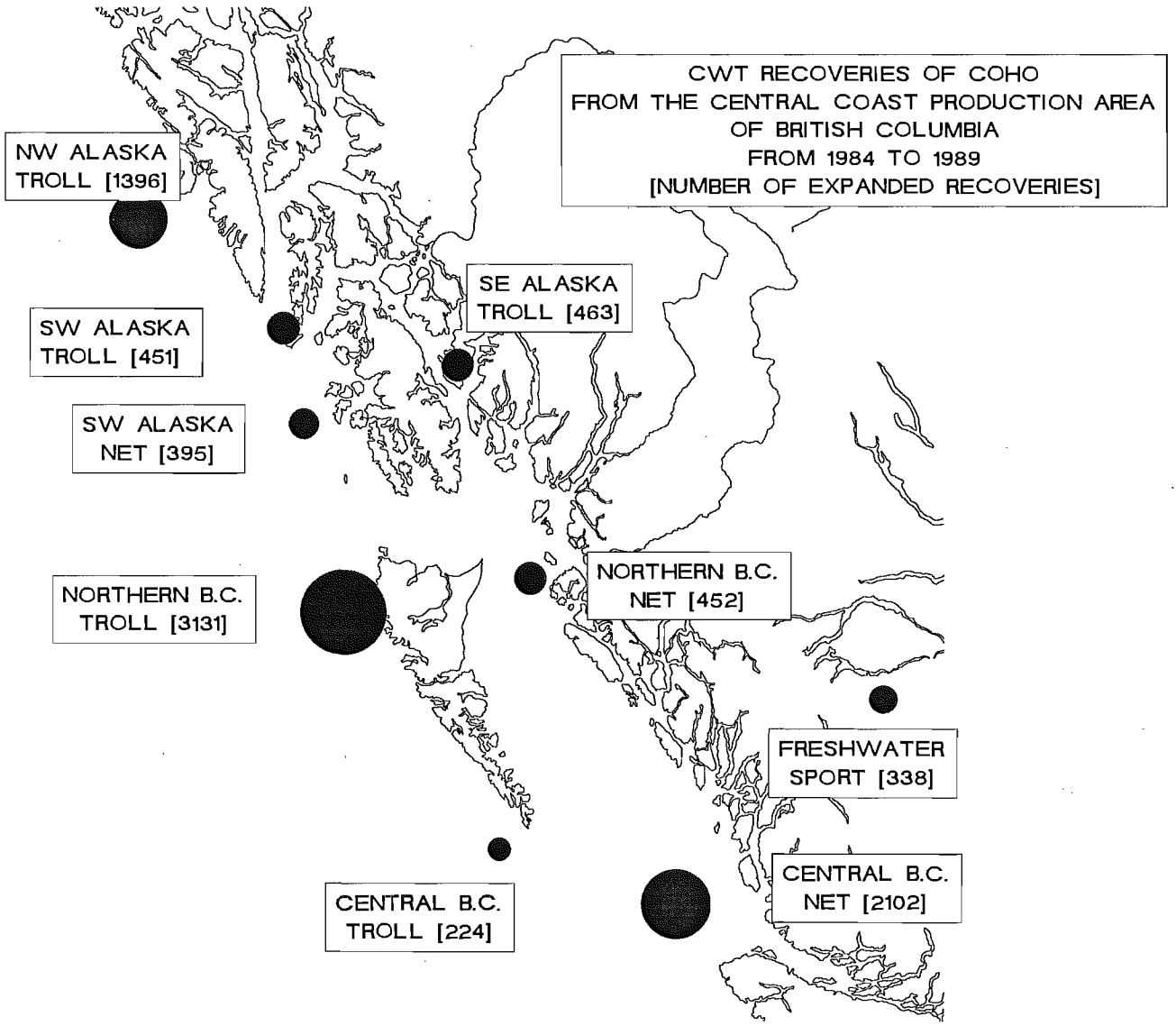


Figure 34. CWT recoveries of coho from the Central Coast production area of British Columbia, 1984 to 1989, [number of expanded recoveries in square brackets]. Includes Kitimat and Snootli rivers, Hartley Bay and McLaughlin Bay creeks.

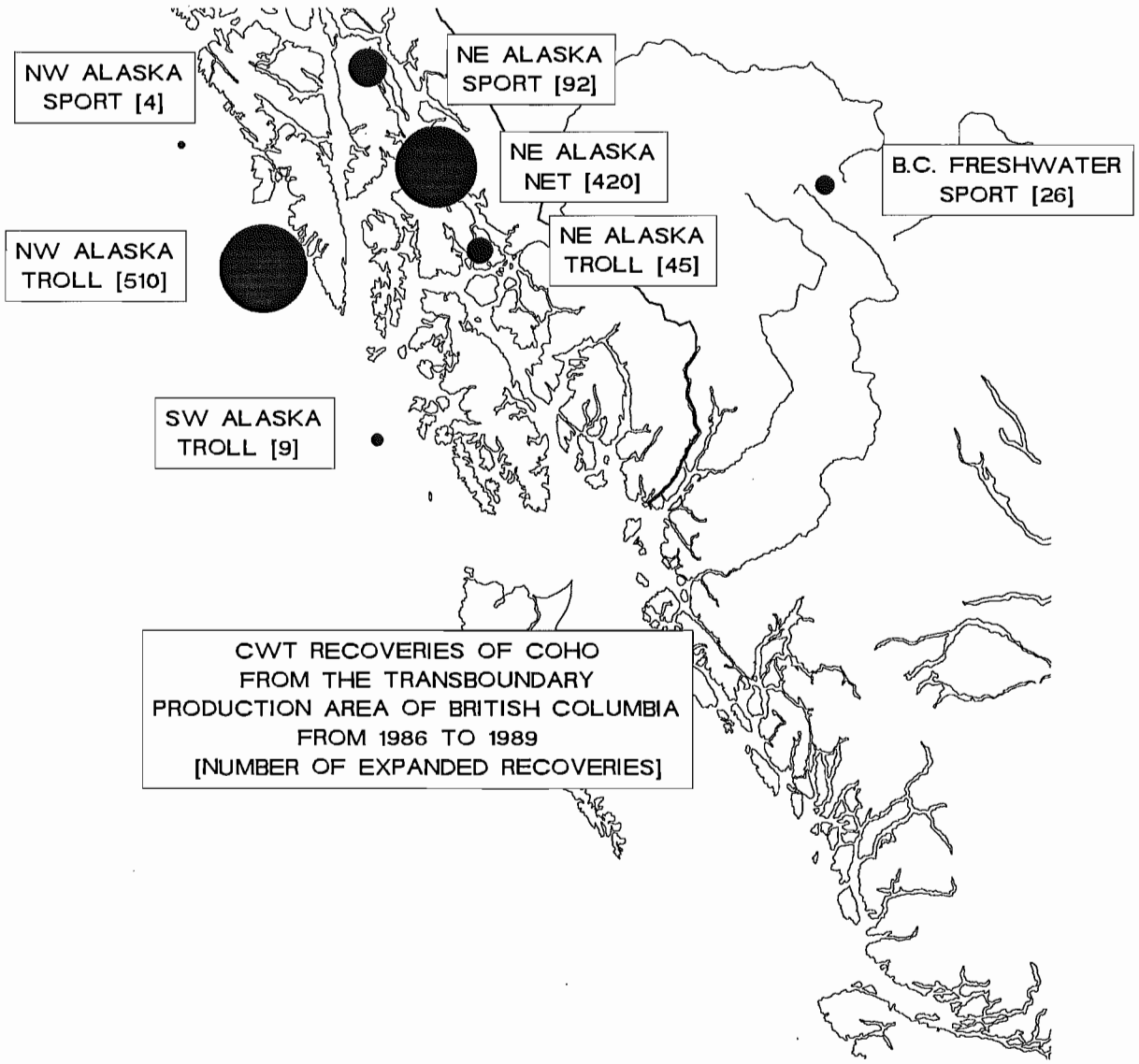
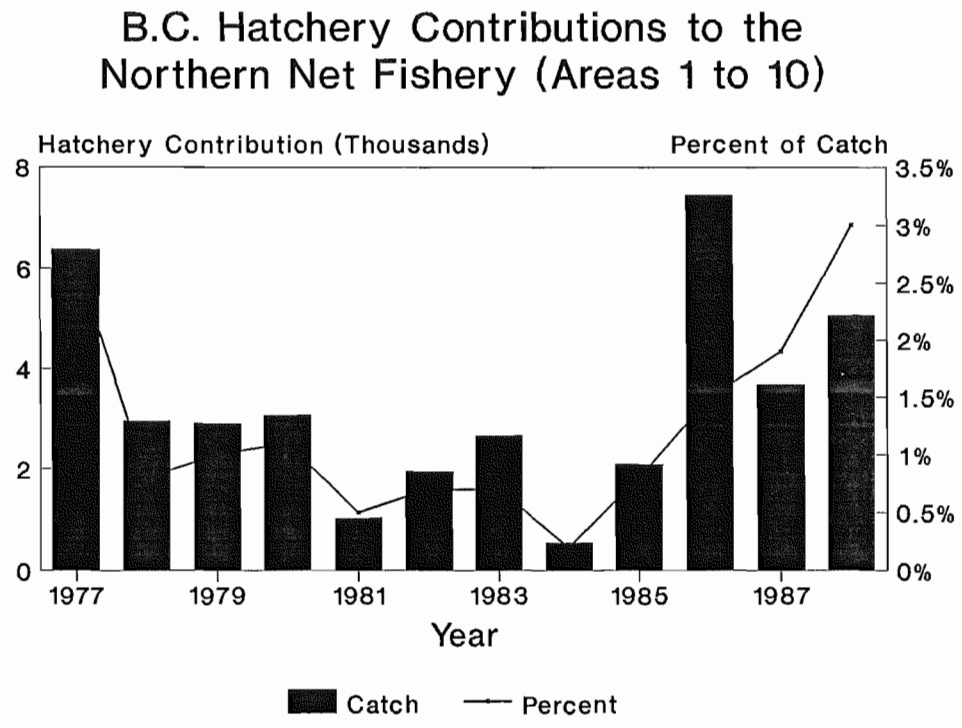


Figure 35. CWT recoveries of coho from the Transboundary production area of British Columbia, 1986 to 1989, [number of expanded recoveries in square brackets]. Includes Taku and Stikine rivers tributaries.



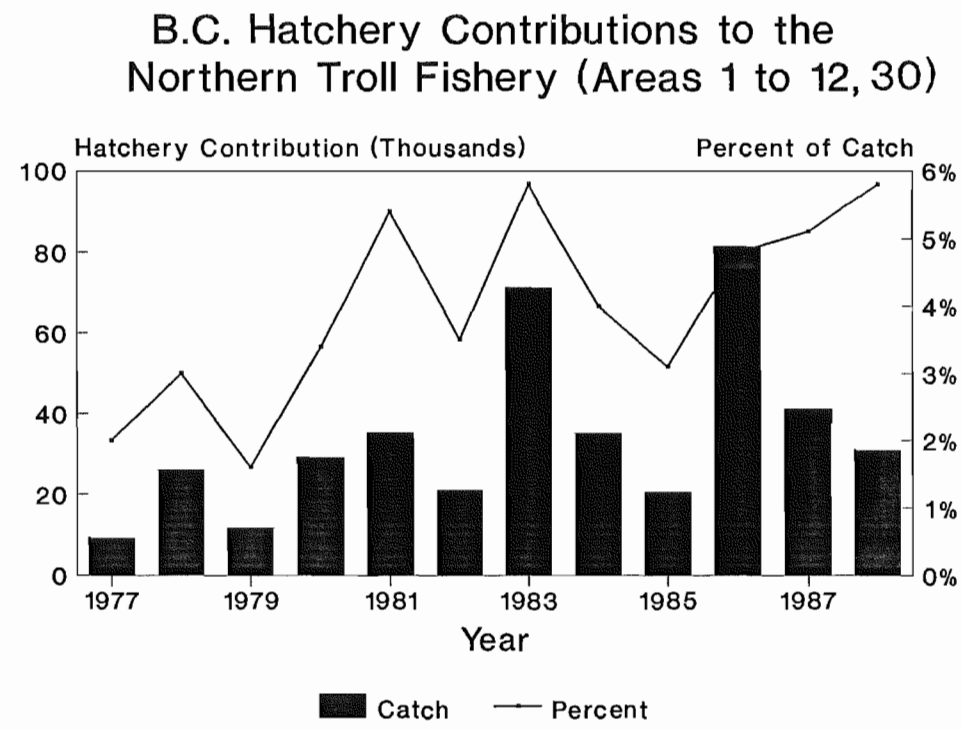


Figure 36. B.C. hatchery coho contributions to Canadian net and troll fisheries, 1977 to 1988.

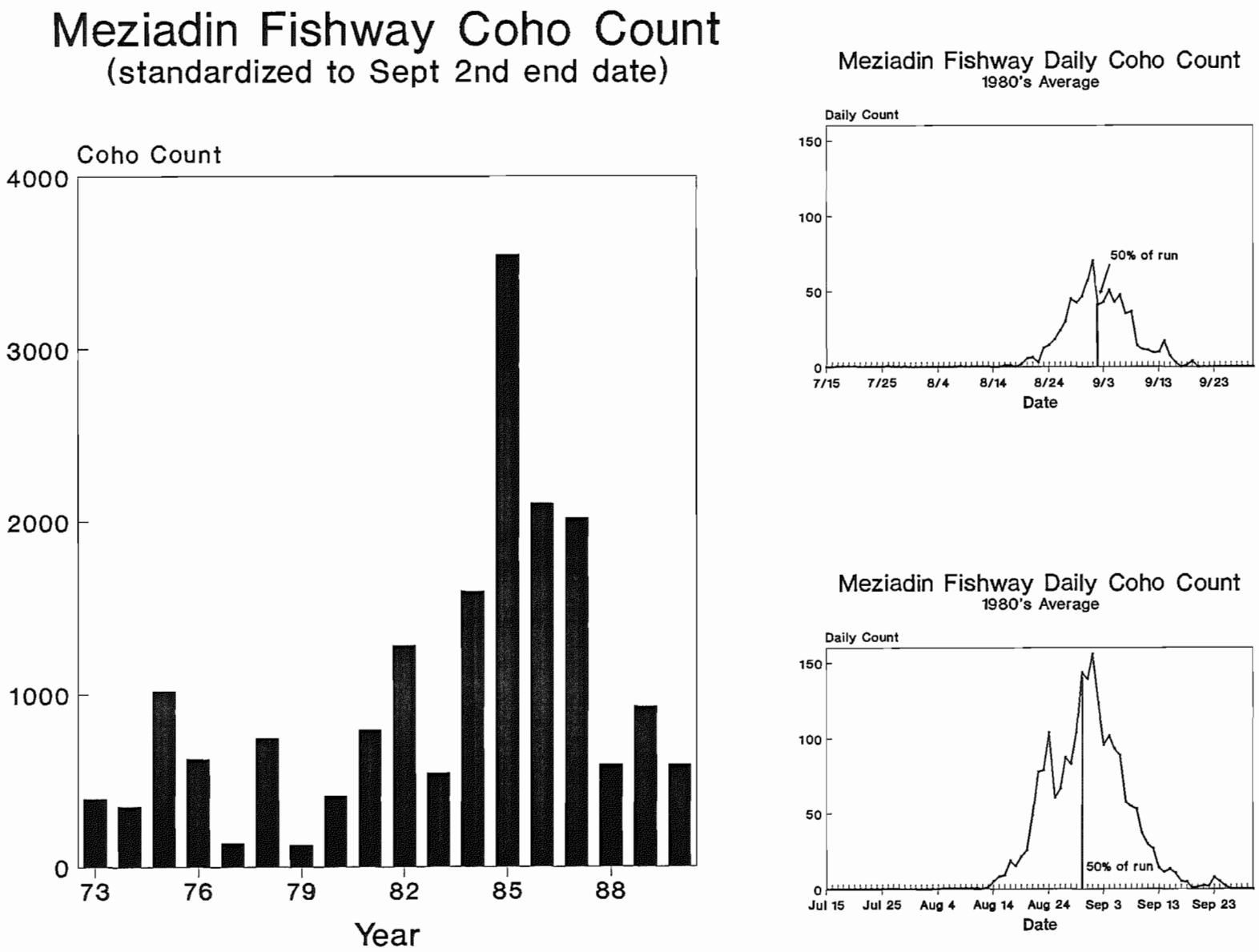


Figure 37. Meziadin fishway annual coho counts and seasonal timing pattern, 1973 to 1990.

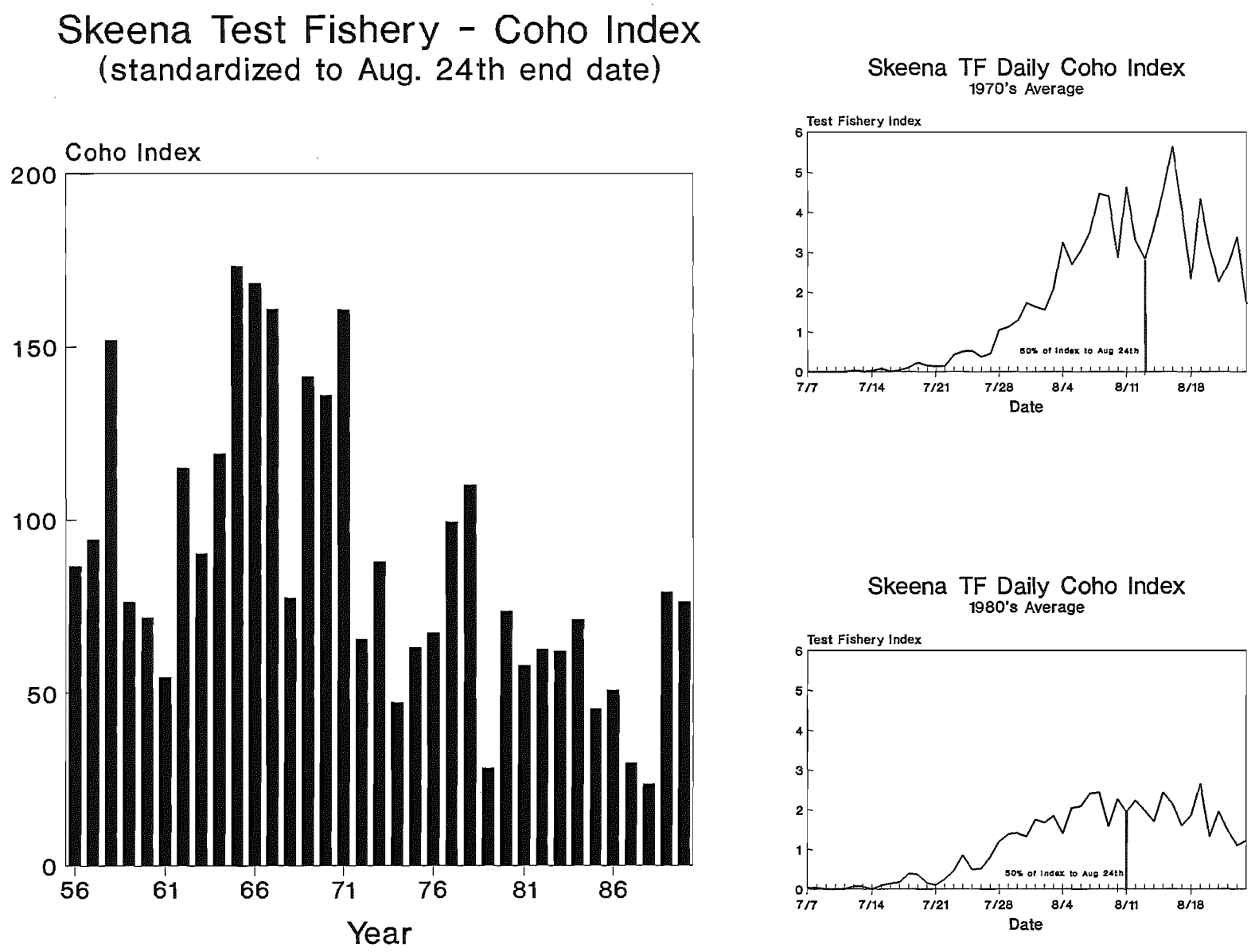


Figure 38. Skeena test fishery annual coho index and seasonal timing pattern, 1956 to 1990.

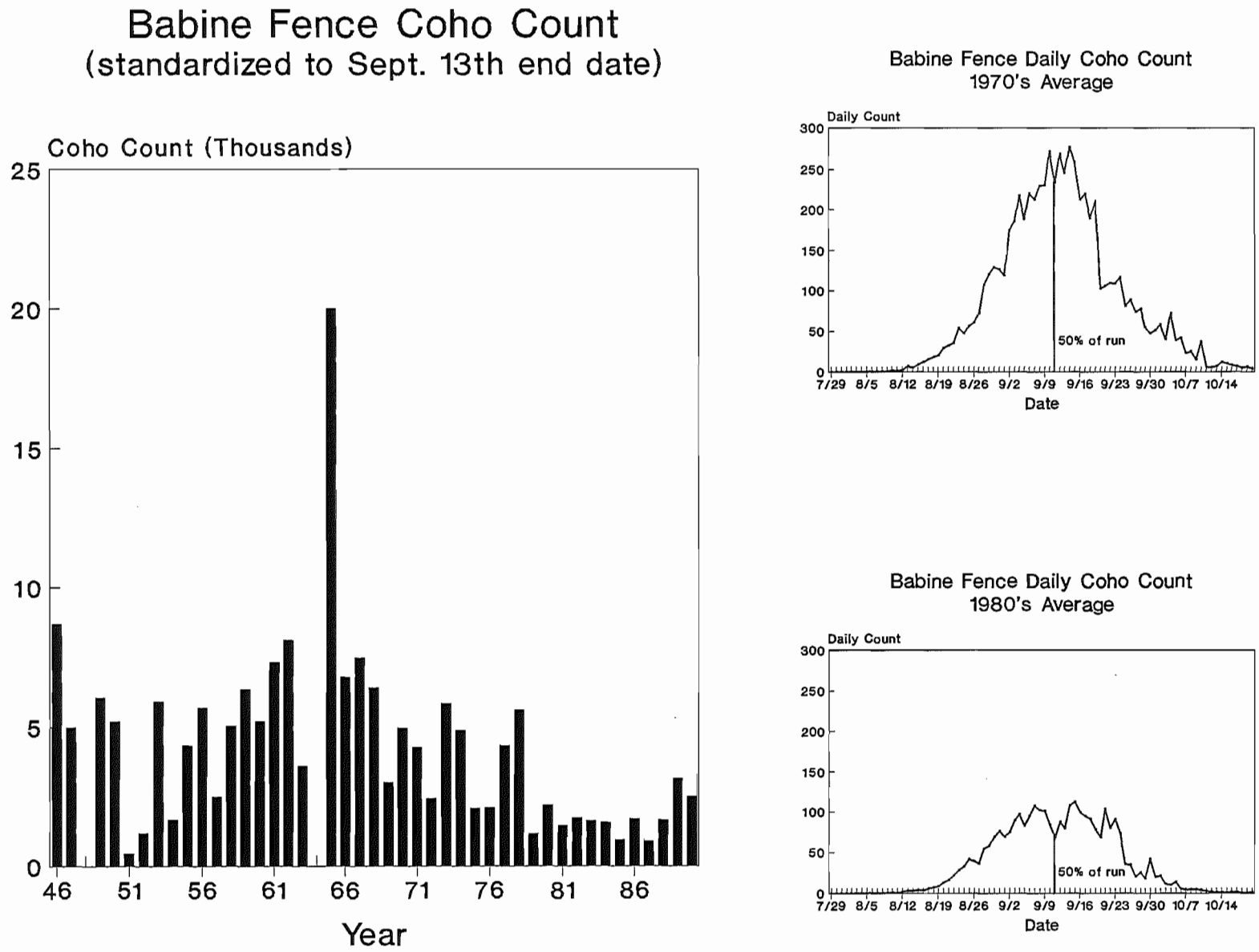


Figure 39. Babine fence annual coho count and seasonal timing pattern, 1946 to 1990.

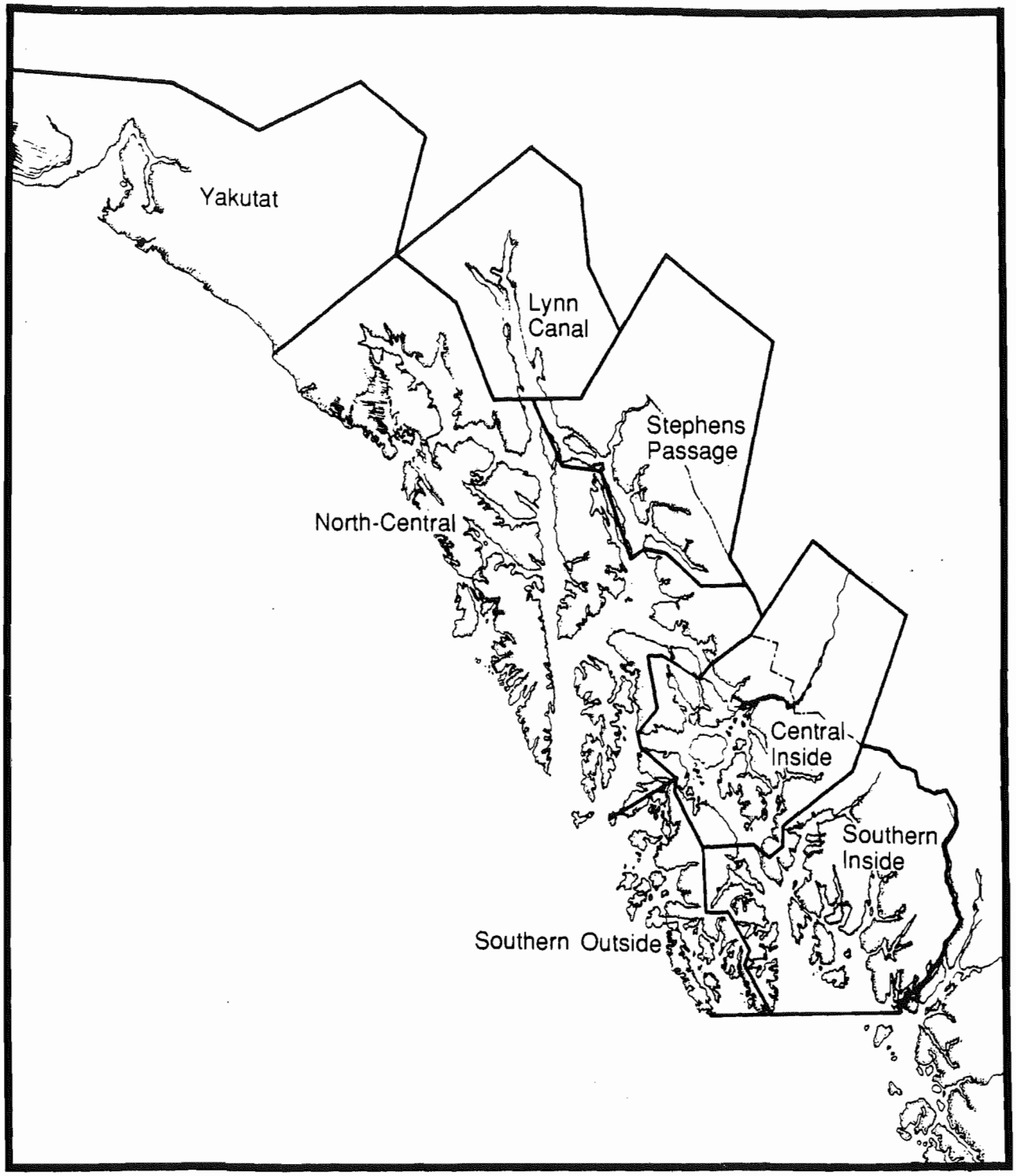


Figure 40. Coho salmon stock groupings in Southeast Alaska.

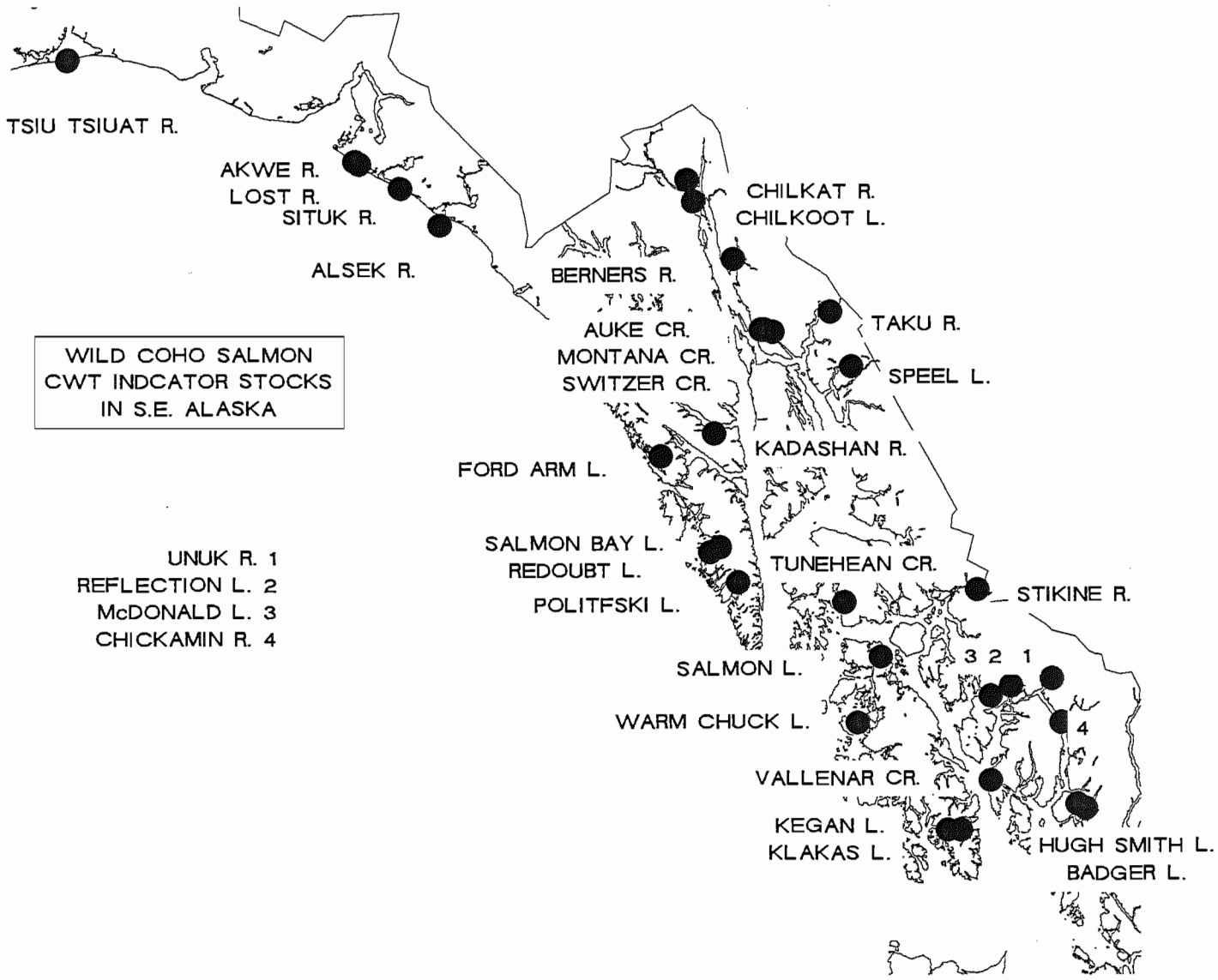


Figure 41. Wild coho salmon coded-wire tag indicator stocks in Southeast Alaska.

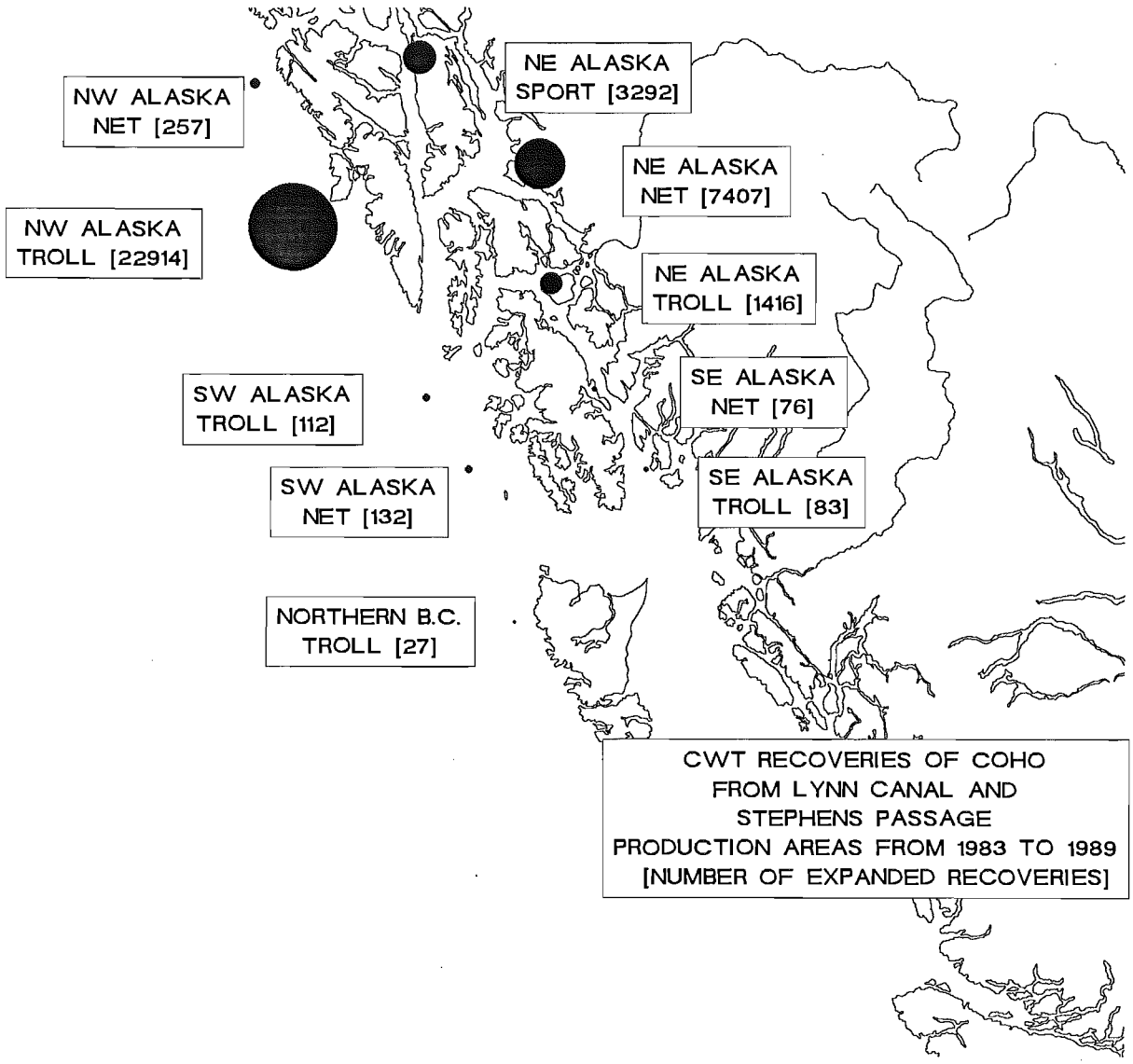


Figure 42. CWT recoveries of coho from the Lynn Canal and Stephens Passage production areas of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

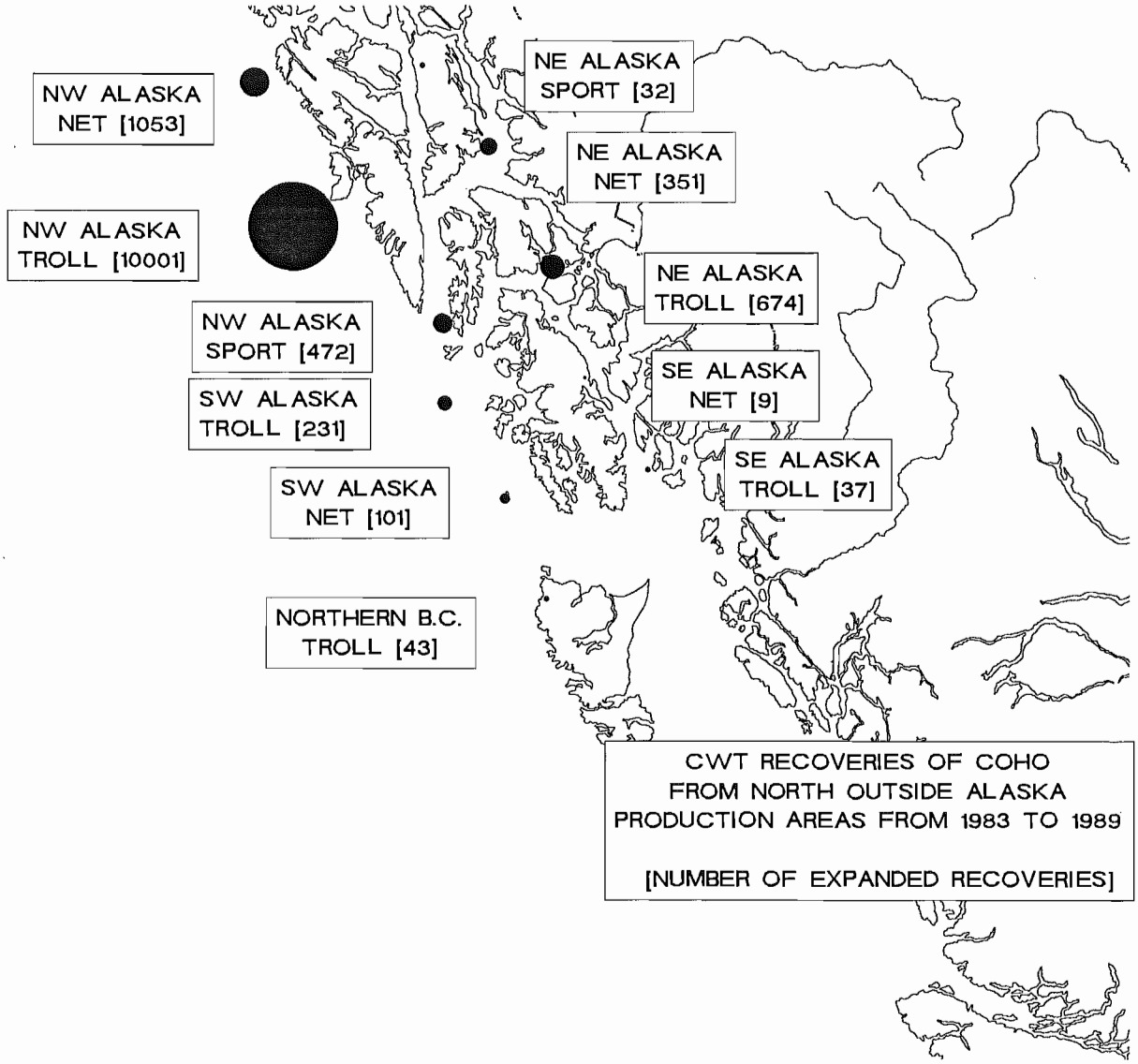


Figure 43. CWT recoveries of coho from the North Outside Alaska production area of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

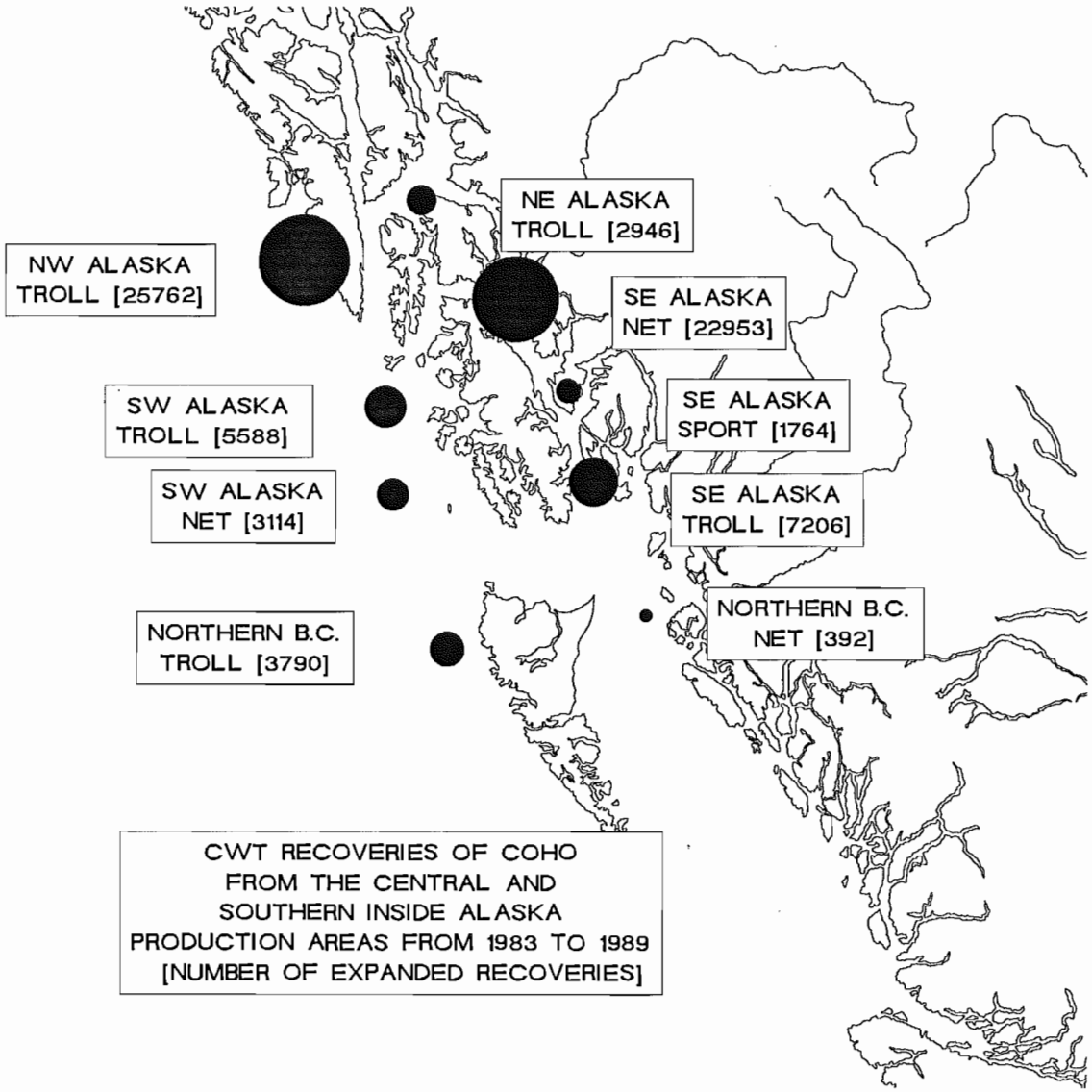


Figure 44. CWT recoveries of coho from the Central and Southern Inside Alaska production area of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

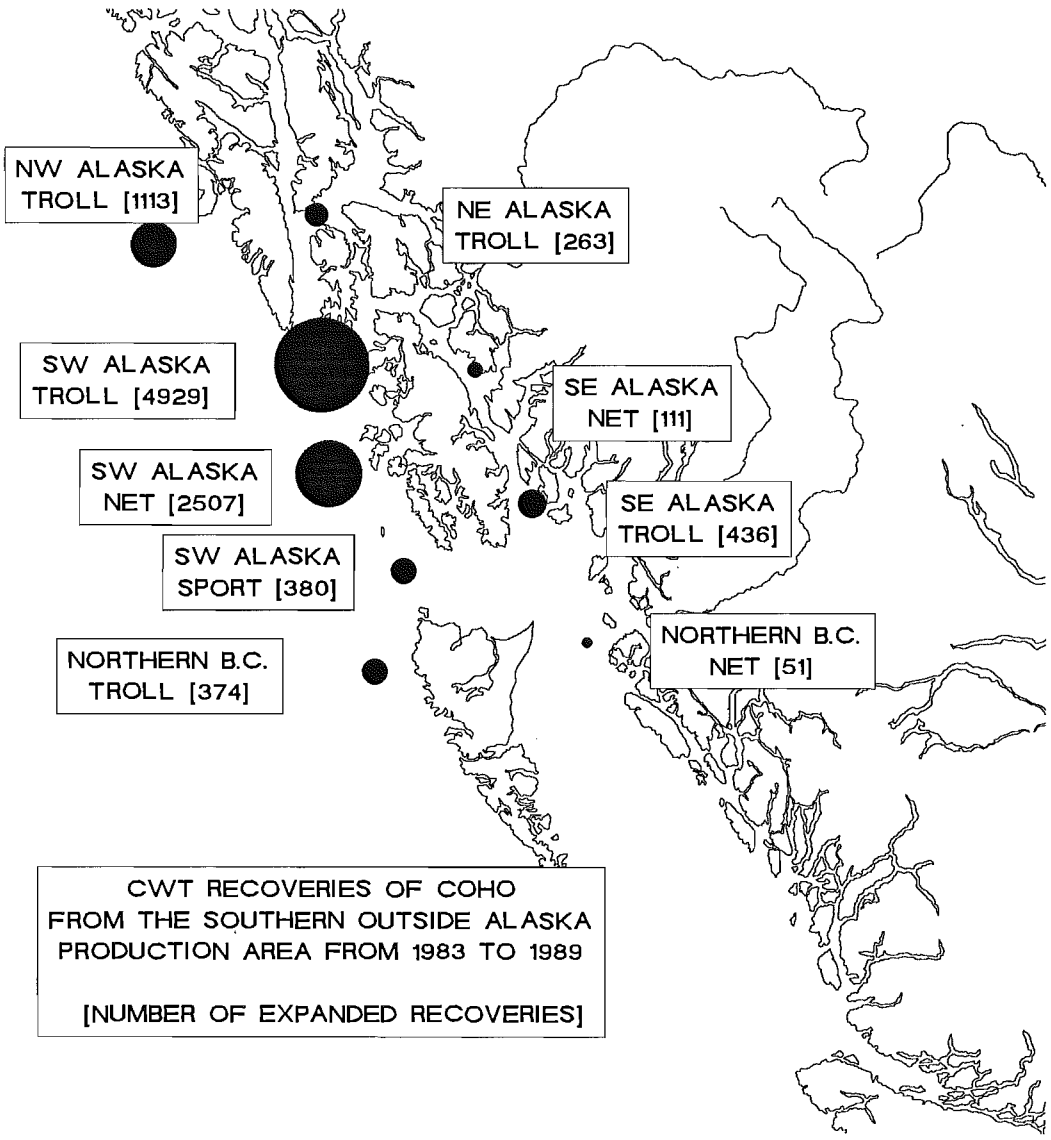


Figure 45. CWT recoveries of coho from the Southern Outside Alaska production area of Southeast Alaska, 1983 to 1989, [number of expanded recoveries in square brackets].

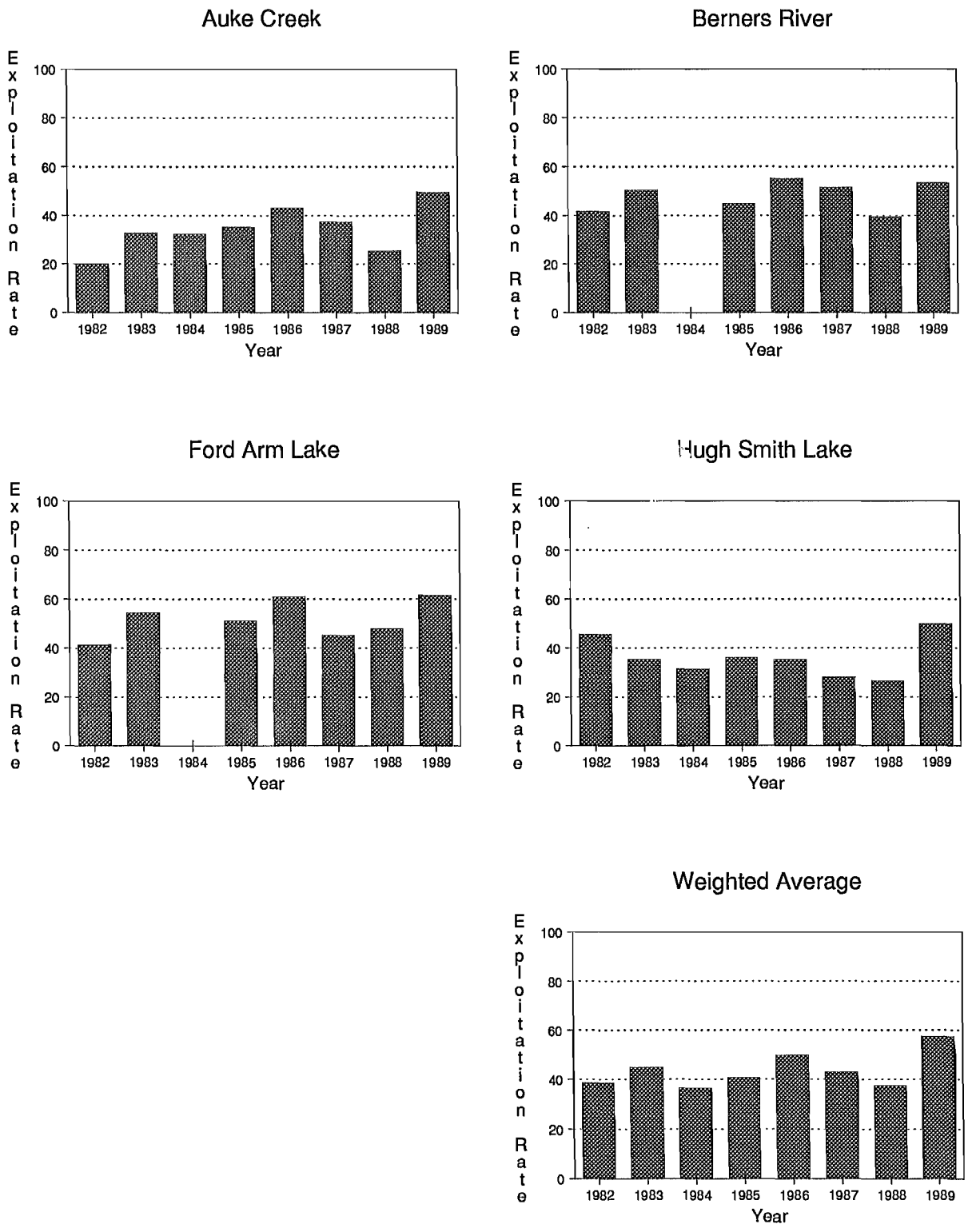


Figure 46. Estimated exploitation rates for four coded-wire tagged wild Southeast Alaska coho salmon stocks by the Alaska troll fishery, 1982-89.

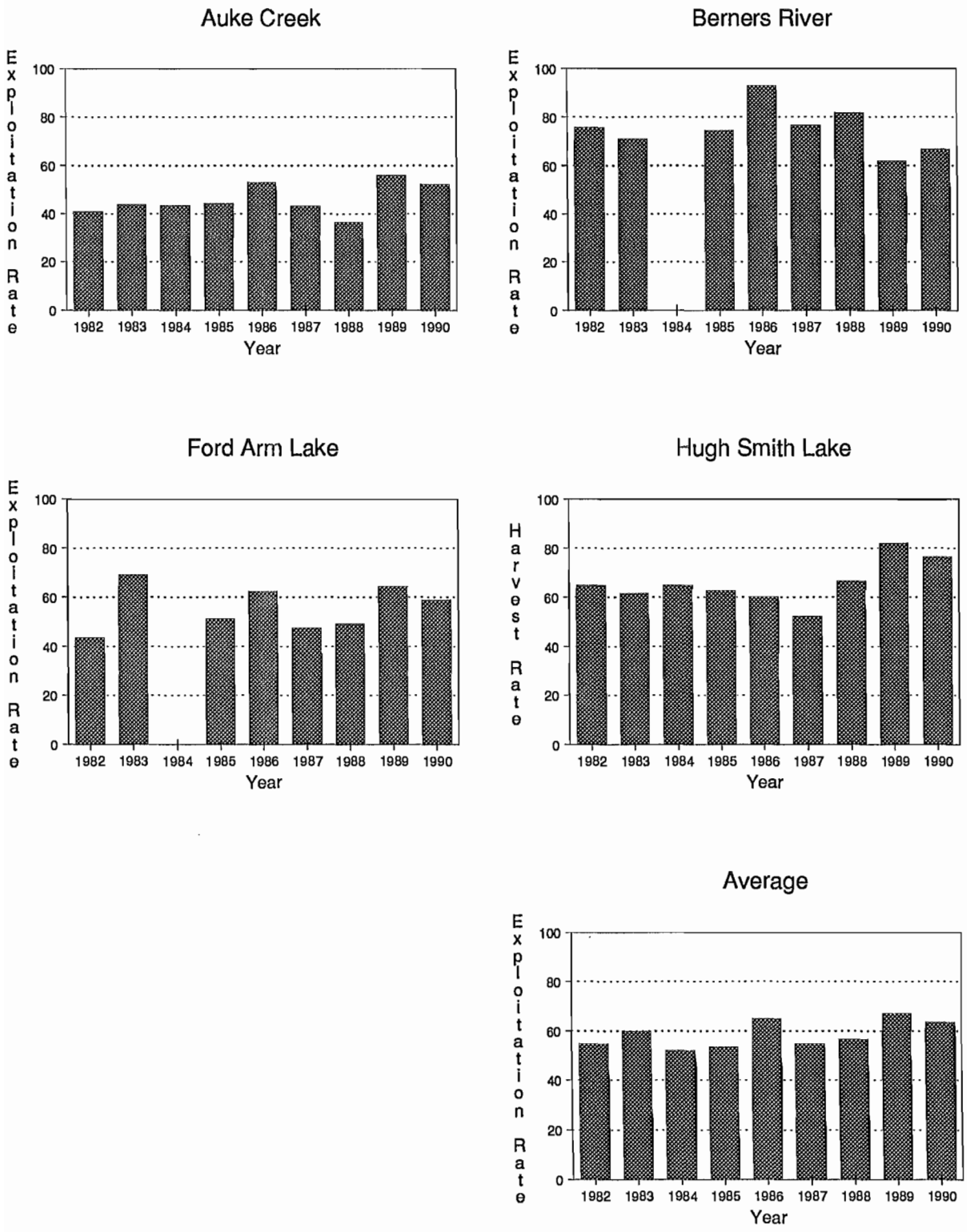


Figure 47. Estimated total exploitation rates for four coded-wire tagged wild Southeast Alaska coho salmon stocks by all fisheries, 1982-89.

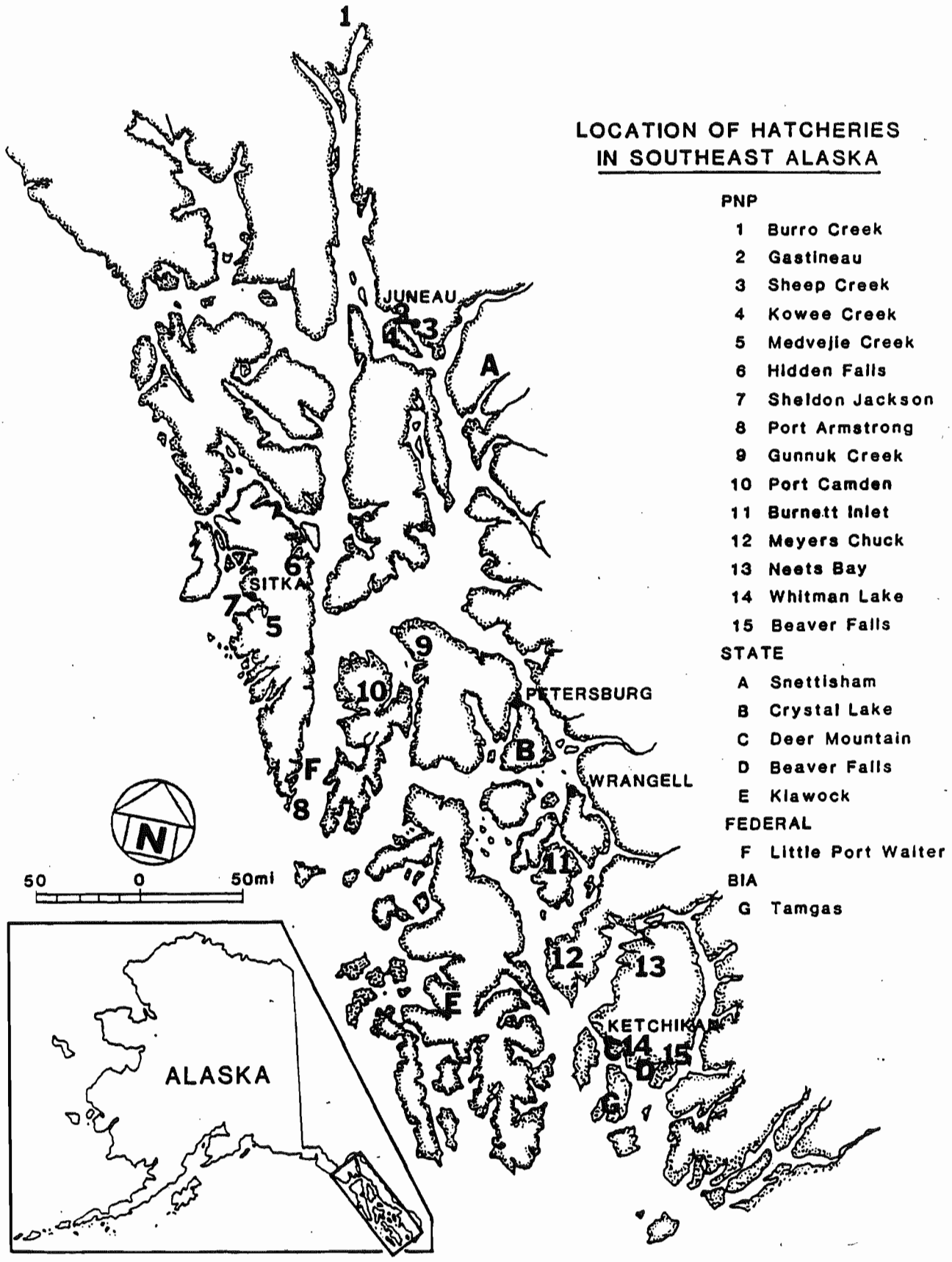


Figure 48. Location of salmon hatcheries in Southeast Alaska.

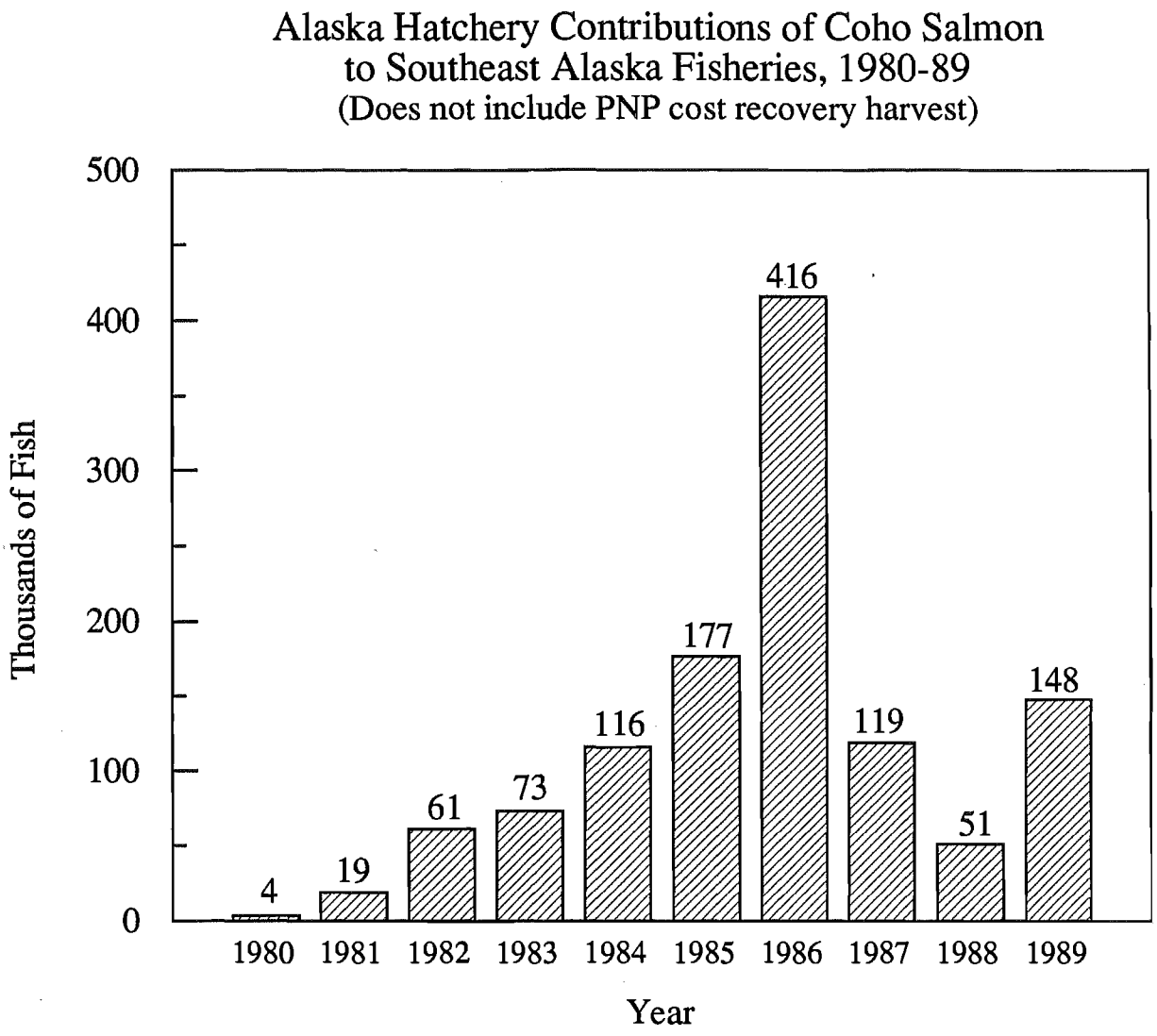


Figure 49. Alaska hatchery contributions of coho salmon to Southeast Alaska fisheries, 1980-89.

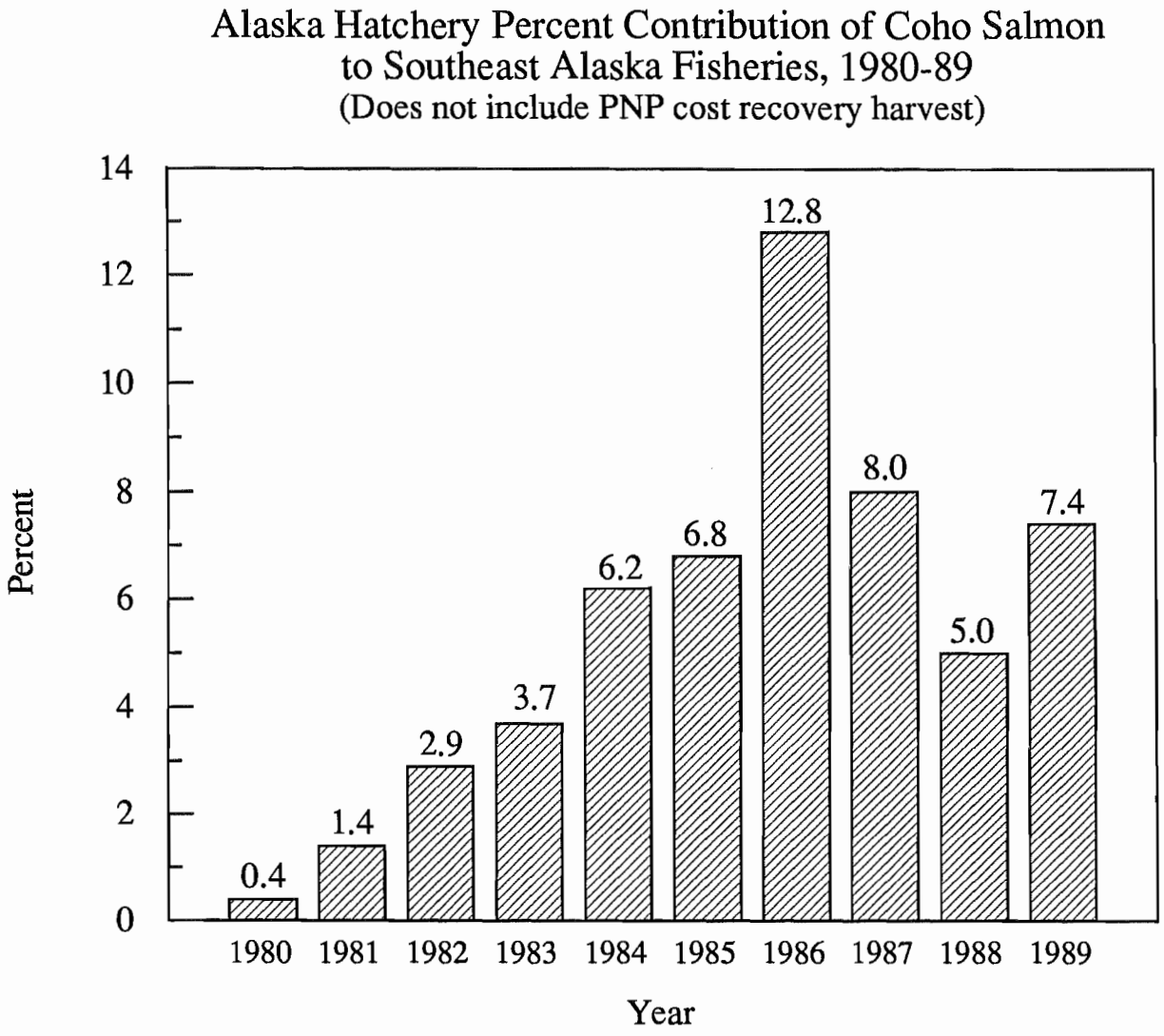


Figure 50. Alaska hatchery contribution as a percent of the total commercial harvest of coho salmon in Southeast Alaska, 1980-89.

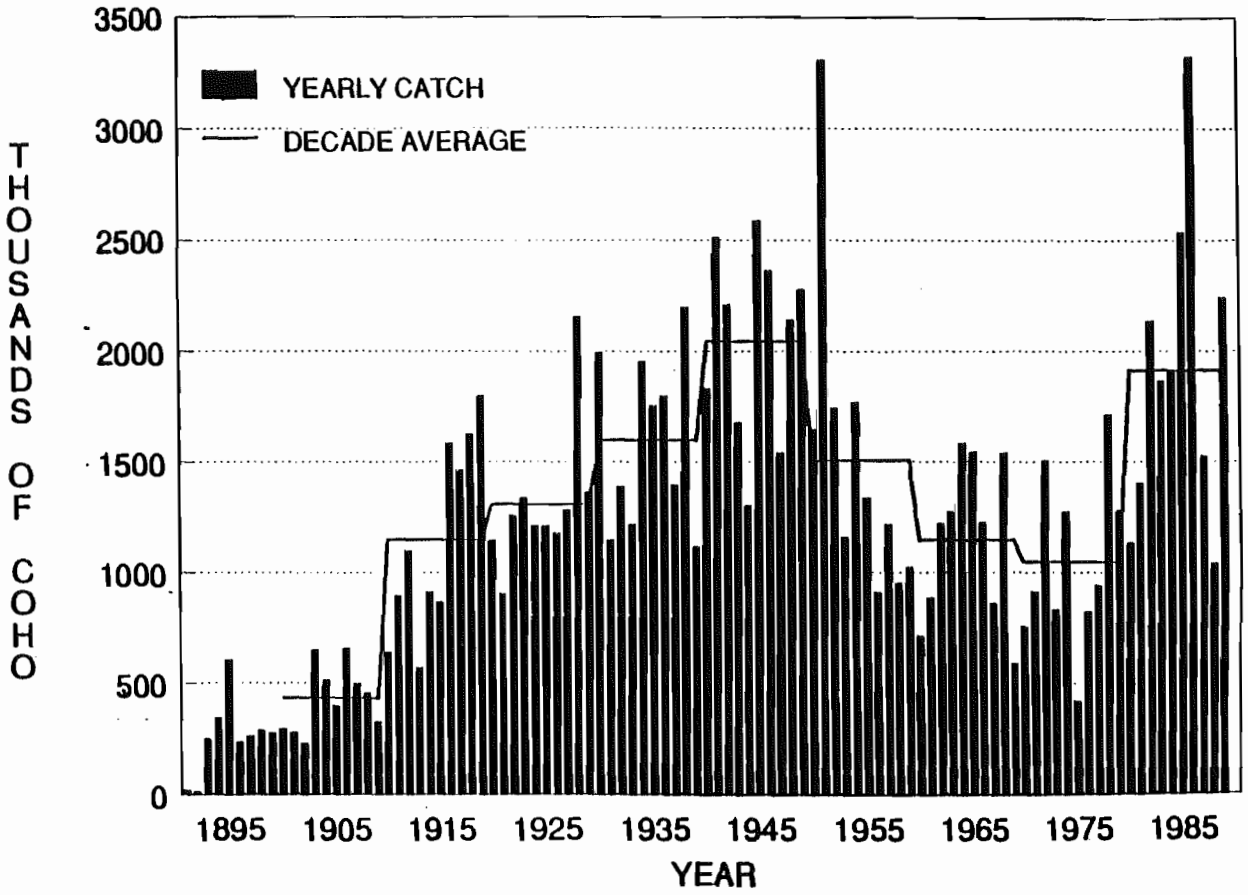


Figure 51. Total commercial catch of coho salmon in Southeast alaska, 1890-1989.

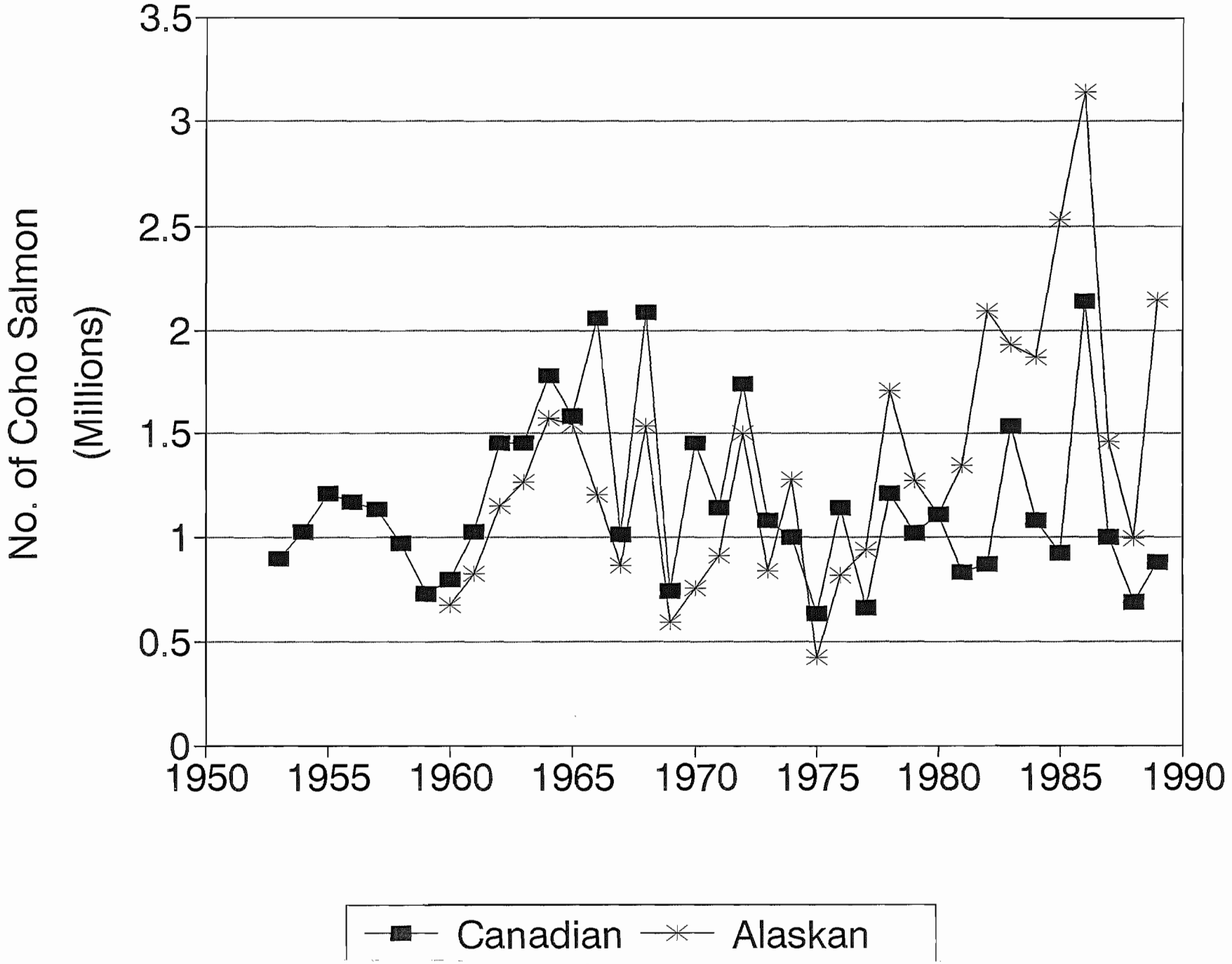


Figure 52. Total commercial coho salmon catch in Southeast Alaska and northern British Columbia, 1953 to 1989.

Appendix 1

Understanding Between the United States and the Canadian Sections of the Pacific Salmon Commission concerning Northern British Columbia and Southeastern Alaska Coho Stocks

The United States and Canada are both concerned with the management and conservation of coho stocks in northern British Columbia and Southeastern Alaska. Both countries recognize that the data base supporting management actions is quite variable and for many stocks actual escapement, escapement goals, production and harvest by area and fishery are poorly understood.

Resource conservation in the boundary area would benefit from an immediate assessment of available information on stocks and harvest, an exchange of information on current management and research procedures and programs, a review of fisheries and an identification of data and analyses needs. The Northern Panel requests the appropriate agencies in Canada and the United States to provide the following information to the Coho Technical Committee by November 1989.

1. Coho catch by fishery area, by gear, by week for the period 1973 to present.

2. Effort levels and distribution of effort by time and area for the above breakdown for the period 1973 to present.

3. Maps of areas referenced in the above tables.

4. Stock composition data available for fisheries of concern.

5. Escapement and harvest rate information available for stocks contributing to Southeast Alaskan and northern British Columbia fisheries.

6. A description of current coho enhancement projects, future plans and present and planned evaluation programs.

7. A report on research-management programs for coho in southern Southeast Alaska and northern British Columbia.

8. A summary of available knowledge on possible high seas foreign interceptions of northern British Columbia and Southeastern Alaska coho stocks.

The Northern section of the Coho Technical Committee in consultation with the respective agencies will prepare a report to the Northern Panel including:

1. A summary of fisheries trends by appropriate geographic area.

2. An assessment of stock status by appropriate geographic areas highlighting any specific conservation concerns.

3. A summary of knowledge of stock migration and fishery interactions.

4. Recommendations for research programs needed to improve the coho data base.

5. An assessment of present and planned programs with respect to the parties conservation and management objectives.

The Northern Panel requests that this technical committee report be completed by October of 1990 with the objective of panel review by December 1990.

Queen Charlotte Islands Weekly Troll Coho Catch, 1980 to 1989
(Areas 1, 2E and 2W)

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	29	134	0	0	0	0	0	0	0
24	062	0	0	1	0	0	0	0	0	0	0
25	063	10572	0	0	0	0	0	0	0	0	0
26	064	21680	0	1828	0	0	0	51497	0	0	0
27	071	37725	2601	17025	0	6393	8481	81627	727	62	41495
28	072	53186	21931	41768	37292	52947	79201	103573	81224	15901	109763
29	073	71806	23748	26889	70904	35685	64966	98942	77712	44656	70754
30	074	63266	51808	42868	84871	54875	49122	165973	70806	47556	49886
31	075	65953	69951	43256	81142	63261	59153	59590	101163	37593	37816
32	081	25725	38991	15463	64077	54527	38376	56072	48073	33973	42144
33	082	27365	32577	16562	30254	32755	28050	35626	22137	22059	40681
34	083	29593	18773	24851	30726	24848	9260	28006	37288	33561	21595
35	084	14076	14325	6524	23220	21466	24998	56121	27045	13514	25380
36	091	12458	10662	11365	16014	14855	12827	63579	15067	2904	12998
37	092	7261	13829	6459	16672	7387	8512	0	25283	22184	1144
38	093	9242	5211	10320	4144	18805	8582	0	1375	11826	0
39	094	2411	5094	6664	18931	6763	4983	0	0	121	76
40	101	7198	5522	11868	10533	383	14087	0	0	0	0
41	102	3468	1043	182	0	9	264	0	0	0	0
42	103	881	0	0	0	0	142	0	0	0	0
43	104	171	0	0	0	0	157	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	44	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	132	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	464213	316095	284027	488780	394959	411161	800606	507900	285910	453732

Queen Charlotte Islands Weekly Troll Coho Catch, 5-Year Averages
(Areas 1, 2E and 2W)

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	1	1	0	0	33	0
0	186	200	406	56	108	0	0
0	4688	10779	5235	5052	3313	2114	0
3211	7712	21750	17043	13837	11491	4702	10299
0	28840	41110	28327	23411	24031	12749	26478
0	29653	45397	32049	28846	36686	41425	77932
0	26671	43323	50971	31468	34060	45806	71406
0	30723	32645	58043	39812	35954	59538	76669
129652	74220	39661	41584	37437	27094	64713	59063
0	19080	38535	39154	36220	21937	39757	43728
0	19936	27663	23396	30003	24812	27903	29711
0	16525	17487	17580	21507	19192	25758	25942
145041	60714	12001	6735	12280	16820	15922	29412
0	5739	6474	5632	6549	9444	13071	21475
0	4545	5179	2980	4804	7012	10322	11425
0	2971	4308	3539	3367	3645	9544	4357
37728	11825	1583	2102	1612	2779	7973	1036
0	384	485	1539	1056	1631	7101	2817
0	6	0	839	556	885	940	53
0	0	0	556	233	341	176	28
0	0	174	104	97	245	34	31
5990	2176	28	0	6	0	0	0
0	0	0	0	0	0	9	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	26	0
0	0	15	0	0	0	0	0
0	0	0	0	0	0	0	0
321621	346594	348799	337816	298210	281479	389615	491862

Appendix Table 1. Queen Charlotte Islands (Areas 1, 2E and 2W) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Nass/Skeena Weekly Troll Coho Catch, 1980 to 1989
(Areas 3, 4 and 5)

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	14	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	13	0	0	0	0	0	0	0	0	0
24	062	47	0	0	51	0	0	0	0	0	0
25	063	1174	5	0	0	0	0	1190	0	0	0
26	064	3668	0	185	0	0	0	10058	0	0	455
27	071	5246	320	3166	3273	10594	9999	16889	2137	142	15963
28	072	3357	471	6201	43396	13752	28748	32928	13333	9855	21720
29	073	2610	1443	14705	39924	10780	13183	55981	8805	12607	13611
30	074	5602	3921	14054	27543	9916	16073	38285	22220	11465	13900
31	075	7330	6816	14168	44966	7418	12759	28802	13584	2488	6909
32	081	8665	4175	4524	20087	17247	8410	27566	9751	6582	12326
33	082	4788	6302	7390	7305	5507	10060	20998	2311	3263	6244
34	083	7063	7350	16108	15198	10369	7266	8451	3474	5157	5843
35	084	9235	7391	9126	6420	11642	3937	14794	2905	5420	11591
36	091	7552	5851	8662	10350	11416	1756	32937	4460	1075	10631
37	092	3176	6655	5854	11574	13230	1753	0	4147	4001	517
38	093	1193	4258	3297	6687	12559	1070	0	706	74	0
39	094	26	3523	1529	6532	312	1044	0	0	0	0
40	101	0	1023	1301	2128	1482	544	0	0	0	0
41	102	0	15	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	70745	59519	110284	245434	136224	116602	288879	87833	62129	119710

Nass/Skeena Weekly Troll Coho Catch, 5-Year Averages
(Areas 3, 4 and 5)

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	3	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	36	0	0	0
0	0	0	0	0	1	3	0
0	96	90	150	87	30	20	0
454	1721	3944	11294	2591	509	236	238
1245	4004	11310	31542	10599	2552	771	2103
1038	7823	19044	27213	10691	5132	4520	9026
1174	9173	18071	24698	14733	5086	13435	21317
3349	8985	18021	31441	14418	4640	13892	20837
11174	12665	14151	30608	21261	5185	12207	20389
26269	22821	19597	30258	12683	3427	16140	12908
7370	10543	15676	24492	12800	4221	10940	12927
5506	10374	13692	17088	9296	4250	6258	8575
7006	11889	13376	10653	9210	5366	11218	6038
14959	11065	10183	10127	7139	6843	8763	7729
10983	7093	7394	8066	5538	6653	8766	10172
5995	6541	4770	5143	5496	4397	8098	2084
6170	3134	2326	3559	3902	3837	5599	370
2592	1255	492	1639	2086	1431	2384	209
0	24	20	523	1111	827	1187	109
0	1	0	27	327	155	3	0
0	0	0	9	4	7	0	0
0	0	0	7	1	4	0	0
0	0	0	1	1	2	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
105282	129207	172156	268539	144008	64554	124441	135031

Appendix Table 2. Nass/Skeena (Areas 3, 4 and 5) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

North Central Coast Weekly Troll Coho Catch, 1980 to 1989
(Areas 6, 7, 8, 9 and 30)

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	9	0	0	0	0	0	0	0	0	0
25	063	5668	0	0	0	0	0	0	0	0	0
26	064	9383	0	0	0	0	0	6655	0	0	2
27	071	10734	969	1854	194	3953	1371	48197	282	411	1257
28	072	8075	4990	5034	7128	32669	4294	19457	7887	2875	4719
29	073	12315	7507	6944	20151	8648	3231	14065	7785	2565	2300
30	074	9765	11443	7600	19132	11761	5530	24285	14493	2926	4339
31	075	13679	8808	7164	21079	9768	5290	4588	16893	4963	2067
32	081	6936	6977	676	19963	16052	6415	11016	8128	9047	3441
33	082	5045	5319	6296	10010	14039	5060	5855	2865	3483	2668
34	083	9886	7088	11650	20612	13868	4870	4818	4106	4601	2710
35	084	10060	7885	6071	9789	11300	4935	12076	3136	1272	2570
36	091	5425	10299	4021	8071	4205	3192	12282	5848	369	2020
37	092	3705	5315	3414	1733	3505	457	0	2018	5413	236
38	093	1193	2350	2539	3726	3107	287	0	0	568	0
39	094	619	4144	225	2399	1703	67	0	0	0	0
40	101	107	1582	514	585	265	947	0	0	0	0
41	102	315	0	0	0	0	24	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	506	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	113425	84676	64002	144572	134843	45970	163294	73441	38493	28329

North Central Coast Weekly Troll Coho Catch, 5-Year Averages
(Areas 6, 7, 8, 9 and 30)

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	5	6	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	14	0	0	0
0	6	102	776	798	94	2	0
640	2160	4708	7207	10146	3483	1134	0
5217	7835	11560	18822	27381	7854	1877	1331
11775	14895	16545	15170	26512	8604	3541	10304
14631	14541	18878	18223	23004	11484	11579	7846
5282	17126	18240	20054	30073	12184	11113	5989
10599	16524	18354	23443	32171	16464	11940	10315
33057	13134	19170	20880	30807	9329	12100	6760
6527	14252	28265	11880	23401	15414	10121	7609
4384	13928	27650	10025	14566	10734	8142	3986
5963	15104	15677	6200	15695	8819	12621	4221
11382	12806	11638	4767	8620	12231	9021	4798
8887	5842	4944	4532	7573	9538	6404	4742
4819	3109	2010	2608	3143	6095	3534	1625
951	1752	766	1156	2187	4327	2583	171
317	423	339	530	808	1298	1818	13
17	0	22	115	194	579	611	189
0	0	0	21	9	105	63	5
0	0	0	1	0	4	0	0
0	0	0	1	51	4	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	101	0
0	0	0	0	0	0	0	0
0	0	0	0	0	12	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
124444	153438	198867	166409	257162	138664	108304	69905

Appendix Table 3. North Central (Areas 6, 7, 8, 9 and 30) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

South Central Coast Weekly Troll Coho Catch, 1980 to 1989
(Areas 10, 11 and 12)

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	396	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	378	0	0	0	0	0	0	0	0
24	062	469	0	0	0	0	0	0	0	0	0
25	063	29807	0	0	0	0	0	794	0	0	0
26	064	38776	5	141	1	0	0	49305	0	0	179
27	071	19493	7761	30664	190	20105	7220	66520	11927	1050	15918
28	072	27515	29134	31796	59117	41144	17136	75273	38266	27847	12248
29	073	15710	16912	17333	51455	36328	8838	55815	13253	26317	20020
30	074	13604	14128	6241	43450	31358	14740	89962	18137	14953	7047
31	075	13665	26061	5637	20080	23477	13040	31430	23038	13893	6737
32	081	11297	21136	3955	46382	11450	11917	8826	12255	18228	3571
33	082	8408	26859	9921	24481	23944	3118	15289	7191	9539	12025
34	083	9069	19296	10740	34933	8997	3175	6867	7170	8076	7792
35	084	7776	13175	4718	21185	12518	5558	15366	7843	4804	8314
36	091	7535	9697	7994	13864	8860	1762	14507	1925	5491	768
37	092	4592	6848	9746	10435	3887	2124	0	44	14875	265
38	093	2428	1941	3275	13218	3914	341	53	0	290	4
39	094	924	2060	1572	4810	42	244	76	0	0	0
40	101	711	1526	1654	8034	45	43	0	0	0	0
41	102	362	0	0	0	42	0	0	0	0	0
42	103	316	0	0	0	19	1	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	9	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	212457	196917	145783	351635	226130	89266	430083	141049	145363	94888

South Central Coast Weekly Troll Coho Catch, 5-Year Averages
(Areas 10, 11 and 12)

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	79	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	18	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	145	0	0	76	0
0	54	416	2896	278	1128	94	0
6602	10481	15521	40079	13413	9009	5961	159
15394	17638	31089	80056	39299	23031	7785	9897
17227	20439	21869	38634	15558	21226	15643	20527
16346	17440	25463	38995	18752	22147	37741	34154
15101	22227	22500	36117	14060	24692	27548	24849
21206	21823	18030	37650	11926	20929	21756	28968
29070	22929	13572	31893	19128	17982	17784	17628
14438	16937	16466	29731	14976	14595	18844	10959
8066	20217	11950	24771	9670	12769	18723	9432
8619	19751	11668	21073	9917	11097	16607	6616
12663	17446	5730	11437	8517	12098	11874	8377
12442	11464	4378	9937	7428	7227	9590	4891
5611	7281	2482	4558	3486	5215	7102	3462
3201	5588	1677	2260	1341	2273	4955	138
3650	1641	490	1222	561	1819	1882	64
364	457	41	491	60	343	2394	9
31	25	51	77	148	196	81	0
0	23	1	23	115	57	67	0
0	0	1	6	2	159	0	0
0	0	0	5	2	22	0	2
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0
190029	233860	203397	412075	188638	208016	226584	180130

Appendix Table 4. South Central (Areas 10, 11 and 12) weekly troll coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 1 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	377	346	0	0	0	0	0	0	0	0
26	064	5149	1211	0	0	0	0	0	0	0	0
27	071	10123	2156	0	0	0	0	0	0	0	0
28	072	401	330	46	0	126	8	0	0	0	0
29	073	19	150	18	19	0	0	87	52	0	0
30	074	0	126	13	33	2	0	0	1	0	16
31	075	148	1046	13	557	15	0	0	0	0	1
32	081	185	339	0	8	22	0	0	6	26	7
33	082	140	170	0	22	7	0	0	2	105	11
34	083	72	66	0	0	1	7	2	1	13	0
35	084	0	0	0	3	9	0	14	0	1	0
36	091	0	11	0	0	36	0	12	0	0	0
37	092	0	0	0	0	0	0	46	0	0	0
38	093	0	2	0	0	0	0	0	119	0	161
39	094	0	0	0	0	0	15	0	123	154	174
40	101	0	0	0	0	0	3	399	0	239	0
41	102	0	0	0	0	3	46	312	0	0	0
42	103	0	0	0	0	0	35	42	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	16614	5953	90	642	221	114	914	304	538	370

Area 1 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	5	0	0	12	0	0	0
0	0	0	0	17	0	0	0
0	0	53	1	0	6	0	0
0	1	109	677	2369	108	145	0
0	1	332	1821	4512	710	1272	0
0	85	733	6140	5843	804	2456	0
0	42	1031	3718	3364	642	181	2
0	151	1160	5961	6455	641	41	28
0	251	1396	6737	5187	515	35	3
134	68	2344	5828	2869	5	356	0
0	85	1893	5695	3126	25	111	8
0	100	1194	5145	2564	8	68	24
0	201	1236	3298	1318	11	28	5
36	224	1288	793	143	68	2	3
0	282	923	757	89	189	9	2
0	466	550	451	32	16	0	9
0	451	607	530	239	50	0	56
30	868	0	566	179	203	0	93
0	713	0	676	291	146	0	128
0	11	0	38	78	0	1	72
0	0	0	16	59	36	0	15
0	0	0	0	14	7	0	0
104	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
304	4005	14849	48849	38762	4192	4704	448

Appendix Table 5. Area 1 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 2E Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	377	346	0	0	0	0	0	0	0	0
26	064	5149	1211	0	0	0	0	0	0	0	0
27	071	10123	2156	0	0	0	0	0	0	0	0
28	072	401	330	46	0	126	8	0	0	0	0
29	073	19	150	18	19	0	0	87	52	0	0
30	074	0	126	13	33	2	0	0	1	0	16
31	075	148	1046	13	557	15	0	0	0	0	1
32	081	185	339	0	8	22	0	0	6	26	7
33	082	140	170	0	22	7	0	0	2	105	11
34	083	72	66	0	0	1	7	2	1	13	0
35	084	0	0	0	3	9	0	14	0	1	0
36	091	0	11	0	0	36	0	12	0	0	0
37	092	0	0	0	0	0	0	46	0	0	0
38	093	0	2	0	0	0	0	0	119	0	161
39	094	0	0	0	0	0	15	0	123	154	174
40	101	0	0	0	0	0	3	399	0	239	0
41	102	0	0	0	0	3	46	312	0	0	0
42	103	0	0	0	0	0	35	42	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	16614	5953	90	642	221	114	914	304	538	370

Area 2E Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	3	145	0
0	0	102	9	0	0	1272	0
0	0	0	0	0	30	2456	0
0	0	7	6	0	21	181	2
0	0	0	3	2	0	41	28
0	0	0	6	0	0	35	3
0	0	0	0	13	2	356	0
0	0	86	0	16	0	111	8
0	0	11	1	37	8	68	24
0	17	61	7	108	18	28	5
18	11	159	26	102	30	2	3
0	0	239	83	363	112	9	2
0	164	1411	2620	540	184	0	9
0	250	1379	2589	2516	6	0	56
1195	822	628	1603	3127	1575	0	93
0	100	223	1003	1866	1236	0	128
0	0	359	0	967	2	1	72
0	0	0	0	1	0	0	15
0	0	0	0	0	0	0	0
640	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1853	1365	4665	7955	9658	3226	4704	448

Appendix Table 6. Area 2E weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 2W Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	170	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	490	160	0	0	0	0	0	0	0	0
28	072	16	62	0	0	0	0	0	0	0	0
29	073	64	0	6	0	14	0	0	0	0	0
30	074	0	0	16	0	0	0	0	0	0	0
31	075	274	0	0	8	0	0	16	0	0	0
32	081	2	72	0	0	0	0	32	0	0	0
33	082	0	16	0	22	0	0	32	0	0	0
34	083	0	34	0	0	0	0	2	0	0	0
35	084	0	0	0	0	0	0	0	0	2	0
36	091	0	0	0	0	0	0	0	0	0	0
37	092	554	0	244	0	0	0	0	0	0	52
38	093	0	0	0	0	0	28	0	0	0	0
39	094	0	0	108	0	58	0	0	0	0	0
40	101	418	0	0	0	44	114	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	2	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	1818	514	374	30	116	142	82	0	4	52

Area 2W Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	2	5	0	0	0	0
0	0	0	14	0	7	34	0
0	2	0	0	0	0	0	0
0	12	7	0	2	35	130	0
0	0	0	2	1	36	16	0
0	0	0	2	1	16	17	0
0	0	0	0	0	2	3	0
0	0	0	0	16	2	56	3
0	0	0	0	15	3	15	6
0	0	0	0	0	4	8	6
0	0	0	0	42	4	7	0
0	34	0	0	21	115	0	0
0	0	0	0	0	0	0	0
0	0	16	303	161	213	160	10
0	0	26	254	167	0	0	6
177	29	17	0	69	54	33	0
0	0	5	0	0	3	92	23
0	3	5	0	0	0	0	0
0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
201	83	78	581	496	493	570	56

Appendix Table 7. Area 2W weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 3 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	2	7	0	0	0	0	0	0	0
25	063	20	211	240	0	0	0	0	0	0	296
26	064	0	332	251	2	145	0	0	0	0	1940
27	071	25	6	902	19	81	540	57	0	0	616
28	072	937	1011	2474	10	553	2661	675	62	92	4764
29	073	2530	2662	985	1542	1236	601	883	203	1661	3043
30	074	2328	511	935	4873	2146	1971	918	571	343	121
31	075	812	440	1260	3376	1508	2916	2844	1372	430	0
32	081	1341	809	502	4481	4448	1669	1837	209	399	1108
33	082	1839	1910	2842	3844	5430	474	1029	694	287	1095
34	083	3627	58	1117	4697	5368	730	2656	1398	201	400
35	084	2754	96	2600	2926	3377	0	4724	207	0	0
36	091	1444	63	2103	0	3809	0	4413	0	0	0
37	092	0	55	3929	0	0	0	0	0	0	0
38	093	0	42	0	0	0	0	0	0	0	0
39	094	0	24	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120		0	0	0	0	0	0	0	0	0
	Total	17657	8232	20147	25770	28101	11562	20036	4716	3413	13383

Area 3 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	7	0	0
0	0	1	0	0	0	0	0
0	0	0	0	0	15	2	0
1	116	914	3	51	167	94	59
62	454	1681	304	293	227	146	388
142	1091	1092	1062	1090	989	207	243
159	594	929	1183	897	1380	997	1651
182	833	1291	1921	1172	1513	1791	1278
566	941	1012	2221	2049	1514	2159	785
1519	1287	738	1722	742	1684	1479	1512
675	1938	1967	2918	1590	831	2316	1044
366	3474	1891	2133	1884	708	3173	716
4356	5457	4237	4883	3231	1725	2973	1077
8890	4510	5528	5519	5732	1600	2351	986
4812	8941	3971	8537	7140	5935	1484	883
5309	9163	6228	7699	6466	3233	797	0
9112	6410	2978	7817	5100	914	8	0
3767	1551	0	2658	569	4	5	0
0	1142	17	1640	5	3	0	0
195	152	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
40110	48054	34473	52219	38012	22451	19981	10622

Appendix Table 8. Area 3 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 4 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	534
27	071	0	0	0	0	0	4582	0	0	281	4943
28	072	5078	1553	8175	107	675	8503	906	355	1060	9397
29	073	4172	5093	6235	3621	3674	12514	3139	905	3991	11138
30	074	3735	4557	6926	7516	4894	6503	6413	2098	3880	1249
31	075	6533	4267	8270	4880	8252	5094	5394	1386	1722	2019
32	081	39	6502	3731	5503	2994	6228	2099	4190	4561	3213
33	082	0	3267	8423	7974	8579	7340	6804	5478	2395	2547
34	083	22	3793	30	5797	3193	4681	9859	3181	5380	3374
35	084	12	30	0	3298	2433	0	9120	751	920	1080
36	091	1410	0	1696	14	0	0	1142	75	0	0
37	092	0	0	0	0	0	0	0	33	19	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	77	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	21001	29062	43486	38710	34694	55445	44876	18452	24286	39494

Area 4 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2	0	0	0	0	14	0	0
0	4	138	5	1	9	0	0
212	96	507	221	73	16	0	107
211	94	802	774	527	1395	0	1961
573	194	795	1006	958	2159	3118	4044
972	713	1549	3895	2167	1839	4559	6337
2369	1338	2724	5094	3419	5237	5526	4029
3544	4677	6318	9014	4597	3659	6440	3123
7742	9156	12150	6898	6959	8484	3754	4058
5532	12439	7813	9968	11608	4543	5649	4913
14420	10851	8754	6905	6220	2011	2567	5295
12446	8845	5477	7314	7488	1933	1155	2374
8625	5516	4095	6604	5026	2305	624	243
6292	5845	2813	6590	4042	2130	0	10
5929	2069	1156	2683	2705	583	0	0
801	635	0	1458	167	1	0	0
0	98	0	248	3	14	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	15
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
69668	62570	55094	68676	55960	36333	33391	36511

Appendix Table 9. Area 4 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 5 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	28	0	0	0	0	0	0	0	0	0
26	064	0	1159	119	0	0	0	0	0	0	14
27	071	0	0	1106	0	0	161	0	0	0	495
28	072	573	330	958	0	152	101	133	155	132	766
29	073	1272	32	1243	763	232	121	693	221	257	3081
30	074	1255	12	293	291	0	79	117	181	407	452
31	075	1156	234	108	1503	974	195	229	368	266	0
32	081	917	0	0	607	2355	1272	3462	457	79	868
33	082	1054	0	856	733	2128	154	1253	238	344	1483
34	083	2086	15	3748	2544	1275	0	767	25	522	376
35	084	3334	1934	1937	1761	0	0	2310	0	525	674
36	091	1972	2093	0	0	203	0	1173	0	0	0
37	092	0	0	0	0	0	0	994	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	13647	5809	10368	8202	7319	2083	11131	1645	2532	8209

Area 5 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	7	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	365	265	5	6	0
0	93	1508	825	331	151	256	3
0	184	3310	2393	807	749	221	131
0	291	4788	2225	1321	316	403	257
0	693	2247	2503	1807	219	708	875
0	1336	3184	3656	1511	827	370	247
1231	1851	1561	3562	3246	1194	795	212
0	730	16334	4478	3046	704	776	1228
0	2306	11448	8951	2473	881	954	694
0	5524	11436	6417	2033	2050	1934	338
21042	7376	7595	5662	3093	3177	1793	702
0	1324	7741	4346	3489	4826	854	235
0	803	4134	3036	572	2745	0	199
0	509	722	696	339	98	0	0
12128	3022	0	0	164	9	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
34401	26040	76005	49114	24500	17958	9069	5120

Appendix Table 10. Area 5 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 6 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	0	0	0	0	0	0	0	0	0
29	073	554	121	38	171	0	0	0	0	0	110
30	074	1423	58	60	98	0	39	213	92	244	46
31	075	1105	1168	8	619	0	155	421	645	299	117
32	081	762	1586	0	1151	0	978	1653	762	237	102
33	082	1940	2166	4251	1028	1198	3263	601	1585	1656	0
34	083	1731	0	4932	2518	733	2422	1231	0	1228	0
35	084	3669	737	4760	1548	644	0	1255	0	1523	0
36	091	1589	2754	0	0	0	0	1566	0	1755	0
37	092	1667	0	0	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	14440	8590	14049	7133	2575	6857	6940	3084	6942	375

Area 6 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	7	0	0	0
0	0	1	0	397	1	0	0
0	20	1241	891	3003	2	0	0
17	143	2596	2362	3332	137	0	0
85	301	3091	3166	2891	260	0	0
164	682	2167	3535	2548	1905	177	22
483	991	2859	4407	1512	136	328	127
1275	1928	3131	6030	1711	955	580	327
1502	3311	7727	6942	2723	934	700	746
803	4779	9272	9696	4106	1625	2117	1421
4035	7226	11524	9715	6241	650	1983	976
4830	7155	12737	7051	8672	1139	2272	556
2505	5235	7248	5543	5875	204	869	664
2004	2284	4139	3738	403	514	333	0
0	157	389	844	53	0	0	0
0	0	0	0	0	1	0	0
0	0	0	0	41	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0
17701	34213	68121	63921	43515	8463	9357	4840

Appendix Table 11. Area 6 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 7 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	16	0	0	0	0	0	0	0	0
29	073	597	689	322	273	0	0	70	0	0	11
30	074	382	538	275	377	90	165	137	178	0	0
31	075	439	481	576	156	0	94	299	338	0	72
32	081	617	1955	433	99	0	462	419	302	121	160
33	082	2648	1619	1594	0	984	888	1075	471	107	701
34	083	2046	177	1831	0	650	1146	1229	0	296	776
35	084	3618	4799	4965	464	679	2444	613	1792	481	1380
36	091	2776	2036	2572	0	0	1150	1365	597	168	277
37	092	2036	0	0	0	0	1759	917	0	0	0
38	093	1177	0	297	0	115	0	0	0	1217	0
39	094	0	0	0	62	45	0	0	61	0	233
40	101	0	0	0	0	79	0	483	64	884	0
41	102	0	0	0	0	0	0	145	0	0	0
42	103	0	0	0	0	0	0	14	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	16336	12310	12865	1431	2642	8108	6766	3803	3274	3610

Area 7 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	21	0	0	0	0	0
0	0	13	0	0	0	0	0
0	0	70	0	0	5	0	0
0	1	55	254	27	17	0	0
6	21	232	867	2088	629	0	0
18	52	355	810	2496	603	3	0
39	66	240	427	1946	805	376	16
54	189	244	702	2379	1081	332	96
188	846	1404	2463	4375	1039	330	161
1177	1985	5483	4105	6368	1800	621	293
296	2876	8982	2910	10096	2535	1369	648
3140	4418	10625	3514	12616	5166	941	689
4667	5324	6958	4820	11334	6481	2905	1342
3767	3510	3985	6144	8796	2228	1477	711
2023	3731	3148	3087	3446	441	407	535
2993	1071	1091	1001	1559	1337	318	243
607	44	0	130	601	0	21	59
0	0	0	0	146	0	16	286
0	0	0	0	0	0	0	29
0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	3	0	0	0
18971	24135	42908	31234	68277	24166	9117	5112

Appendix Table 12. Area 7 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 8 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	2	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	21	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	320	0	0	0	0	4	1	0
25	063	4	0	20	0	0	0	0	0	0	0
26	064	1	0	2	0	5	0	0	1	0	3
27	071	19	10	19	0	1177	367	1832	0	0	58
28	072	985	534	518	933	1191	567	4215	810	844	347
29	073	1041	686	273	832	1	198	1843	557	697	902
30	074	579	519	0	1397	738	680	1661	985	1101	255
31	075	760	823	788	721	834	757	3525	1014	1252	78
32	081	930	1415	24	1683	429	716	6195	2009	2489	803
33	082	1407	2858	1985	1543	1622	1805	5345	1207	720	3045
34	083	1056	2207	1284	4662	1278	1233	7994	0	1338	1661
35	084	1213	0	1505	3883	0	1394	4762	0	997	491
36	091	1444	0	1088	0	0	954	3432	0	816	0
37	092	2381	0	0	0	0	0	1210	0	0	0
38	093	0	0	0	0	0	1720	1070	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	11820	9054	7826	15675	7275	10391	43084	6587	10255	7643

Area 8 Weekly Gillnet Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	4	0
0	0	0	0	0	0	0	0
0	0	0	0	0	1	64	1
0	7	1	12	6	14	5	0
1	100	454	254	143	11	2	1
330	397	1315	700	191	241	245	451
551	735	1568	1116	472	1076	832	1357
597	1332	912	852	1018	1195	567	839
1201	1784	2099	796	1000	1272	647	936
2286	2221	2091	1068	852	885	785	1325
3527	5173	5180	2084	1106	1027	896	2442
2546	7574	5514	1696	1324	1079	1883	2424
10379	10759	8064	2742	2338	2338	2097	2445
10349	11944	10176	4228	4407	2932	1320	1529
11899	12295	7820	6028	4940	2972	506	1040
12610	11736	8857	7421	3562	3333	476	242
10562	5368	4675	7862	3180	10	0	558
5601	401	0	3726	2861	678	0	0
0	2	0	0	713	1984	0	0
0	0	0	0	0	1418	0	0
0	0	0	0	0	181	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
72436	71828	58727	40585	28111	22648	10330	15592

Appendix Table 13. Area 8 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 9 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	58	1690	516	0	609
28	072	0	0	0	0	0	358	2834	583	669	592
29	073	1	0	0	12	0	774	1305	559	734	570
30	074	0	0	824	0	851	532	438	297	313	0
31	075	28	732	5	1706	1443	0	474	1210	1293	0
32	081	0	816	24	650	1899	518	1368	654	1126	101
33	082	696	1029	346	193	1638	777	910	339	749	170
34	083	318	271	102	0	634	87	859	412	619	0
35	084	463	0	0	182	0	443	488	0	698	0
36	091	0	0	0	0	0	435	288	0	0	0
37	092	0	0	1	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	1506	2848	1302	2743	6465	3982	10654	4570	6201	2042

Area 9 Weekly Gillnet Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	1	0	0
24	062	0	0	2	15	0	12	0	0
25	063	0	4	23	9	8	20	0	0
26	064	4	110	490	760	1525	572	0	0
27	071	402	334	1478	2004	1292	1084	0	575
28	072	393	569	2609	3186	259	2899	0	1007
29	073	728	995	2199	4199	1943	1426	3	788
30	074	961	1940	2078	2713	1988	2576	335	316
31	075	1373	2255	2006	2015	1505	1007	783	595
32	081	216	922	2053	1832	1556	1896	678	753
33	082	1851	3387	3707	2930	1541	2443	780	589
34	083	5646	4266	2668	3822	2088	2377	265	395
35	084	3319	3859	4325	2595	2726	2818	129	326
36	091	2795	4016	4989	3948	2617	2917	0	145
37	092	2296	4080	5067	3849	2339	939	0	0
38	093	1070	1247	2539	2978	2023	4	0	0
39	094	815	1097	0	814	1462	0	0	0
40	101	605	79	0	207	431	0	0	0
41	102	169	634	204	0	63	0	0	0
42	103	0	49	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	2	0	0	0
	Total	22640	29842	36439	37877	25369	22993	2973	5490

Appendix Table 14. Area 9 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 10 Weekly Gillnet Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	23	0	0	1035	928	507	0	795
28	072	0	0	666	0	561	1703	2700	864	1295	1729
29	073	0	0	3297	15	0	3196	2283	553	1214	1044
30	074	0	909	1359	2952	0	1479	897	345	686	0
31	075	812	370	500	517	0	583	21	623	539	0
32	081	51	84	0	114	354	379	25	33	172	0
33	082	220	268	412	14	579	400	37	0	0	0
34	083	852	0	341	0	0	301	0	715	0	0
35	084	558	0	0	0	0	0	0	642	0	0
36	091	0	0	0	0	0	0	0	966	0	0
37	092	0	0	0	0	0	0	0	0	0	0
38	093	0	0	0	179	0	0	0	0	0	0
39	094	0	0	0	15	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	2493	1631	6598	3806	1494	9076	6891	5248	3906	3568

Area 10 Weekly Gillnet Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0
25	063	0	0	7	18	0	7	0	0
26	064	0	38	623	9968	134	142	0	0
27	071	336	370	4400	19705	480	430	5	653
28	072	479	828	4787	22524	235	1387	245	1658
29	073	1108	1122	3332	24001	1610	1003	662	1658
30	074	758	1271	2214	10152	1630	1097	1044	681
31	075	352	420	855	5410	939	513	440	353
32	081	39	161	278	4831	402	1213	121	122
33	082	83	320	538	6604	284	1012	299	87
34	083	368	594	934	4372	653	627	239	203
35	084	786	583	998	5477	1213	852	112	128
36	091	767	744	1171	6341	1204	469	0	193
37	092	722	1030	1258	2187	646	150	0	0
38	093	218	337	516	405	461	0	36	0
39	094	0	52	0	93	244	0	3	0
40	101	80	72	87	0	57	0	0	0
41	102	40	10	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	6132	7954	21998	122087	10192	8902	3204	5738

Appendix Table 15. Area 10 weekly gillnet coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 1 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	24	45	0	0	0	0	0	0	0	0
26	064	464	98	0	0	0	0	0	0	0	0
27	071	1940	508	0	0	0	0	0	0	0	0
28	072	1396	897	3103	0	0	0	0	0	0	0
29	073	1051	1806	1473	1925	750	9994	3872	2493	228	7096
30	074	1384	2028	3178	1179	919	7558	3947	5885	651	0
31	075	1298	3797	1629	160	1277	1602	2423	1075	986	0
32	081	3787	312	351	485	1014	365	1616	248	200	222
33	082	506	431	0	230	1528	807	23	1901	472	413
34	083	36	689	0	298	499	327	11	1540	473	0
35	084	0	159	0	486	865	0	42	0	153	0
36	091	0	99	0	0	381	0	535	0	0	0
37	092	0	0	0	0	0	0	6435	0	0	0
38	093	0	0	0	0	0	0	0	45	0	0
39	094	0	0	0	0	0	2	0	18	0	0
40	101	0	0	0	0	0	0	391	0	0	0
41	102	0	0	0	0	0	0	407	0	0	0
42	103	0	0	0	0	0	134	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	11886	10869	9734	4763	7233	20789	19702	13205	3163	7731

Area 1 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0
25	063	0	0	0	0	17	58	14	0
26	064	0	0	3	0	286	266	112	0
27	071	0	0	12	4	616	582	490	0
28	072	0	0	25	95	197	395	1079	0
29	073	0	0	7	90	371	1294	1401	4737
30	074	0	0	379	190	239	588	1738	3608
31	075	0	1	97	194	280	395	1632	1217
32	081	0	4	37	128	352	493	1190	530
33	082	0	37	40	220	73	725	539	723
34	083	0	52	234	330	58	92	304	470
35	084	280	28	280	563	55	75	302	39
36	091	0	0	293	303	6	0	96	107
37	092	0	5	690	133	0	2	0	1287
38	093	0	386	56	77	188	0	0	9
39	094	6627	300	0	15	5	8	0	4
40	101	0	414	0	34	33	6	0	78
41	102	0	0	0	0	0	0	0	81
42	103	0	0	0	0	0	0	0	27
43	104	0	0	0	0	0	0	0	0
44	105	2520	1781	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	9426	3011	2153	2377	2777	4979	8897	12918

Appendix Table 16. Area 1 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 2E Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	154	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	0	0	0	0	0	0	0	0	0
29	073	0	0	0	0	0	0	0	0	0	0
30	074	0	0	0	0	0	0	0	0	0	0
31	075	0	0	0	0	0	0	0	0	0	0
32	081	0	0	0	0	0	0	187	0	0	0
33	082	0	0	0	0	0	0	0	0	0	0
34	083	0	0	0	0	0	0	0	0	0	0
35	084	0	0	0	0	84	0	0	0	166	0
36	091	0	26	0	0	592	0	1428	0	460	0
37	092	417	16	0	0	0	1346	3696	203	0	1398
38	093	0	0	97	0	154	3502	924	554	447	630
39	094	301	0	0	0	635	3069	133	77	678	1751
40	101	0	446	0	0	386	2734	2036	349	942	0
41	102	273	0	0	0	416	677	1872	328	500	480
42	103	0	0	0	0	0	0	0	0	659	0
43	104	0	0	0	0	17	30	0	0	7	0
44	105	0	0	0	0	0	27	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	41	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	1145	488	97	0	2284	11426	10276	1511	3859	4259

Area 2E Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	31	0
27	071	0	0	0	0	13	0	0	0
28	072	0	0	42	0	0	67	0	0
29	073	0	0	0	0	0	40	0	0
30	074	0	11	0	0	0	12	0	0
31	075	0	0	0	0	3	30	0	0
32	081	0	3	99	30	1	0	0	37
33	082	0	92	56	8	13	1	0	0
34	083	0	289	201	68	127	175	0	0
35	084	20	704	827	182	271	331	17	33
36	091	0	75	660	148	341	718	124	378
37	092	0	2029	3243	2331	89	174	87	1329
38	093	0	696	2803	2491	807	0	50	1211
39	094	10053	2541	1380	1173	897	823	187	1142
40	101	0	207	188	325	989	561	166	1212
41	102	0	7	0	0	287	0	138	771
42	103	0	0	0	0	0	0	0	132
43	104	0	0	0	0	0	0	3	7
44	105	4507	0	0	0	0	0	0	5
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	8
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	14580	6656	9500	6755	3838	2933	803	6266

Appendix Table 17. Area 2E weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 2W Weekly Seine Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	295	0	0	0	0	0	0	0	0
26	064	2199	0	0	0	0	0	0	0	0	0
27	071	3438	3000	0	0	0	0	0	0	0	0
28	072	2849	2021	1180	0	0	0	0	0	0	0
29	073	637	791	725	0	832	0	0	0	0	3354
30	074	1184	152	251	0	440	1253	536	38	0	1726
31	075	1973	43	749	1852	3319	286	141	123	548	0
32	081	1683	794	0	1464	1524	95	1306	309	0	174
33	082	0	272	0	1261	0	0	158	0	0	0
34	083	0	62	0	0	0	0	0	0	0	0
35	084	295	0	0	0	0	0	0	0	24	0
36	091	0	0	0	0	0	0	0	0	175	0
37	092	1432	0	346	0	0	1529	169	0	0	0
38	093	0	0	599	0	416	378	27	0	0	0
39	094	0	0	0	0	919	64	26	0	0	0
40	101	360	0	0	0	5	66	39	0	0	0
41	102	0	0	0	0	14	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	16050	7430	3850	4577	7469	3671	2402	470	747	5254

Area 2W Weekly Seine Coho Catch, 5-Year Averages

U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0
25	063	0	0	0	1	0	117	59	0
26	064	0	0	0	0	0	805	440	0
27	071	0	0	0	0	0	920	1288	0
28	072	0	0	0	0	0	2311	1210	0
29	073	0	0	0	0	0	1507	597	671
30	074	0	0	0	0	0	880	405	711
31	075	0	0	0	0	0	443	1587	220
32	081	0	0	0	7	62	651	1093	377
33	082	0	46	0	31	75	663	307	32
34	083	0	307	82	27	3143	52	12	0
35	084	1220	38	0	42	68	96	59	5
36	091	0	0	25	3	11	0	0	35
37	092	0	742	207	1158	594	99	356	340
38	093	0	741	350	1066	757	0	203	81
39	094	10220	878	65	31	696	20	184	18
40	101	0	0	11	0	10	0	73	21
41	102	0	0	14	0	0	0	3	0
42	103	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0
44	105	3020	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	14460	2752	753	2366	5415	8563	7875	2509

Appendix Table 18. Area 2W weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 3 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	51	12	0	0	0	0	0	0	0
26	064	0	12	26	0	0	0	0	0	0	0
27	071	0	0	56	0	0	0	0	0	0	0
28	072	3281	1201	10550	184	0	1	0	0	0	0
29	073	4101	2139	11176	3905	9058	9564	7568	1418	4458	41746
30	074	3378	1461	9392	50878	8755	5614	13244	11102	2519	1765
31	075	3452	2978	9393	27021	5715	9510	15821	17792	2562	3452
32	081	2489	1648	4147	20062	8721	8172	12812	9199	1691	21212
33	082	1263	798	14196	14393	6007	6690	10729	3705	2626	8529
34	083	842	0	2788	13660	3248	725	7905	3872	1179	1627
35	084	799	0	4378	238	5028	0	2521	6	0	0
36	091	1184	0	2646	0	2784	0	2031	0	0	0
37	092	0	0	2794	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	20789	10288	71554	130341	49316	40276	72631	47094	15035	78331

Area 3 Weekly Seine Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	24	0	0
0	0	13	0	8	68	13	0
4	5	56	132	12	99	8	0
0	18	46	207	178	1014	11	0
1	30	235	753	361	1691	3043	0
34	194	215	1495	375	2666	6076	12951
251	463	394	1485	868	3261	14773	6849
503	1987	930	2668	714	5869	9712	9827
1691	3704	1212	2619	511	3906	7413	10617
1079	3343	197	2875	2816	1562	7331	6456
1494	1168	702	2086	975	784	4108	3062
607	100	339	1360	1018	44	2089	505
9	586	295	1722	832	428	1323	406
0	172	100	277	475	329	559	0
113	122	22	98	123	123	0	0
38	0	0	0	2	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
5822	11892	4758	17778	9266	21868	56458	50673

Appendix Table 19. Area 3 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 4 Weekly Seine Coho Catch, 1980 to 1989

Stat Week											
U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	459	5	17	0	0	0	0	0	0	0
29	073	235	2098	511	0	111	0	0	0	0	0
30	074	230	1717	15795	0	9407	6955	0	2719	1484	0
31	075	67	106	5390	0	120	6454	5580	0	26	0
32	081	0	0	0	0	0	0	102	65	544	1695
33	082	0	0	0	0	0	1429	20	461	0	818
34	083	0	0	0	0	1960	0	835	1480	1	44
35	084	0	0	0	0	0	0	274	0	0	88
36	091	114	0	0	0	0	0	0	0	0	0
37	092	0	0	0	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	1105	3926	21713	0	11598	14838	6811	4725	2055	2645

Area 4 Weekly Seine Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	2	0	0
0	2	0	0	0	0	0	0
0	0	0	2	7	0	0	0
0	0	0	6	8	95	0	0
0	0	0	0	26	461	96	0
2	0	0	41	175	140	591	0
0	0	63	1	402	662	5430	2232
11	35	21	0	610	1357	1137	2412
63	39	39	36	745	392	0	481
246	35	48	14	44	478	0	546
181	8	13	27	29	4	392	472
98	19	40	80	4	4	0	72
5	7	8	2	1	0	23	0
0	1	6	0	1	0	0	0
0	0	0	0	3	24	0	0
12	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
615	146	239	210	2053	3619	7668	6215

Appendix Table 20. Area 4 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 5 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	322	0	0	0	0	0	0	0	0
27	071	0	0	121	0	0	0	0	0	0	0
28	072	759	109	990	0	0	0	0	0	0	0
29	073	201	7	1464	547	337	68	456	231	732	758
30	074	193	63	1107	604	0	867	1152	105	336	153
31	075	99	0	399	701	1244	489	251	632	64	77
32	081	111	0	0	459	4829	608	2499	2229	267	1113
33	082	80	0	0	157	3293	1122	3132	1550	563	730
34	083	717	0	55	916	2807	0	3692	781	704	0
35	084	1078	19	1247	365	0	0	2650	0	661	266
36	091	1059	16	0	0	162	0	2398	0	0	0
37	092	0	0	0	0	0	0	568	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	4297	536	5383	3749	12672	3154	16798	5528	3327	3097

Area 5 Weekly Seine Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0
0	0	0	149	23	0	0	0
0	0	23	268	119	31	64	0
0	16	241	813	99	40	24	0
0	113	709	777	249	126	372	0
0	349	493	1090	190	52	511	449
0	978	741	2170	226	217	393	523
827	1415	1546	1891	694	160	489	303
0	1562	4379	3258	1078	651	1080	1343
0	1727	4199	4019	1524	531	706	1419
0	1903	4464	3046	985	562	899	1035
9073	3222	2642	2870	1238	584	542	715
0	277	2200	1892	579	682	247	480
0	181	507	923	54	298	0	114
0	0	67	144	0	5	0	0
5553	611	0	0	4	0	0	0
0	0	0	0	15	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0
15453	12352	22210	23310	7075	3938	5327	6381

Appendix Table 21. Area 5 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 6 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	21	0	0	0	0	0	0	0	0
29	073	4497	1301	2449	4975	0	0	0	0	0	460
30	074	7261	1005	3368	7550	16	3264	10926	3789	5752	0
31	075	6412	6613	2494	17219	0	3471	10958	11618	4843	0
32	081	4619	12818	2537	13703	0	7865	27047	12295	7213	837
33	082	10147	8530	9928	15340	7330	8818	8454	5944	6983	0
34	083	11902	0	7580	21838	8744	6134	11763	0	4444	0
35	084	15375	963	8311	6864	8170	0	7860	0	4438	0
36	091	7028	2525	0	0	0	0	13778	0	2998	0
37	092	1346	0	0	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	68587	33776	36667	87489	24260	29552	90786	33646	36671	1297

Area 6 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0
25	063	0	0	0	0	8	0	0	0
26	064	0	39	219	952	1005	4	0	0
27	071	9	221	844	2246	2414	1191	0	0
28	072	179	752	2501	2647	3527	2312	4	0
29	073	863	1623	2509	3520	4163	1984	2644	92
30	074	1403	3786	3291	5392	4148	1799	3840	4746
31	075	2069	4314	4775	6618	4713	2895	6548	6178
32	081	3204	6101	11756	6631	4647	3516	6735	11051
33	082	2035	6003	10282	7364	4254	5234	10255	6040
34	083	8918	6020	7250	6921	6890	2717	10013	4468
35	084	4951	3111	3949	4492	5319	2085	7937	2460
36	091	3961	1070	1969	2644	3801	863	1911	3355
37	092	2545	1419	839	1222	256	748	269	0
38	093	0	33	107	107	3	0	0	0
39	094	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	30135	34492	50291	50756	45149	25349	50156	38390

Appendix Table 22. Area 6 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 7 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	0	0	0	0	0	0	0	0	0
29	073	2057	4820	5796	4661	0	0	2771	0	0	38
30	074	2023	1426	3834	821	474	703	2918	278	0	0
31	075	388	2394	1786	857	0	474	3873	1898	0	25
32	081	962	6995	2352	1090	0	330	1665	7606	376	127
33	082	3590	3983	4520	0	3572	703	3879	2561	462	0
34	083	1922	0	2940	0	2693	2671	2083	0	946	1119
35	084	1471	5830	2751	357	2697	4872	2553	3657	1989	1848
36	091	2272	2550	2432	0	0	2274	3644	2138	1031	778
37	092	2076	0	0	0	0	1552	1643	0	0	0
38	093	685	0	1154	0	32	0	0	0	918	0
39	094	0	0	0	69	113	0	0	28	0	1092
40	101	0	0	0	0	100	0	197	41	69	0
41	102	0	0	0	0	0	0	29	0	0	0
42	103	0	0	0	0	0	0	1	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	17446	27998	27565	7855	9681	13579	25256	18207	5791	5027

Area 7 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	1	0	0	0	0	0
24	062	0	0	0	0	0	69	0	0
25	063	0	0	0	0	0	0	0	0
26	064	0	0	9	134	0	4	0	0
27	071	1	1	42	359	857	1683	0	0
28	072	4	33	205	489	547	4004	0	0
29	073	38	189	170	1223	1272	2362	3467	562
30	074	142	571	383	1628	1258	2654	1716	780
31	075	584	617	1231	2980	2106	1227	1085	1254
32	081	1183	1148	2779	2513	1906	2492	2280	2021
33	082	1601	1430	3111	1919	1985	2299	3133	1521
34	083	2321	1615	2771	2160	2457	1790	1511	1364
35	084	1280	1293	1572	2337	3808	1450	2621	2984
36	091	919	496	536	1922	2100	812	1451	1973
37	092	387	1080	498	834	659	114	415	639
38	093	558	323	288	142	192	227	374	184
39	094	204	0	0	20	50	0	36	224
40	101	0	0	0	8	33	0	20	61
41	102	0	0	0	0	0	0	0	6
42	103	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	9219	8798	13594	18668	19229	21188	18109	13572

Appendix Table 23. Area 7 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 8 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	87	4	100	0	0	0	0	0	0
29	073	2572	2313	1502	2169	0	936	20577	1626	3445	2360
30	074	4079	951	3	7976	2886	1750	11712	2922	5493	1610
31	075	2754	1894	1049	1885	0	996	11751	7911	14797	1245
32	081	1770	3076	0	784	0	4194	23395	4931	8493	0
33	082	1162	7293	0	1155	1043	3557	7698	725	1423	633
34	083	970	722	0	10064	2054	1008	4776	0	1088	132
35	084	1108	426	0	3137	0	208	2432	0	23	0
36	091	979	0	1250	0	0	1173	1867	0	0	0
37	092	944	2	0	0	0	0	2933	0	0	0
38	093	0	0	0	0	0	1579	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	16338	16764	3808	27270	5983	15401	87141	18115	34762	5980

Area 8 Weekly Seine Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	1	0	0	10	0	0
0	0	0	0	0	0	0	0
0	9	32	306	150	0	0	0
46	42	594	728	433	3	0	0
553	473	2131	1164	1178	1475	38	0
1561	1434	3234	2384	3036	4121	1711	5789
3847	2822	4360	4336	4073	3476	3179	4697
4747	1808	4137	3217	2158	3488	1516	7340
3111	2689	8687	3006	2275	1921	1126	8203
2580	2421	9193	3421	1595	865	2131	2807
3598	2206	7009	3406	904	2492	2762	1401
1519	1940	4919	3272	3868	1825	934	533
607	558	2973	4190	1986	1579	446	608
437	287	2657	2239	766	1484	189	587
397	26	1483	1985	378	0	0	316
3	0	0	530	125	0	0	0
0	0	0	0	57	0	0	0
0	0	0	0	0	38	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
23003	16715	51408	34186	22981	22777	14033	32280

Appendix Table 24. Area 8 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 9 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	0	0	0	0	0	0	0	0	0
29	073	0	0	0	0	0	0	0	0	0	0
30	074	0	0	0	0	0	0	0	0	0	0
31	075	0	0	0	0	0	0	0	0	0	0
32	081	0	0	0	0	0	0	0	0	0	0
33	082	0	0	0	0	0	0	0	0	0	0
34	083	0	0	0	0	0	0	0	0	0	0
35	084	0	0	0	0	0	0	0	0	0	0
36	091	0	0	0	0	0	0	0	0	0	0
37	092	0	0	0	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0

Area 9 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
10	031	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	7	0	0
26	064	0	0	0	0	13	0	0	0
27	071	0	0	0	4	255	1	0	0
28	072	0	0	0	112	70	421	0	0
29	073	0	1	7	925	631	1104	0	0
30	074	0	0	0	123	947	914	0	0
31	075	0	0	0	45	115	133	0	0
32	081	0	0	0	102	540	251	0	0
33	082	211	126	96	607	690	391	0	0
34	083	532	251	378	309	715	98	0	0
35	084	1	9	97	129	455	46	0	0
36	091	0	0	35	47	411	34	0	0
37	092	0	72	74	2	208	14	0	0
38	093	0	100	240	13	93	0	0	0
39	094	134	162	0	12	149	0	0	0
40	101	96	21	0	21	8	0	0	0
41	102	39	82	8	0	7	0	0	0
42	103	0	1	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0
	Total	1011	826	935	2451	5307	3413	0	0

Appendix Table 25. Area 9 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Area 10 Weekly Seine Coho Catch, 1980 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
10	031	0	0	0	0	0	0	0	0	0	0
11	032	0	0	0	0	0	0	0	0	0	0
12	033	0	0	0	0	0	0	0	0	0	0
13	034	0	0	0	0	0	0	0	0	0	0
14	041	0	0	0	0	0	0	0	0	0	0
15	042	0	0	0	0	0	0	0	0	0	0
16	043	0	0	0	0	0	0	0	0	0	0
17	044	0	0	0	0	0	0	0	0	0	0
18	045	0	0	0	0	0	0	0	0	0	0
19	051	0	0	0	0	0	0	0	0	0	0
20	052	0	0	0	0	0	0	0	0	0	0
21	053	0	0	0	0	0	0	0	0	0	0
22	054	0	0	0	0	0	0	0	0	0	0
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	0
28	072	0	0	0	0	0	0	0	0	0	0
29	073	0	0	0	0	0	0	0	0	0	0
30	074	0	0	0	0	0	0	0	0	0	0
31	075	0	1	0	0	0	0	0	0	0	0
32	081	0	0	0	0	0	0	0	0	0	0
33	082	0	0	0	0	0	0	0	0	0	0
34	083	0	0	0	0	0	0	0	0	0	0
35	084	0	0	0	0	0	0	0	0	0	0
36	091	0	0	0	0	0	0	0	0	0	0
37	092	0	0	0	0	0	0	0	0	0	0
38	093	0	0	0	0	0	0	0	0	0	0
39	094	0	0	0	0	0	0	0	0	0	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
46	112	0	0	0	0	0	0	0	0	0	0
47	113	0	0	0	0	0	0	0	0	0	0
48	114	0	0	0	0	0	0	0	0	0	0
49	120	0	0	0	0	0	0	0	0	0	0
	Total	0	1	0	0	0	0	0	0	0	0

Area 10 Weekly Seine Coho Catch, 5-Year Averages

53-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	3	0	0
0	0	0	0	0	0	0	0
0	0	0	0	3	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	26	3	0	0
0	0	0	6	2	0	0	0
16	0	8	34	0	0	0	0
78	0	32	2	10	0	0	0
20	0	135	5	21	0	0	0
0	0	72	27	105	0	0	0
11	1	117	0	27	0	0	0
0	0	66	6	17	0	0	0
0	0	0	3	0	67	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
124	1	431	83	210	73	0	0

Appendix Table 26. Area 10 weekly seine coho catch, 1980 to 1989, and 5 year averages, 1953 to 1989.

Appendix Table 27. Southeast Alaska Area 1 troll coho catch by week, 1980–1989, with 5-year averages for 1960–89.

Alaska Area 1 Weekly Troll Coho Catch, 1981 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	061	0	0	0	0	2	0	0	0	0	0
24	062	0	0	0	0	17	0	0	0	0	0
25	063	32	38	33	0	188	0	97	344	0	0
26	064	129	126	414	0	970	0	1,214	1,074	0	219
27	071	1,136	0	173	85	553	11,681	3,404	2,652	163	1,911
28	072	1,743	1,403	468	4,150	5,753	12,612	10,514	1,079	1,161	5,688
29	073	2,442	3,170	7,803	10,114	12,432	24,071	19,609	4,668	3,661	6,801
30	074	166	4,338	7,949	15,394	12,511	43,872	19,877	12,741	8,500	13,772
31	075	2,013	17,498	14,105	19,588	26,459	59,938	36,894	14,433	6,678	16,676
32	081	7,060	14,096	0	19,932	24,650	35,361	35,165	11,878	5,531	50,714
33	082	14,550	8,460	25,137	2,963	34,401	22,396	10,568	2,377	11,830	33,411
34	083	8,719	415	44,384	22,461	101	0	15,865	23,060	14,539	7,076
35	084	13,168	14,943	37,523	45,335	9,230	26,477	43,454	44,362	4,862	47,537
36	091	5,349	19,141	36,355	20,040	22,130	52,331	37,122	27,128	28,876	25,603
37	092	2,597	6,660	18,205	9,498	16,057	27,176	9,416	16,804	23,065	27,151
38	093	1,471	5,617	3,252	14,530	9,652	16,238	1,598	503	7,251	7,265
39	094	429	907	2,273	5,121	5,789	0	0	0	411	0
40	101	0	0	0	575	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	6	0	0
	Total	61,004	96,812	198,074	189,786	180,895	332,153	244,797	163,109	116,528	243,824

Alaska Area 1 Weekly Troll Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	60–64	65–69	70–74	75–79	80–84	85–89
23	061	6	0	21	2	0	0
24	062	18	25	24	58	3	0
25	063	153	149	118	247	58	88
26	064	412	392	461	540	328	501
27	071	837	2,034	1,834	1,111	389	3,962
28	072	1,559	4,234	6,570	2,022	2,703	6,211
29	073	3,015	8,267	5,976	3,643	7,192	11,762
30	074	3,557	13,709	5,495	4,061	8,072	19,752
31	075	3,571	16,462	7,839	11,668	15,933	26,924
32	081	4,342	12,292	12,510	12,329	13,148	27,730
33	082	4,009	11,710	8,755	14,289	17,102	16,116
34	083	3,989	8,813	13,535	16,011	15,216	12,108
35	084	4,109	6,576	6,764	12,692	24,040	33,338
36	091	3,538	6,045	4,301	9,874	20,603	34,212
37	092	1,014	1,476	1,629	2,123	10,603	20,722
38	093	342	306	195	490	6,904	6,571
39	094	26	84	31	8	2,904	82
40	101	0	3	0	0	115	0
41	102	0	3	0	0	0	0
42	103	0	0	0	14	0	0
43	104	0	0	0	0	0	0
44	105	0	0	0	0	0	0
45	111	0	0	0	0	0	1
	Total	34,499	92,580	76,058	91,181	145,314	220,082

Appendix Table 28. Southeast Alaska Area 2 troll coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Alaska Area 2 Weekly Troll Coho Catch, 1981 to 1989

Alaska Area 2 Weekly Troll Coho Catch, 5-Year Averages

Stat U.S.	Week Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
23	061	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
24	062	0	0	0	0	478	11	0	63	0	0	197	56	31	198	96	15
25	063	930	403	276	0	2,017	0	12,526	688	0	257	1,492	521	491	1,580	725	2,694
26	064	6,256	1,053	3,365	0	12,733	0	29,669	9,585	0	814	3,478	1,463	1,132	4,281	4,681	8,014
27	071	17,095	0	4,000	2,551	6,168	153,595	122,001	17,310	594	11,404	10,738	4,166	2,335	8,989	5,963	60,981
28	072	33,094	6,945	20,636	51,198	23,797	59,031	202,391	24,732	4,855	23,629	16,106	5,027	4,861	13,086	27,134	62,928
29	073	11,322	20,308	82,413	75,818	80,981	99,964	210,112	37,606	6,206	54,204	18,933	12,947	8,797	11,956	54,168	81,618
30	074	4,709	26,706	87,918	105,830	96,244	90,667	126,685	27,668	7,921	105,709	24,809	13,707	9,009	16,071	64,281	71,730
31	075	31,180	48,375	52,682	83,599	111,180	61,460	128,710	38,254	5,044	73,420	13,035	10,960	8,423	24,328	65,403	61,378
32	081	23,901	35,672	0	59,410	79,022	33,010	75,652	30,267	7,275	55,814	12,040	10,969	6,266	25,661	39,601	40,404
33	082	41,637	24,885	70,299	4,198	67,600	45,968	42,579	8,086	29,897	32,256	14,254	7,027	3,959	26,954	41,724	31,757
34	083	19,522	5,076	79,549	21,559	2,107	0	62,900	48,641	18,453	12,508	9,610	6,119	4,965	18,856	25,563	28,500
35	084	18,660	22,940	44,241	35,499	10,148	46,112	64,699	24,189	4,206	75,842	6,113	3,889	4,635	12,709	26,298	43,010
36	091	8,147	15,392	18,580	20,779	14,665	30,507	32,951	10,480	11,667	6,823	2,699	2,084	4,278	8,890	15,513	18,486
37	092	4,941	4,705	6,034	6,930	8,881	7,206	12,528	1,598	1	10,332	1,756	1,604	3,371	2,928	6,298	6,333
38	093	1,667	2,241	3,321	4,558	4,212	4,129	707	378	0	1,410	1,050	1,624	2,687	1,126	3,200	1,325
39	094	23	449	2,268	1,479	0	0	0	43	0	0	315	482	1,619	356	844	9
40	101	0	0	0	0	0	413	0	0	0	0	1	2	0	0	0	83
41	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	223,084	215,150	475,582	473,408	520,233	632,073	1,124,110	279,588	96,119	464,422	136,626	82,649	66,861	177,970	381,491	519,262

Appendix Table 29. Southeast Alaska Area 3 troll coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Alaska Area 3 Weekly Troll Coho Catch, 1981 to 1989

Stat U.S.	Week Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	061	0	0	0	0	2	0	0	0	0	0
24	062	9	0	0	0	52	0	0	282	0	0
25	063	2,607	3,535	654	0	1,118	0	954	2,165	0	2,274
26	064	8,748	9,371	4,759	0	2,686	0	5,359	13,384	0	1,977
27	071	18,678	448	8,768	3,764	7	36,255	6,984	15,253	1,931	21,218
28	072	29,879	33,438	9,730	24,084	6,278	43,954	17,496	27,691	9,924	23,948
29	073	18,670	37,589	27,763	37,607	11,192	46,757	49,292	47,684	22,810	30,902
30	074	8,539	36,468	29,347	40,596	19,662	27,649	73,562	51,489	22,768	55,810
31	075	37,952	49,613	21,000	35,126	38,131	22,368	45,452	59,732	4,887	52,519
32	081	35,630	33,376	0	23,679	25,779	25,717	39,320	33,188	9,287	29,259
33	082	22,404	15,186	44,339	0	24,779	25,421	15,758	9,768	23,314	10,306
34	083	10,529	994	18,758	12,472	161	11	17,965	34,403	8,374	4,962
35	084	6,739	13,453	7,661	7,234	10,912	26,159	40,294	18,040	5,856	16,993
36	091	1,343	14,742	2,228	4,264	11,170	10,933	14,910	6,381	6,147	2,785
37	092	438	2,713	417	0	3,787	4,093	3,503	1,572	440	970
38	093	133	20	0	253	429	631	968	277	0	320
39	094	0	69	566	0	0	0	0	0	13	0
40	101	0	0	0	0	0	108	0	11	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
	Total	202,298	251,015	175,990	189,079	156,145	270,056	331,817	321,320	115,751	254,243

Alaska Area 3 Weekly Troll Coho Catch, 5-Year Averages

60-64	65-69	70-74	75-79	80-84	85-89
0	8	0	0	0	0
22	120	81	243	12	56
592	895	2,212	1,217	1,583	1,079
2,083	1,152	2,937	2,837	5,113	4,144
3,299	2,632	4,033	3,468	6,333	16,328
4,930	2,586	6,695	5,385	20,682	24,603
9,054	6,591	16,329	11,656	26,564	39,489
11,777	9,783	18,094	12,250	26,922	46,256
12,145	14,465	17,571	15,723	36,364	36,992
14,550	12,790	19,075	17,628	23,693	27,354
15,251	10,473	19,389	15,968	21,342	16,913
10,343	6,079	19,234	9,515	8,583	13,143
5,955	4,764	8,913	4,850	9,200	21,468
2,535	1,196	4,771	3,274	6,749	8,231
977	32	1,726	1,641	1,471	2,116
563	45	314	229	167	439
70	19	121	112	127	3
2	0	0	0	0	24
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
94,148	73,630	141,494	105,996	194,905	258,637

Appendix Table 30. Southeast Alaska Area 4 troll coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Stat Week U.S.	Cdn.	Alaska Area 4 Weekly Troll Coho Catch, 1981 to 1989										Alaska Area 4 Weekly Troll Coho Catch, 5-Year Averages					
		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
23	061	0	0	0	0	0	0	0	0	0	0	6	3	2	2	0	0
24	062	0	0	0	0	93	71	0	0	0	0	36	73	5	79	19	14
25	063	45	32	95	0	553	0	48	44	13	1,116	314	504	341	481	145	244
26	064	533	162	564	0	2,911	0	579	1,668	78	91	814	1,190	859	1,121	834	483
27	071	519	1	582	728	146	4,812	896	1,849	387	1,527	2,132	3,762	3,173	3,072	395	1,894
28	072	1,924	1,362	1,737	7,008	6,614	5,379	6,632	2,921	1,288	2,350	3,889	5,949	4,992	5,425	3,729	3,714
29	073	986	1,589	4,750	13,302	8,394	11,369	8,158	5,409	1,708	8,047	7,472	11,413	5,685	6,091	5,804	6,938
30	074	995	2,058	8,641	11,756	10,034	10,210	8,647	7,449	3,982	11,036	8,617	11,810	7,396	9,723	6,697	8,265
31	075	1,772	7,643	4,653	11,172	10,492	10,413	9,429	8,597	2,327	10,607	9,475	17,413	11,113	9,256	7,146	8,275
32	081	4,089	12,245	8	9,972	10,494	6,753	7,379	6,544	2,253	23,739	14,117	19,078	12,758	10,312	7,362	9,334
33	082	2,485	4,439	42,171	0	7,821	5,854	3,183	4,592	14,950	10,389	18,781	21,354	13,105	11,680	11,383	7,794
34	083	6,514	17,950	35,897	21,566	844	0	5,563	15,932	6,694	21,482	18,304	23,088	15,279	12,492	16,554	9,934
35	084	2,776	26,322	19,621	21,660	23,287	26,269	13,118	13,499	7,492	45,738	18,058	21,598	18,707	11,939	18,733	21,223
36	091	7,935	20,468	14,474	14,026	24,032	23,529	6,935	9,915	18,664	37,936	17,420	18,351	15,687	11,638	16,187	19,396
37	092	3,359	9,748	11,090	12,061	17,483	19,681	4,994	7,635	17,959	32,005	10,442	9,011	11,093	8,275	10,748	16,455
38	093	1,765	4,397	9,819	7,021	5,365	10,623	2,530	5,355	9,617	11,168	6,230	5,213	7,128	4,588	5,673	7,859
39	094	0	1,433	4,100	1,947	0	212	20	1,927	1,980	0	1,909	1,853	2,761	1,107	1,496	828
40	101	0	0	0	0	0	0	0	0	0	0	8	14	0	0	0	0
41	102	0	62	0	0	0	0	0	0	0	0	1	20	0	0	12	0
42	103	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	35,697	109,911	158,202	132,219	128,563	135,175	78,111	93,336	89,392	217,231	138,022	171,705	130,083	107,282	112,918	122,649

Appendix Table 31. Southeast Alaska Area 5 troll coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
		Alaska Area 5 Weekly Troll Coho Catch, 1981 to 1989										Alaska Area 5 Weekly Troll Coho Catch, 5-Year Averages					
23	061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	19	0	0	0	0	0	2	12	6	28	4	0
25	063	131	82	435	0	261	0	426	65	0	2,272	85	97	101	164	182	553
26	064	984	259	1,417	0	528	0	3,744	1,610	7	692	269	501	365	517	638	1,211
27	071	7,145	0	2,126	819	0	9,125	5,997	3,631	244	11,262	792	1,348	722	1,106	2,018	6,052
28	072	11,223	11,244	5,577	7,197	2,297	12,764	33,558	10,476	2,449	17,107	2,599	2,632	1,334	3,152	7,508	15,271
29	073	5,215	17,228	9,133	16,403	11,412	11,776	40,587	19,943	4,790	31,751	5,692	4,787	2,954	3,629	11,878	21,769
30	074	2,409	17,966	14,071	24,211	11,110	11,246	35,990	15,141	8,379	33,847	6,262	10,442	5,867	6,034	13,953	20,921
31	075	8,809	19,847	13,172	24,051	13,586	12,152	35,103	17,193	2,786	21,261	7,750	12,261	5,234	8,013	15,893	17,699
32	081	18,749	15,337	0	26,877	8,747	15,956	21,612	10,878	6,152	17,347	5,663	14,120	6,391	10,574	13,942	14,389
33	082	10,127	9,853	47,605	0	7,001	19,352	8,247	4,569	17,085	6,695	7,633	11,375	6,295	10,831	14,917	11,190
34	083	8,483	1,735	30,777	20,269	31	3	5,884	21,326	8,739	4,658	9,527	11,690	9,167	8,614	12,259	8,122
35	084	6,610	12,442	16,962	16,346	11,109	7,711	19,666	5,720	3,436	12,965	7,890	9,783	9,671	8,240	12,694	9,900
36	091	4,798	16,261	7,232	8,316	11,091	7,523	14,580	2,797	5,361	1,900	6,067	5,768	7,835	6,885	9,540	6,432
37	092	2,847	265	3,608	5,973	8,591	2,898	6,584	1,595	0	1,981	3,636	2,117	5,391	4,335	4,257	2,612
38	093	1,062	11	2,076	3,930	2,161	2,040	4,298	394	7	254	1,566	875	3,486	2,097	1,848	1,399
39	094	41	0	647	647	32	0	0	15	0	0	658	375	1,178	576	273	3
40	101	0	0	0	0	0	900	0	0	0	0	8	51	0	0	0	180
41	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	88,633	122,530	154,838	155,039	87,976	113,446	236,277	115,353	59,435	163,992	66,100	88,235	65,998	74,795	121,803	137,701

Appendix Table 32. Southeast Alaska Area 6 troll coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Alaska Area 6 Weekly Troll Coho Catch, 1981 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	4	0	0	0	0	0
25	063	2,101	106	61	0	176	0	5	0	0	530
26	064	3,017	1,215	5,531	0	2,111	0	714	497	16	511
27	071	8,862	0	7,822	511	2	2,314	2,876	977	38	7,250
28	072	6,260	1,165	4,105	14,731	210	14,400	11,983	6,000	1,720	5,884
29	073	11,278	6,047	14,527	16,368	5,858	27,105	12,191	10,617	1,752	4,567
30	074	126	13,106	18,537	33,100	3,003	19,002	6,434	13,571	8,346	11,254
31	075	8,844	10,898	25,254	19,611	2,168	15,707	9,292	12,540	676	9,442
32	081	11,630	6,533	54	16,955	2,858	9,140	16,487	8,782	59	10,236
33	082	10,981	7,152	16,299	427	4,546	13,078	10,907	284	1,879	10,439
34	083	5,115	381	29,656	5,235	48	269	2,399	5,421	3,539	222
35	084	5,873	4,969	16,021	8,505	5,986	5,782	9,804	1,107	343	5,660
36	091	5,624	5,507	8,016	4,609	12,596	4,315	10,512	1,233	4,839	1,485
37	092	3,623	4,339	3,494	7,899	12,626	2,948	11,219	4,590	0	2,044
38	093	2,233	2,853	2,656	6,004	6,623	3,234	7,987	1,670	0	1,257
39	094	0	1,117	1,284	2,877	0	25	0	1,167	0	0
40	101	0	66	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
	Total	85,567	65,454	153,317	136,832	58,815	117,319	112,810	68,456	23,207	70,781

Alaska Area 6 Weekly Troll Coho Catch, 5-Year Averages

60-64	65-69	70-74	75-79	80-84	85-89
0	0	0	0	0	0
2	7	15	94	1	0
85	109	401	1,121	489	107
269	523	1,812	2,500	2,375	348
792	1,456	3,832	5,046	3,439	2,691
2,599	2,882	5,436	5,115	5,294	7,997
5,692	4,834	7,843	10,274	10,816	11,246
6,262	10,868	10,062	9,164	13,574	11,721
7,750	12,449	8,794	8,855	13,355	9,531
5,663	14,992	9,144	9,348	7,606	8,941
7,633	11,646	8,975	11,344	7,881	7,317
9,527	11,676	7,981	6,194	8,087	2,370
7,890	9,418	5,632	8,162	8,271	4,539
6,067	5,403	5,937	9,522	7,270	4,477
3,636	2,117	4,990	5,092	6,396	4,160
1,566	875	4,168	3,367	4,074	2,830
658	375	1,546	446	1,056	238
8	51	0	0	13	0
0	0	0	0	0	0
0	0	1	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
66,100	89,680	86,571	95,644	99,997	78,515

Appendix Table 33. Southeast Alaska Area 2 purse seine coho catch by week, 1980–1989, with 5-year averages for 1960–89.

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60–64	65–69	70–74	75–79	80–84	85–89
		Alaska Area 2 Weekly Seine Coho Catch, 1981 to 1989										Alaska Area 2 Weekly Seine Coho Catch, 5-Year Averages					
23	061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	23	183	17	0	0	0	5
28	072	0	0	0	0	0	0	0	39	0	56	170	53	33	0	0	19
29	073	0	121	0	0	2	2	0	396	174	500	447	638	66	62	25	214
30	074	2,270	1,625	8	1,274	2	2	162	578	0	1,865	709	1,177	89	1,078	1,036	521
31	075	0	6,947	0	6,323	305	305	38	4,399	5	116	1,111	790	101	450	2,715	973
32	081	0	5,858	21	6,725	479	479	232	0	0	316	655	1,176	127	336	2,617	205
33	082	0	2,691	656	6,872	1,419	1,419	102	435	129	834	1,899	863	291	698	2,328	584
34	083	7	1,853	410	1,436	702	702	136	131	16	0	671	1,536	424	881	882	197
35	084	30	828	2,177	580	202	202	91	0	13	0	910	1,023	360	107	763	61
36	091	0	174	1,162	126	197	197	0	1,596	91	0	0	150	559	37	332	377
37	092	80	0	0	0	37	37	0	180	60	0	0	12	0	59	23	55
38	093	0	0	0	0	0	0	0	0	0	0	14	37	0	0	0	0
39	094	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	6
40	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2,387	20,097	4,434	23,336	3,345	3,345	761	7,784	488	3,710	6,808	7,473	2,051	3,707	10,720	3,218

Appendix Table 34. Southeast Alaska Area 3 purse seine coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Alaska Area 3 Weekly Seine Coho Catch, 1981 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	167	18	223	0	922	922	0	0	0	4,025
28	072	44,063	19,988	16,927	50,052	1,498	1,498	7,441	3,171	2,581	14,154
29	073	17,338	9,181	25,549	30,504	1,259	1,259	11,265	10,878	8,810	11,061
30	074	13,551	17,761	9,919	20,516	7,618	7,618	30,882	6,975	8,835	19,530
31	075	8,967	32,022	2,419	24,841	23,850	23,850	43,637	4,524	1,298	32,185
32	081	15,262	34,429	10,664	30,756	31,052	31,052	57,877	15,938	16,843	37,078
33	082	9,157	22,261	32,144	19,781	49,643	49,643	43,957	3,833	21,957	29,841
34	083	14,296	21,615	19,935	17,072	42,284	42,284	49,297	9,790	11,399	20,340
35	084	5,482	5,620	18,206	15,267	22,295	22,295	70,197	0	23,758	14,417
36	091	487	3,042	17,760	2,867	0	0	20,251	6,459	9,866	0
37	092	0	0	3,756	0	0	0	5,585	5,826	720	0
38	093	0	0	0	0	0	0	4,329	1,359	553	0
39	094	0	0	0	0	0	0	3,556	488	100	0
40	101	0	0	20	0	0	0	539	0	5	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
Total		128,770	165,937	157,522	211,656	180,421	180,421	348,813	69,241	106,725	182,631

Alaska Area 3 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	60-64	65-69	70-74	75-79	80-84	85-89
23	061	0	0	0	0	0	0
24	062	0	0	0	0	0	0
25	063	0	0	0	0	0	0
26	064	0	0	1	0	0	0
27	071	3,234	1,856	0	6,090	266	989
28	072	3,009	7,998	1,666	10,515	26,506	5,769
29	073	6,931	9,950	5,054	10,257	16,766	8,655
30	074	9,781	12,350	2,563	4,308	13,873	14,768
31	075	9,357	11,407	2,674	5,475	18,420	21,099
32	081	13,667	9,324	5,376	1,774	24,433	31,758
33	082	12,225	14,903	9,022	5,439	26,597	29,846
34	083	11,690	13,101	16,475	4,371	23,040	26,622
35	084	11,562	11,366	12,710	5,128	13,374	26,133
36	091	6,144	4,440	3,994	1,679	4,831	7,315
37	092	1,236	66	919	952	751	2,426
38	093	260	0	0	79	0	1,248
39	094	0	0	99	4	0	829
40	101	0	0	0	0	4	109
41	102	0	0	0	0	0	0
42	103	0	0	0	0	0	0
43	104	0	0	0	0	0	0
44	105	0	0	0	0	0	0
45	111	0	0	0	0	0	0
Total		89,096	96,761	60,555	56,071	168,861	177,566

Appendix Table 35. Southeast Alaska Area 4 purse seine coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
		Alaska Area 4 Weekly Seine Coho Catch, 1981 to 1989										Alaska Area 4 Weekly Seine Coho Catch, 5-Year Averages					
23	061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0	1,435	218	0	0	0	0
27	071	0	0	0	0	32	32	33	177	0	184	3,873	2,121	0	0	6	85
28	072	0	0	0	0	482	482	512	1,366	236	405	10,336	8,570	4,766	0	96	600
29	073	0	1,124	201	132	523	523	1,010	1,188	1,433	2,027	8,530	14,059	6,903	37	396	1,236
30	074	0	1,435	1,015	1,629	913	913	1,145	3,432	274	5,340	13,958	22,208	10,297	173	998	2,221
31	075	205	1,025	3,017	8,273	2,545	2,545	1,468	1,535	333	3,514	12,514	20,072	10,311	170	3,013	1,879
32	081	130	2,765	12,878	3,770	5,492	5,492	1,421	2,632	0	3,889	12,769	26,905	12,696	102	5,007	2,687
33	082	587	3,447	11,887	4,789	3,110	3,110	3,032	1,109	1,346	2,635	10,653	22,046	14,279	69	4,764	2,246
34	083	1,220	3,776	16,185	4,090	3,844	3,844	0	1,189	4,421	4,315	6,857	13,671	14,511	144	5,823	2,754
35	084	501	3,220	13,879	2,738	1,297	1,297	596	0	2,143	3,429	2,956	3,935	9,398	221	4,327	1,493
36	091	1,020	2,981	9,460	135	2,851	2,851	0	0	3,094	0	547	2,574	1,639	0	3,289	1,189
37	092	0	0	339	0	469	469	0	300	0	0	110	254	1,663	0	162	154
38	093	1,234	357	0	914	0	0	0	330	442	0	0	597	1,318	265	501	154
39	094	67	0	0	0	255	255	0	174	0	0	16	84	666	73	64	86
40	101	0	0	0	0	31	31	3	0	0	0	0	33	9	60	6	7
41	102	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
42	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	4,964	20,130	68,861	26,470	21,844	21,844	9,220	13,432	13,722	25,738	84,555	137,346	88,454	1,316	28,454	16,791

Appendix Table 36. Southeast Alaska Area 5 purse seine coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Alaska Area 5 Weekly Seine Coho Catch, 1981 to 1989

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	061	0	0	0	0	0	0	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	0	0	0	249
28	072	0	0	0	0	0	0	0	0	0	558
29	073	0	1	0	0	151	151	0	905	28	2,668
30	074	0	409	0	0	167	167	0	0	89	11,903
31	075	0	919	0	1,265	1,464	1,464	0	2,521	236	3,595
32	081	38	3,728	14,317	733	3,177	3,177	1,972	2,597	74	8,512
33	082	1,108	4,229	30,434	7,944	11,777	11,777	5,420	498	1,584	2,549
34	083	1,615	440	13,710	7,211	11,821	11,821	0	313	231	3,013
35	084	2,325	121	2,635	4,749	4,662	4,662	7,869	0	2,845	1,203
36	091	128	0	2,800	852	473	473	0	645	3,337	0
37	092	14	0	341	0	233	233	0	0	562	0
38	093	0	0	0	0	61	61	0	0	0	0
39	094	0	0	0	0	1	1	0	0	663	0
40	101	0	0	0	0	0	0	0	0	0	0
41	102	0	0	0	0	0	0	0	0	0	0
42	103	0	0	0	0	0	0	0	0	0	0
43	104	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0
	Total	5,228	9,847	64,237	22,754	33,987	33,987	15,261	7,479	9,649	34,250

Alaska Area 5 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	60-64	65-69	70-74	75-79	80-84	85-89
23	061	0	0	0	0	0	0
24	062	0	0	0	0	0	0
25	063	1	0	0	0	0	0
26	064	28	1	0	0	0	0
27	071	97	53	0	0	0	50
28	072	384	103	214	123	0	112
29	073	764	902	500	177	30	750
30	074	1,312	2,607	1,164	196	115	2,432
31	075	1,870	3,105	1,902	674	730	1,563
32	081	3,320	5,283	3,521	3,751	4,399	3,266
33	082	4,684	7,679	3,516	3,806	11,098	4,366
34	083	8,012	7,196	4,934	3,006	6,959	3,076
35	084	6,080	7,320	6,947	3,234	2,898	3,316
36	091	4,476	5,232	7,241	3,561	851	891
37	092	1,309	1,924	4,938	2,202	118	159
38	093	139	643	1,029	448	12	12
39	094	0	399	375	0	0	133
40	101	0	73	0	0	0	0
41	102	0	0	0	0	0	0
42	103	0	0	0	0	0	0
43	104	0	0	0	0	0	0
44	105	0	0	0	0	0	0
45	111	0	0	0	0	0	0
	Total	32,474	42,520	36,281	21,178	27,211	20,125

Appendix Table 37. Southeast Alaska Area 6 purse seine coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Alaska Area 6 Weekly Seine Coho Catch, 1981 to 1989

Alaska Area 6 Weekly Seine Coho Catch, 5-Year Averages

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
23	061	0	0	0	0	21	21	0	0	0	0	0	0	0	0	4	4
24	062	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	064	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	071	0	0	0	0	0	0	1	0	0	198	0	732	0	38	0	40
28	072	0	0	1,330	0	567	567	1,405	69	132	2,248	206	662	746	1,329	379	884
29	073	0	0	9,267	1,699	2,648	2,648	2,929	496	983	10,051	1,106	2,549	1,946	2,860	2,723	3,421
30	074	1,381	0	8,300	4,273	1,757	1,757	6,361	1,658	302	11,708	1,842	2,700	3,842	2,911	3,142	4,357
31	075	1,133	4,301	4,012	4,701	3,498	3,498	12,588	2,963	252	10,504	4,398	8,025	4,491	7,240	3,529	5,961
32	081	3,614	8,121	9,434	4,792	15,995	15,995	16,661	6,943	4,784	13,216	9,959	10,044	7,982	7,097	8,391	11,520
33	082	7,186	5,919	20,792	4,252	23,426	23,426	23,304	2,995	4,574	10,548	14,025	10,008	9,097	8,578	12,315	12,969
34	083	10,795	2,564	23,595	13,223	28,826	28,826	21,925	0	1,396	9,608	22,489	11,459	13,745	7,884	15,801	12,351
35	084	8,183	28	23,719	23,587	22,430	22,430	48,598	0	3,483	12,003	13,889	12,001	14,154	9,216	15,589	17,303
36	091	10,800	0	22,177	15,380	3,304	3,304	44,725	2,931	393	0	5,348	9,758	12,186	9,156	10,332	10,271
37	092	0	0	7,201	0	5,918	5,918	0	3,700	3,102	1,289	25	1,309	3,242	5,509	2,624	2,802
38	093	69	0	258	763	1,306	1,306	3,833	206	1,252	539	194	227	1,285	580	479	1,427
39	094	46	0	59	0	706	706	6,097	1,822	1,293	586	362	114	997	729	162	2,101
40	101	0	0	1,290	0	0	0	5,727	422	89	406	171	0	157	77	258	1,329
41	102	0	0	1,822	0	0	0	43	113	67	0	7	0	37	13	364	45
42	103	0	0	1	0	0	0	0	0	7	0	0	0	1	0	0	1
43	104	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	43,213	20,933	133,257	72,670	110,402	110,402	194,197	24,318	22,109	82,904	74,020	69,588	73,908	63,218	76,095	86,786

Appendix Table 38. Southeast Alaska Area 4 drift gill net coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
		Alaska Area 4 Weekly Gill Net Coho Catch, 1981 to 1989										Area 4 Weekly Gill Net Coho Catch, 5-Year Average					
23	061	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0
25	063	20	581	14	0	65	65	1	0	0	96	6	57	130	80	136	32
26	064	77	78	149	12	435	435	5	133	5	153	13	130	233	314	150	146
27	071	169	299	161	193	191	191	44	730	125	878	138	335	594	592	203	394
28	072	433	1279	914	129	276	276	196	478	411	824	157	508	1,339	627	606	437
29	073	816	1374	784	288	633	633	225	488	1052	877	300	938	2,025	594	779	655
30	074	1035	872	1395	633	1143	1143	487	2093	860	1504	366	1,130	2,085	535	1,016	1,217
31	075	742	1088	1120	1327	1432	1432	1301	2797	675	2518	334	721	1,915	949	1,142	1,745
32	081	3501	919	1618	2815	3111	3111	2004	2237	912	2650	595	777	1,484	861	2,393	2,183
33	082	4438	1416	3564	4451	4107	4107	4332	3448	2475	5936	809	1,119	1,954	1,112	3,595	4,060
34	083	4435	3659	6840	5293	6618	6618	8190	3539	5049	17017	1,843	3,241	4,210	3,906	5,369	8,083
35	084	12149	12462	8932	9554	12362	12362	15657	11155	11083	19279	4,622	6,463	7,828	9,109	11,092	13,907
36	091	13126	23476	9334	17440	15454	15454	20278	12400	31232	22055	6,197	9,727	11,108	16,995	15,766	20,284
37	092	17448	18115	12920	14928	28718	28718	23391	19729	32102	15157	10,404	13,894	17,652	21,921	18,426	23,819
38	093	6236	2034	19523	12204	17010	17010	22236	12893	22068	13175	8,441	17,742	19,453	14,772	11,401	17,476
39	094	5890	3709	17690	11065	8790	8790	8151	10723	13603	0	6,753	11,839	12,295	11,370	9,429	8,253
40	101	0	0	11939	8965	1184	1184	5488	4613	3744	0	1,935	5,072	6,268	4,005	4,418	3,006
41	102	0	0	3689	1449	326	326	637	679	1107	0	236	943	873	1,332	1,093	550
42	103	0	0	682	219	34	34	0	712	0	0	6	19	27	284	187	149
43	104	0	0	79	0	0	0	0	0	0	0	5	0	0	44	16	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	70,515	71,361	101,347	90,965	101,889	101,889	112,623	88,847	126,503	102,119	43,158	74,653	91,477	89,402	87,215	106,396

Appendix Table 39. Southeast Alaska Area 5 drift gill net coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Stat Week U.S.	Cdn.	Alaska Area 5 Weekly Gill Net Coho Catch, 1981 to 1989										Area 5 Weekly Gill Net Coho Catch, 5-Year Average					
		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
23	061	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0
24	062	0	0	0	0	0	0	0	0	0	0	18	20	0	0	0	0
25	063	99	75	110	0	142	142	572	0	0	542	174	258	127	85	251	32
26	064	395	57	1,088	636	433	433	1,034	336	117	1,138	632	839	290	522	612	146
27	071	352	485	2,358	1,339	723	723	1,518	985	592	1,794	1,217	1,537	422	1,051	1,122	394
28	072	1,096	459	2,504	2,082	791	791	0	2,523	754	3,381	1,785	2,195	720	1,386	1,490	437
29	073	2,393	1,844	2,042	1,158	2,146	2,146	2,012	3,256	1,315	5,839	2,860	2,426	1,145	1,917	2,914	655
30	074	3,383	3,893	3,436	4,860	2,779	2,779	3,289	3,771	1,271	5,878	4,705	2,942	1,209	3,670	3,398	1,217
31	075	3,294	4,054	939	3,842	3,903	3,903	10,747	4,228	1,294	8,063	4,300	4,042	1,457	3,206	5,647	1,745
32	081	0	2,380	0	1,524	2,775	2,775	11,569	5,794	1,851	6,825	7,815	6,270	2,169	1,336	5,763	2,183
33	082	1,091	5,813	1,628	3,708	4,402	4,402	14,154	2,918	852	12,982	8,518	8,885	5,791	3,328	7,062	4,060
34	083	2,450	2,329	2,719	7,971	10,591	10,591	19,299	616	1,884	15,829	7,048	8,578	5,753	5,212	9,644	8,083
35	084	4,105	1,289	14,350	9,886	7,167	7,167	28,007	4,613	2,279	13,960	7,587	9,925	7,542	7,359	11,205	13,907
36	091	915	1,336	17,472	14,371	8,817	8,817	34,196	3,685	1,506	8,494	8,159	11,749	6,411	8,582	11,340	20,284
37	092	39	0	9,987	14,010	7,347	7,347	22,101	2,427	716	10,687	4,358	7,814	3,874	6,277	8,656	23,819
38	093	0	0	4,719	8,708	1,369	1,369	10,824	3,013	0	1,235	2,167	2,279	1,938	2,959	3,288	17,476
39	094	0	0	492	2,355	0	0	1,152	0	0	0	120	1,063	863	569	230	8,253
40	101	0	0	432	1,361	0	0	0	0	0	0	12	121	61	359	0	3,006
41	102	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	550
42	103	0	0	0	0	0	0	0	0	0	0	0	0	322	0	0	149
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	19,612	24,014	64,276	77,811	53,385	53,385	160,474	38,165	14,431	96,647	61,478	70,950	40,095	47,820	72,620	106,396

Appendix Table 40. Southeast Alaska Area 6 drift gill net coho catch by week, 1980-1989, with 5-year averages for 1960-89.

Stat Week U.S.	Cdn.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	60-64	65-69	70-74	75-79	80-84	85-89
		Alaska Area 6 Weekly Gill Net Coho Catch, 1981 to 1989										Area 6 Weekly Gill Net Coho Catch, 5-Year Average					
23	061	27	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
24	062	106	0	0	0	0	0	0	0	0	0	28	0	0	0	21	0
25	063	428	198	39	0	410	410	220	0	0	545	109	97	209	753	215	235
26	064	944	377	589	650	821	821	428	580	105	1,493	387	285	605	1,326	676	685
27	071	1,311	166	1,168	1,993	1,064	1,064	707	576	1,248	1,263	685	605	867	1,603	1,140	972
28	072	1,225	757	836	1,181	847	847	925	281	491	690	637	620	905	1,959	969	647
29	073	1,026	253	2,462	1,805	1,146	1,146	3,815	891	1,687	1,379	618	1,090	1,268	1,572	1,338	1,784
30	074	461	917	2,263	2,661	898	898	3,338	1,581	659	1,285	555	723	1,674	1,906	1,440	1,552
31	075	305	884	1,289	3,296	1,334	1,334	3,489	555	209	2,664	733	910	994	1,170	1,422	1,650
32	081	1,756	2,522	2,517	5,818	1,955	1,955	4,613	1,940	633	1,895	723	802	1,844	1,140	2,914	2,207
33	082	2,112	2,832	3,145	3,770	3,526	3,526	3,694	1,675	1,243	1,933	768	1,035	1,971	1,227	3,077	2,414
34	083	5,793	2,717	2,972	3,278	5,144	5,144	6,968	0	831	2,609	1,162	783	2,523	1,693	3,981	3,110
35	084	2,131	3,124	2,815	3,072	5,624	5,624	11,197	1,774	131	3,329	393	490	2,039	2,216	3,353	4,411
36	091	1,105	1,716	3,914	5,774	4,596	4,596	9,782	5,589	2,763	4,137	421	548	2,561	1,475	3,421	5,373
37	092	242	2,012	2,713	5,713	5,370	5,370	5,576	7,006	2,230	4,348	499	558	1,202	943	3,210	4,906
38	093	357	306	1,187	1,853	2,779	2,779	8,269	11,639	2,833	4,915	141	124	563	299	1,296	6,087
39	094	0	0	0	692	0	0	356	3,188	1,973	0	0	0	189	36	138	1,103
40	101	0	0	0	0	0	0	0	838	0	0	0	0	0	0	0	168
41	102	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	2
42	103	0	344	106	0	0	0	0	0	0	0	0	0	0	0	90	0
43	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	19,329	19,125	28,015	41,556	35,514	35,514	63,377	38,123	17,036	32,485	7,861	8,669	19,415	19,320	28,708	37,307

Appendix Table 41. Consistently surveyed streams used in the analysis of B.C. coho escapement trends.

AREA 1	AREA 2E	AREA 2W	AREA 3	AREA 4
Masset Inlet	Tlell	Tasu Inlet	Portland Canal	Coastal
AIN RIVER	TLELL RIVER	FAIRFAX INLET CREEK	BEAR RIVER	KLOIYA RIVER
AWUN RIVER		FLAT CREEK		OONA RIVER
DATLAMEN CREEK	Skidegate Inlet	TASU CREEK	Observatory Inlet	
DINAN CREEK				Lakelse
KUMDIS CREEK	DEENA RIVER		KITSAULT RIVER	
MAMIN RIVER	HAANS CREEK			ANDALAS CREEK
MC CLINTON CREEK	HONNA RIVER		Nass	CLEARWATER CREEK
YAKOUN RIVER	LAGINS CREEK			HERMAN CREEK
	SLATECHUCK CREEK		ANSEDAGAN CREEK	LAKELSE RIVER
Naden Harbour			CRANBERRY RIVER	SCHULBUCKHAND CR.
	Copper		GINGIT CREEK	WILLIAMS CREEK
NADEN RIVER			GINLULAK CREEK	
	COPPER RIVER		GITZYON CREEK	Kitsumkalum
			ISHKHEENICKH R.	
	Cumshewa Inlet		KWINAGEESE RIVER	CEDAR RIVER
			KWINYARH CREEK	CLEAR CREEK
	CHADSEY CREEK		KWINYIAK RIVER	DEEP CREEK
	MATHERS CREEK		MEZIADIN R. & LK.	DRY CREEK
	PALLANT CREEK		QUILGAUW CREEK	KITSUMKALUM R. (LO)
			SEASKINNISH CREEK	LEAN-TO CREEK
	Selwyn Inlet		TSEAX RIVER	SPRING CREEK
			ZOLZAP CREEK	
	BIG GOOSE CREEK			Other Lower Skeena
	LAGOON CREEK		Portland Inlet	
	PACOFI CREEK			EXCHAMSIKS RIVER
	SEWELL INLET CR. HEAD		KHUTZEYMATEEN R.	GITNADOIX RIVER
			KWINAMASS RIVER	KASIKS RIVER
	Darwin-Atli			ZYMAGOTITZ RIVER
			Work Channel	
	CRESCENT INLET CREEK			Kispiox
	ECHO HARBOUR CREEK		ENSHESHESE RIVER	
	SALMON RIVER		LACHMACH RIVER	CLUB CREEK (LOWER)
				CLUB CREEK (UPPER)
	Juan Perez Sound			CULLON CREEK
				KISPIOX RIVER
	MATHESON R/H CREEK			MURDER CREEK
	SEDGWICK CREEKS (3)			NANGEESE RIVER
				SKUNSNAT CREEK
	Skincuttle & South			
				Bulkley/MORICE
	BAG HARBOUR CREEK			
	GEORGE BAY CREEK			KATHLYN CREEK
	HARRIET HARBOUR CREEK			TOBOGGAN CREEK
	SEDMOND CREEK			
	SLIM INLET CREEK			Other Middle Skeena
	TANGLE COVE CREEK			
				KITWANGA RIVER
				ZYMOETZ RIVER (LOW)
				Babine
				BABINE FENCE COUNT

APPENDIX

Table 4. Consistently surveyed streams used in the analysis of B.C. coho escapement trends.

AREA 5	AREA 6	AREA 7	AREA 8
Outside Banks Is.	Gardner Canal	Gunboat-Seaforth	Burke Channel
KINGKOWN INLET SYS	BRIM RIVER	KADJUSDIS CREEK	KWATNA RIVER
QUITONSTA CREEK	KEMANO RIVER	KUNSOOT RIVER	
	KILTUISH RIVER	KWAKUSDIS RIVER	Dean Channel (Closed)
Upper Principe	KITLOPE RIVER	SCRIBNER CREEK	
			CASCADE RIVER
END HILL CREEK	Kitimat Arm	Finlayson-Mussel	ELCHO CREEK
KESWAR CREEK			FRENCHMAN CREEK
	BISH CREEK	DUTHIE CREEK	MARTIN RIVER
Lower Principe	DALA RIVER	MUSSEL RIVER	
	KILDALA RIVER		Fisher-Fitz Hugh
CURTIS INLET CREEK	KITIMAT RIVER SYS.	Kynock	
DEVON LK. SYSTEM			HOOK NOSE CREEK
KEECHA CREEK	Douglas, Ursula, Ch.	KAINET CREEK	KOEYE RIVER
KOORYET LAKE SYS			
MIKADO LK SYS	EVELYN CREEK	Spiller	North Bentinck
	FOCH CREEK		
Petrel Channel	GILTTOYEES CREEK	PINE RIVER	BELLA COOLA RIVER
	HARTLEY BAY CREEK	TANKEEAH RIVER	
HEVENOR INLET CREEK	KISKOSH CREEK		
SHAW CRK.	KITKIATA CREEK	Roscoe Inlet	
	QUAAL RIVER		
Upper Grenville Chan		QUARTCHA CREEK	
	Fraser-Graham Reach	ROSCOE CREEK	
KUMEALON CREEK			
PA-AAT RIVER	AALTANASH RIVER	Southern Group	
	CANOONA CREEK		
Lower Grenville Chan	DOME CREEK	COOPER INLET CRKS	
	GREEN RIVER		
LOWE INLET SYS	KHUTZE RIVER		
	SCOW BAY CREEK		
Ogden Channel	SODA CREEK		
BILLY CREEK	Laredo Channel		
CAPTAIN COVE CREEK			
KITKATLA CREEK	EAST ARM CREEK		
PHOENIX CREEK	FURY CREEK		
	LIMESTONE CREEK		
	ROLAND CREEK		
	TALAMOOSA CREEK		
	WALE CREEK		
	Laredo Sound		
	ARNOUP CREEK		
	BLEE CREEK		
	BLOOMFIELD CREEK		
	NIAS CREEK		
	POWLES CREEK		
	PRICE CREEK		
	QUIGLEY CREEK		
	STEEP CREEK		
	TYLER CREEK		

APPENDIX

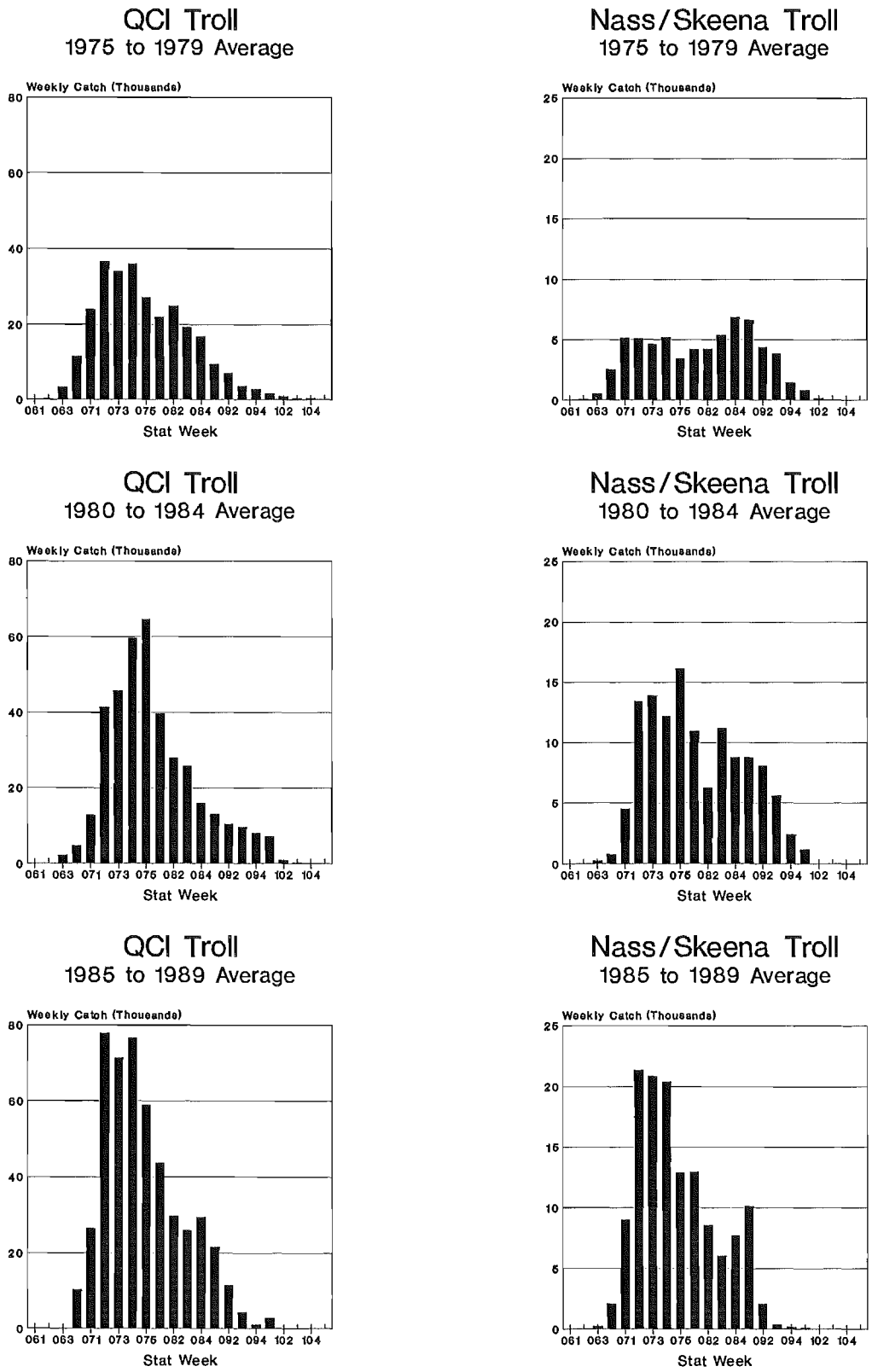
Table 4. Consistently surveyed streams used in the analysis of B.C. coho escapement trends.

AREA 5	AREA 6	AREA 7	AREA 8
	Aristazabal Island W.		
	BORROWMAN CREEK		
	DUFFEY CREEK		
	EAGLE CREEK		
	KDELMASHAN CREEK		
	NOBLE CREEK		
	STANNARD CREEK		
	TRENEMAN CREEK		

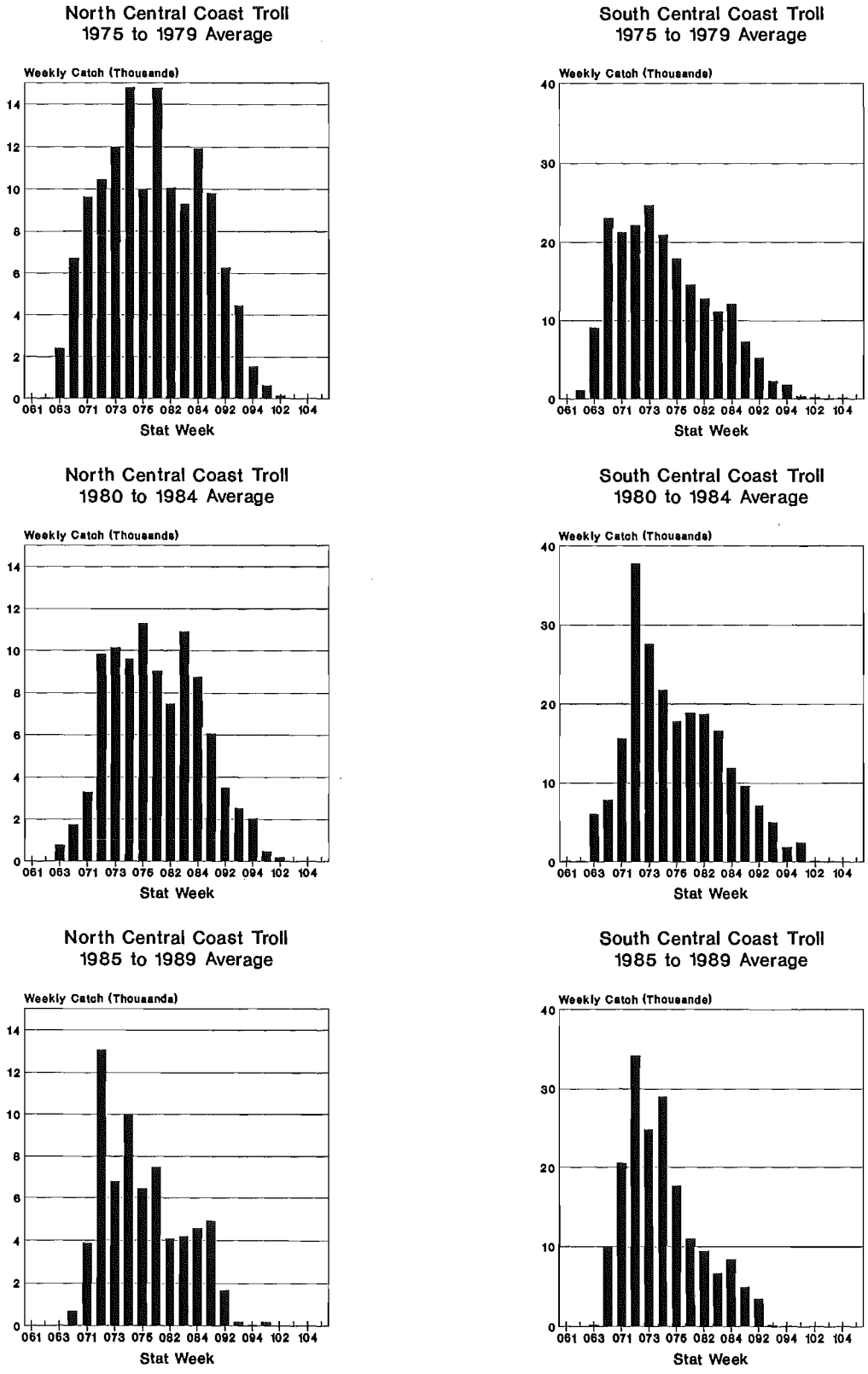
APPENDIX

Table 4.1 Consistently surveyed streams used in the analysis of B.C. coh

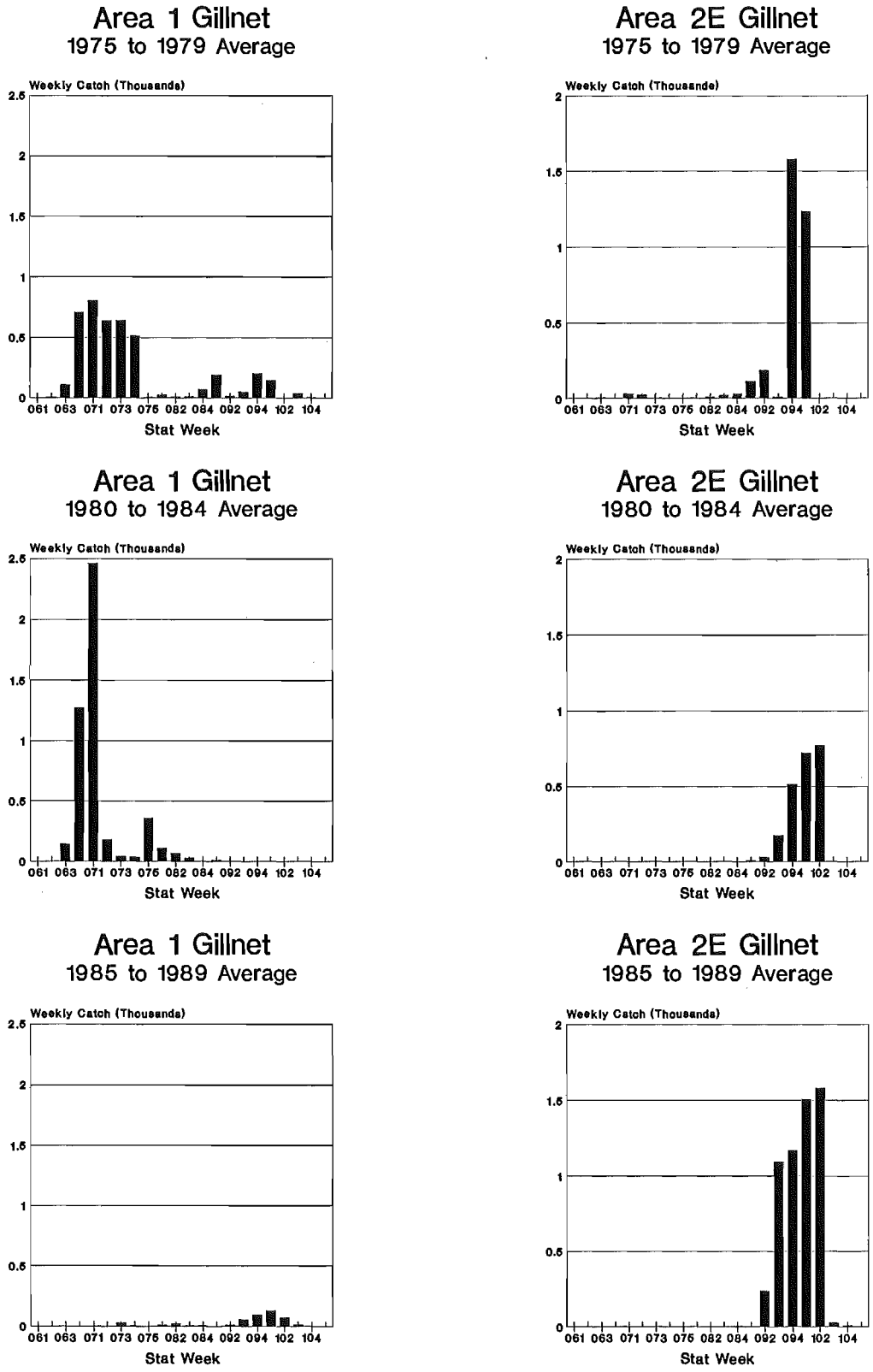
AREA 9	AREA 10
BEAVER CREEK	NEKITE RIVER
CHUCKWALLA RIVER	TAKUSH RIVER
JOHNSTON CREEK	WALKUM CREEK
KILBELLA RIVER	
LOCKHART-GORDON CR	
MACNAIR CREEK	



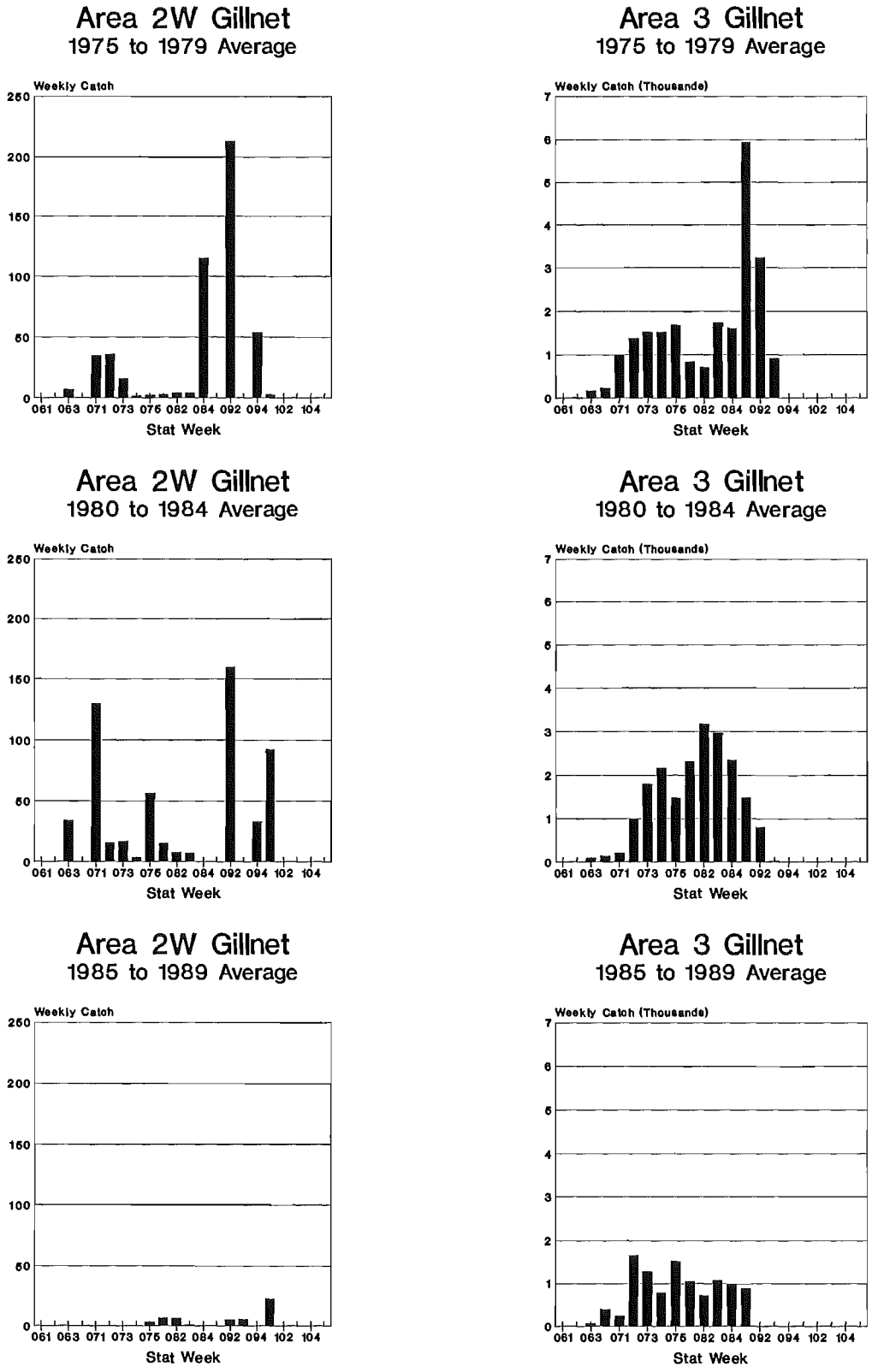
Appendix Figure 1. Queen Charlotte Islands and Nass/Skeena weekly troll coho catch, 5 year averages, 1975 to 1989.



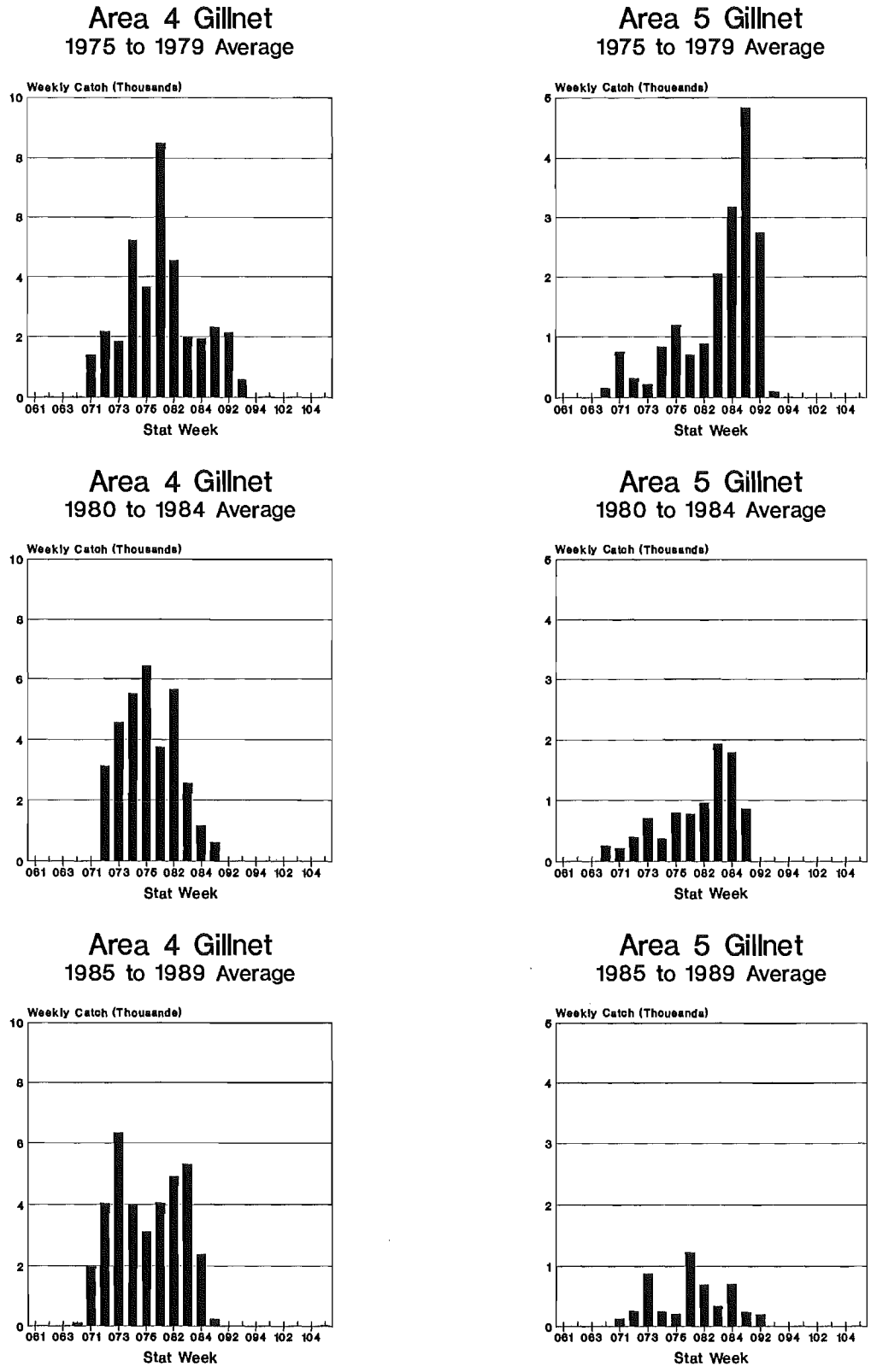
Appendix Figure 2. North Central and South Central weekly troll coho catch, 5 year averages, 1975 to 1989.



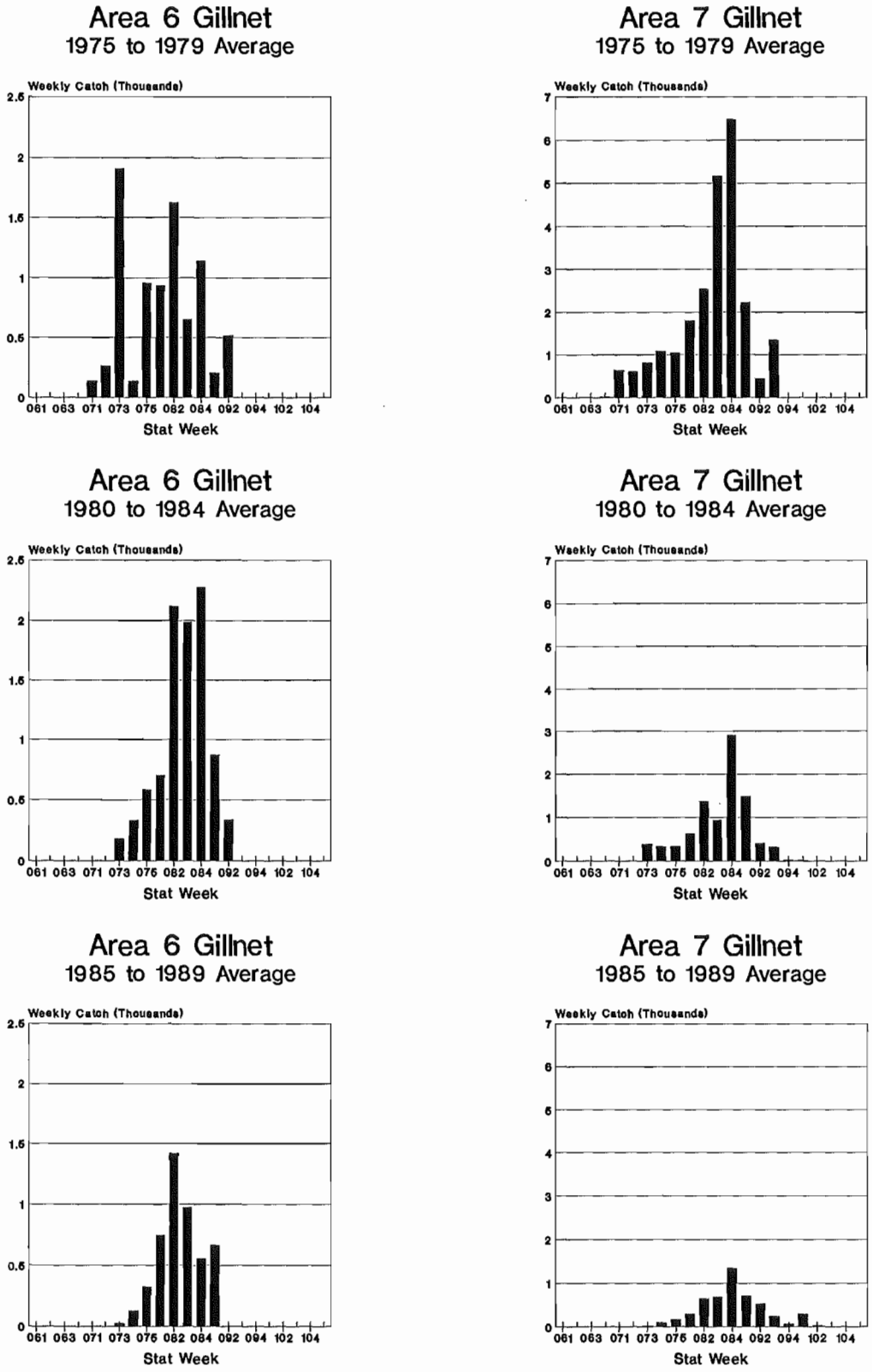
Appendix Figure 3. Area 1 and 2E weekly gillnet coho catch, 5 year averages, 1975 to 1989.



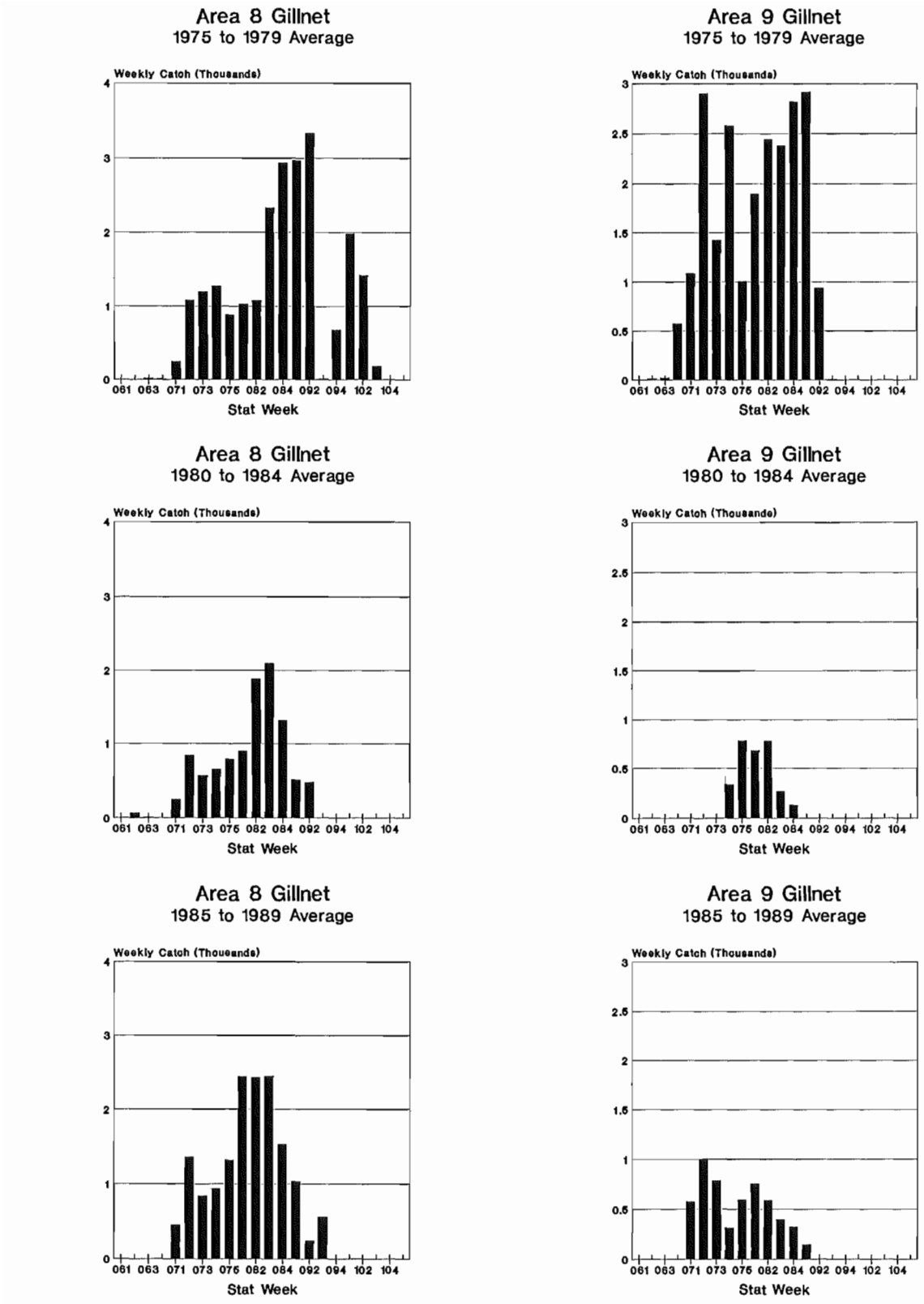
Appendix Figure 4. Area 2W and 3 weekly gillnet coho catch, 5 year averages, 1975 to 1989.



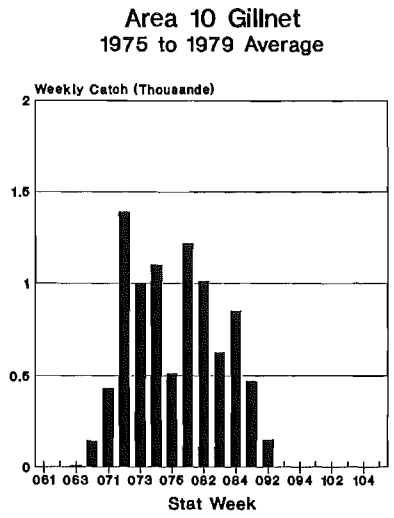
Appendix Figure 5. Area 4 and 5 weekly gillnet coho catch, 5 year averages, 1975 to 1989.

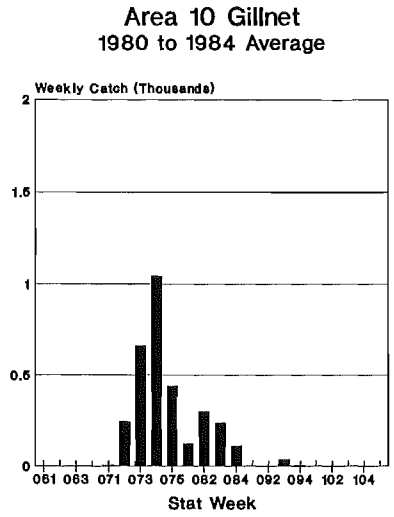


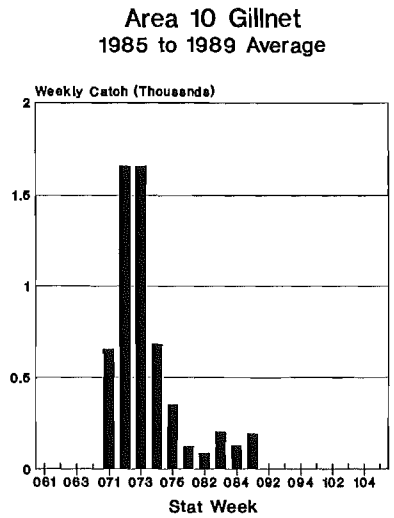
Appendix Figure 6. Area 6 and 7 weekly gillnet coho catch, 5 year averages, 1975 to 1989.



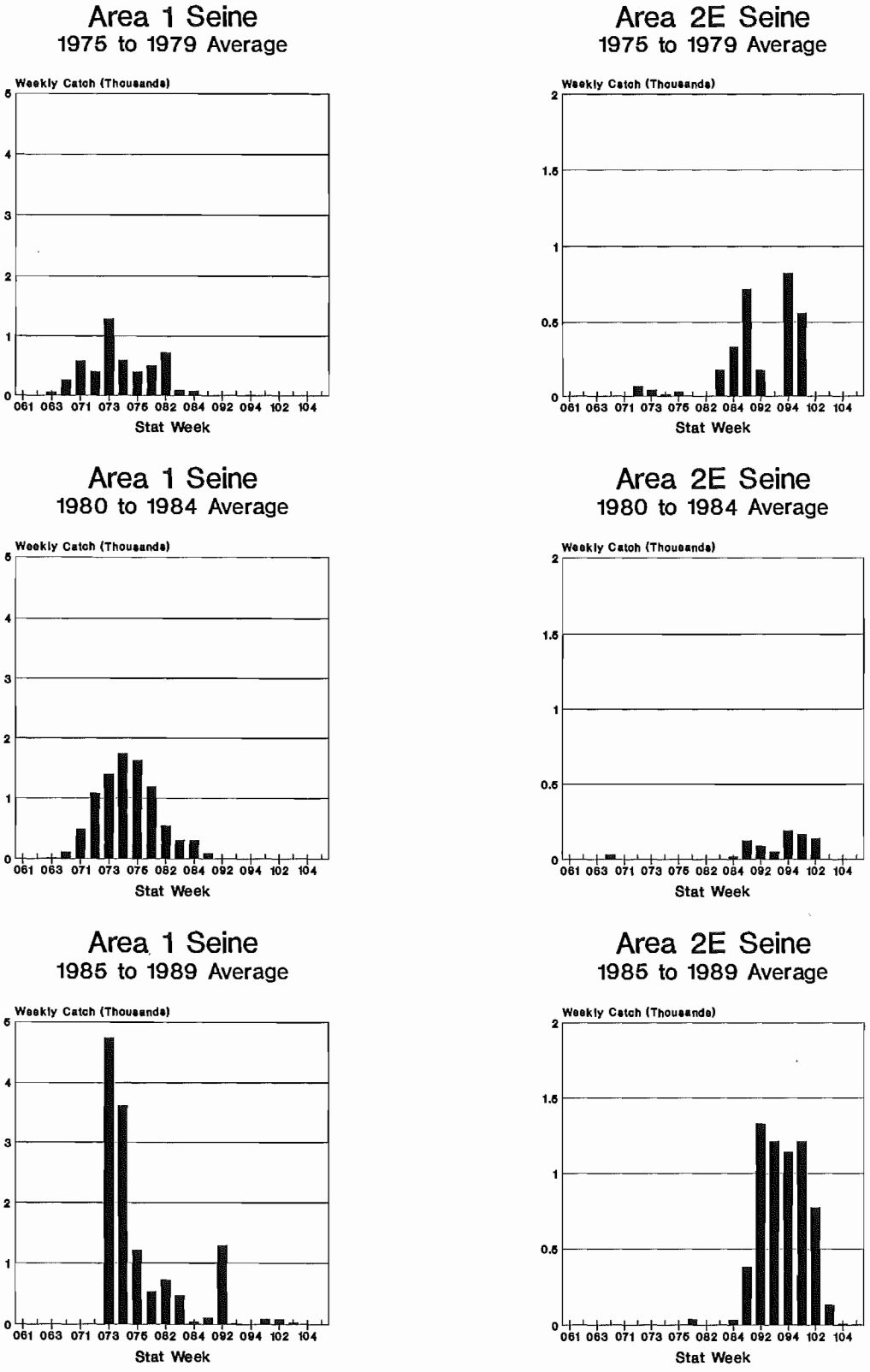
Appendix Figure 7. Area 8 and 9 weekly gillnet coho catch, 5 year averages, 1975 to 1989.



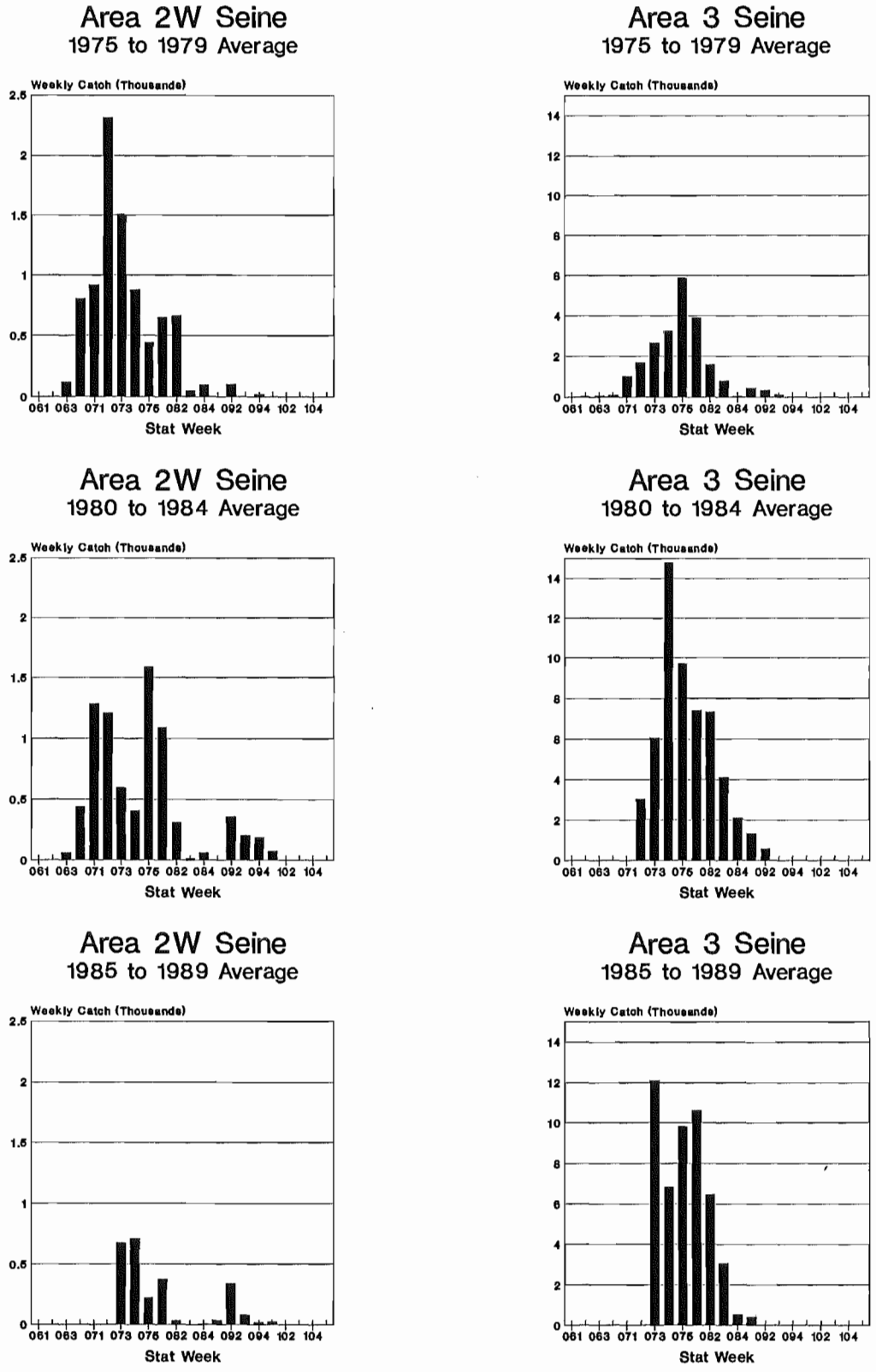




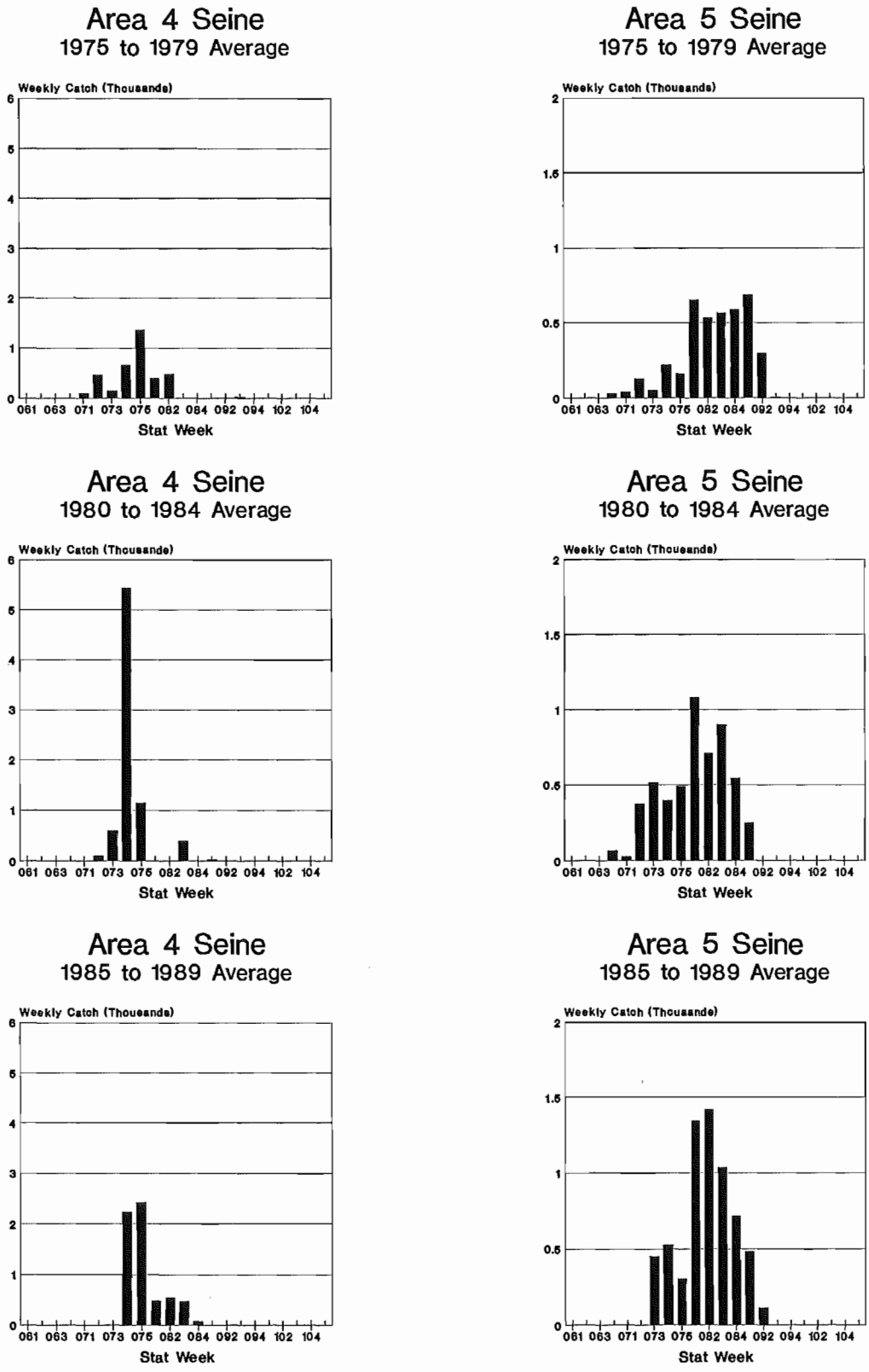
Appendix Figure 8. Area 10 weekly gillnet coho catch, 5 year averages, 1975 to 1989.



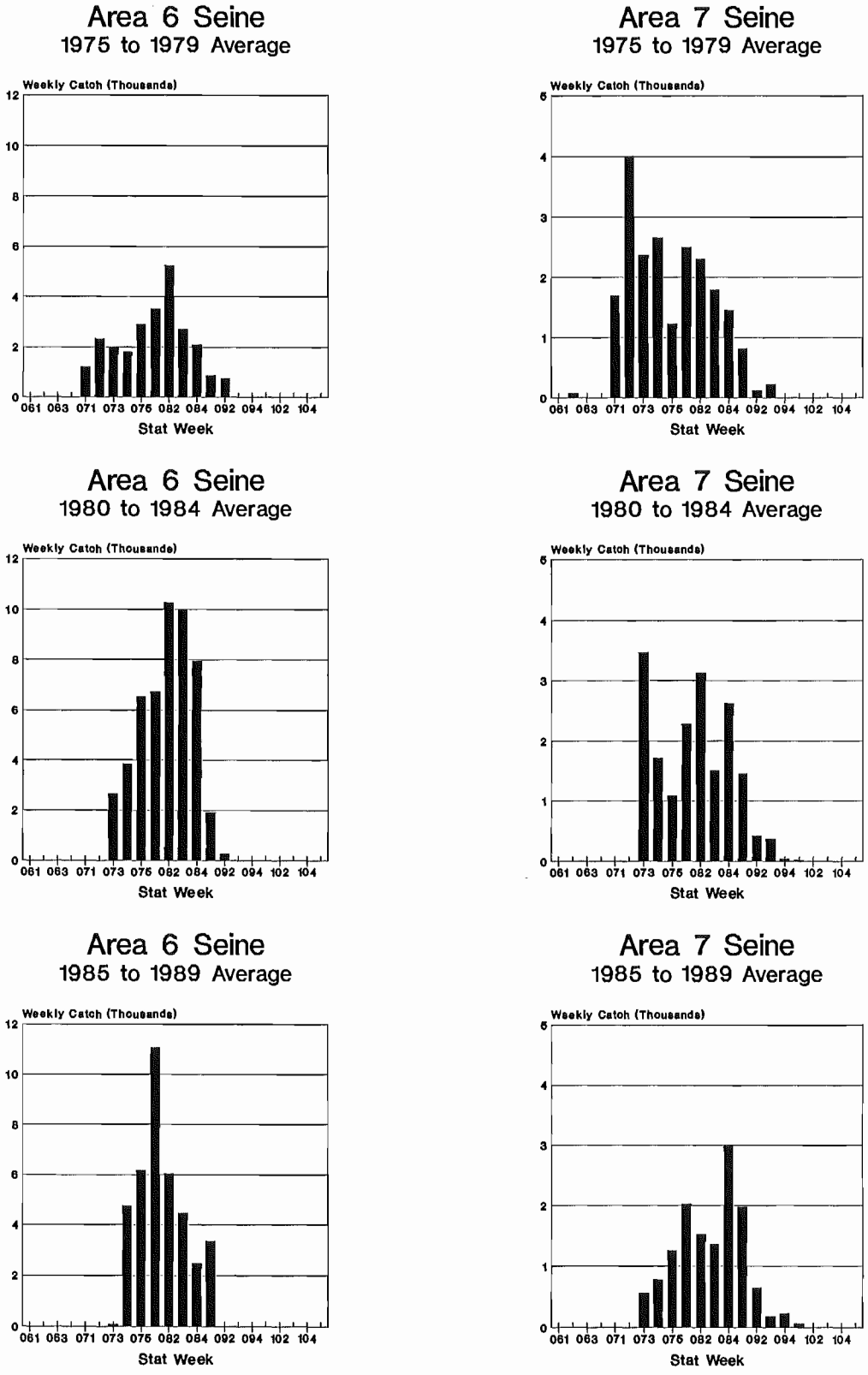
Appendix Figure 9. Area 1 and 2E weekly seine coho catch, 5 year averages, 1975 to 1989.



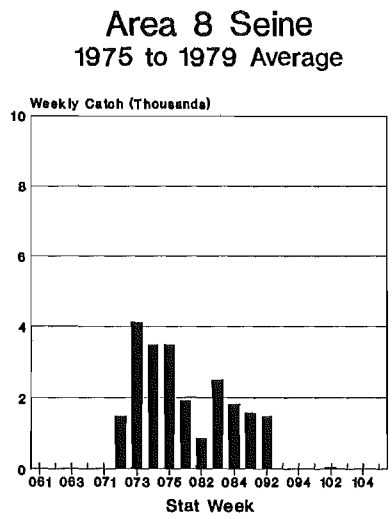
Appendix Figure 10. Area 2W and 3 weekly seine coho catch, 5 year averages, 1975 to 1989.

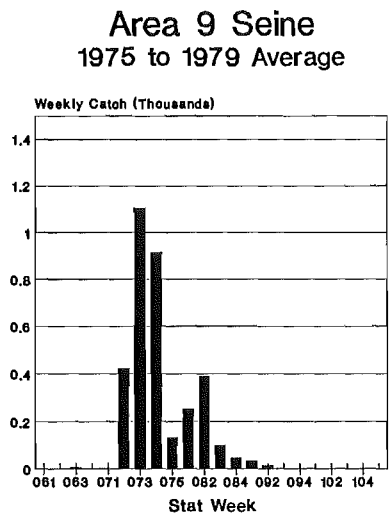


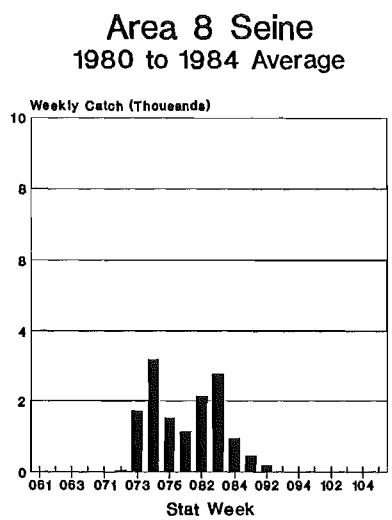
Appendix Figure 11. Area 4 and 5 weekly seine coho catch, 5 year averages, 1975 to 1989.

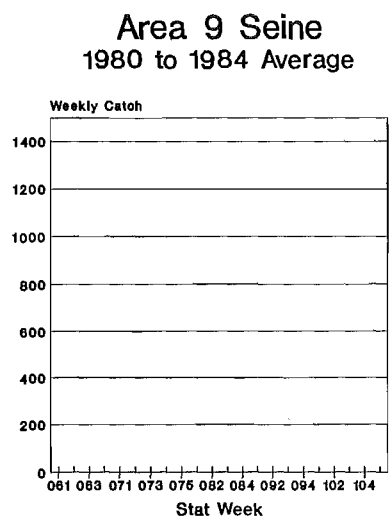


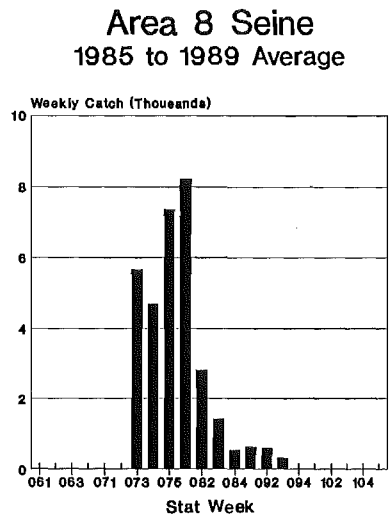
Appendix Figure 12. Area 6 and 7 weekly seine coho catch, 5 year averages, 1975 to 1989.

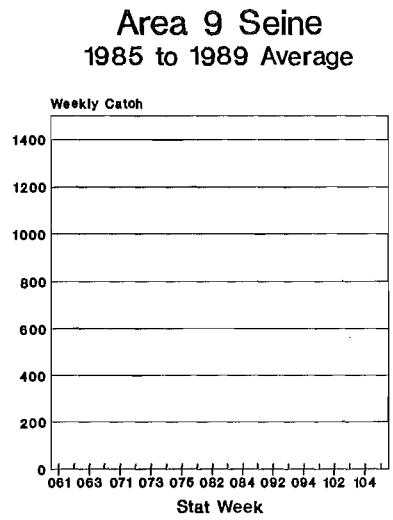




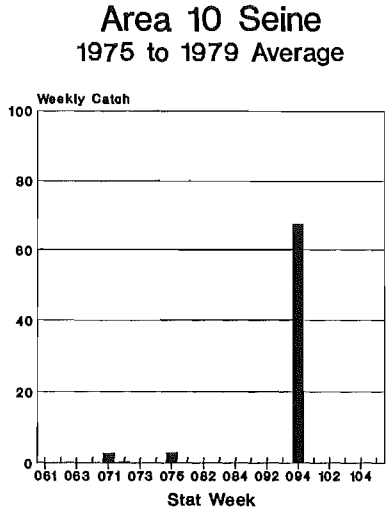


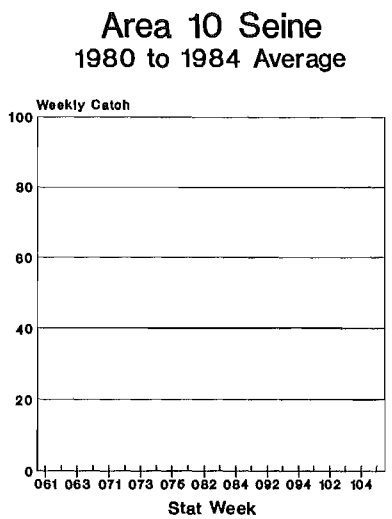


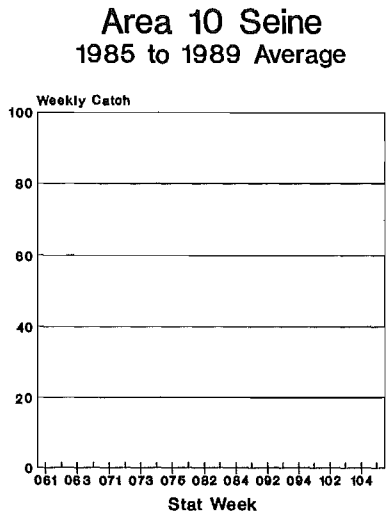




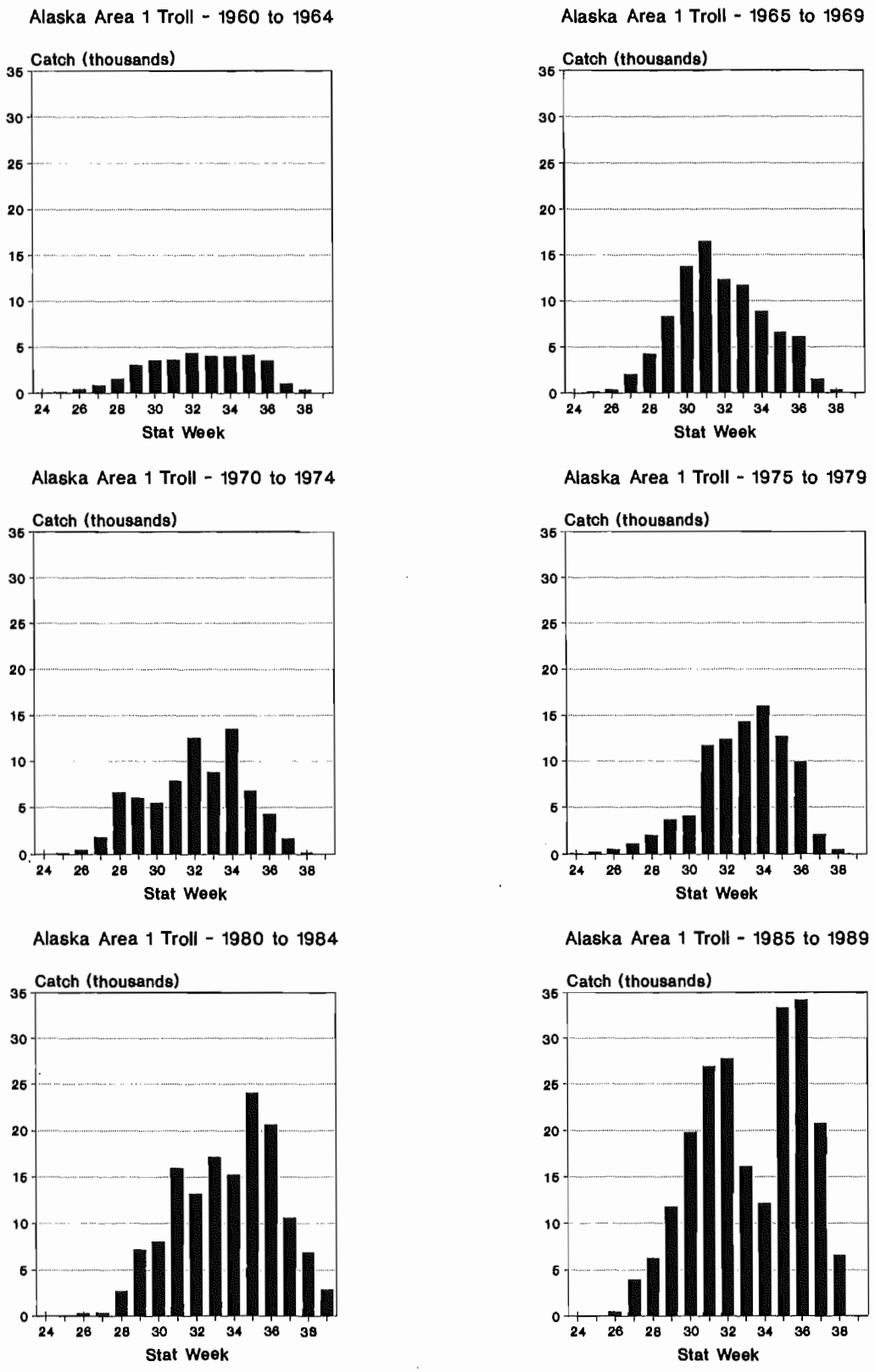
Appendix Figure 13. Area 8 and 9 weekly seine coho catch, 5 year averages, 1975 to 1989.



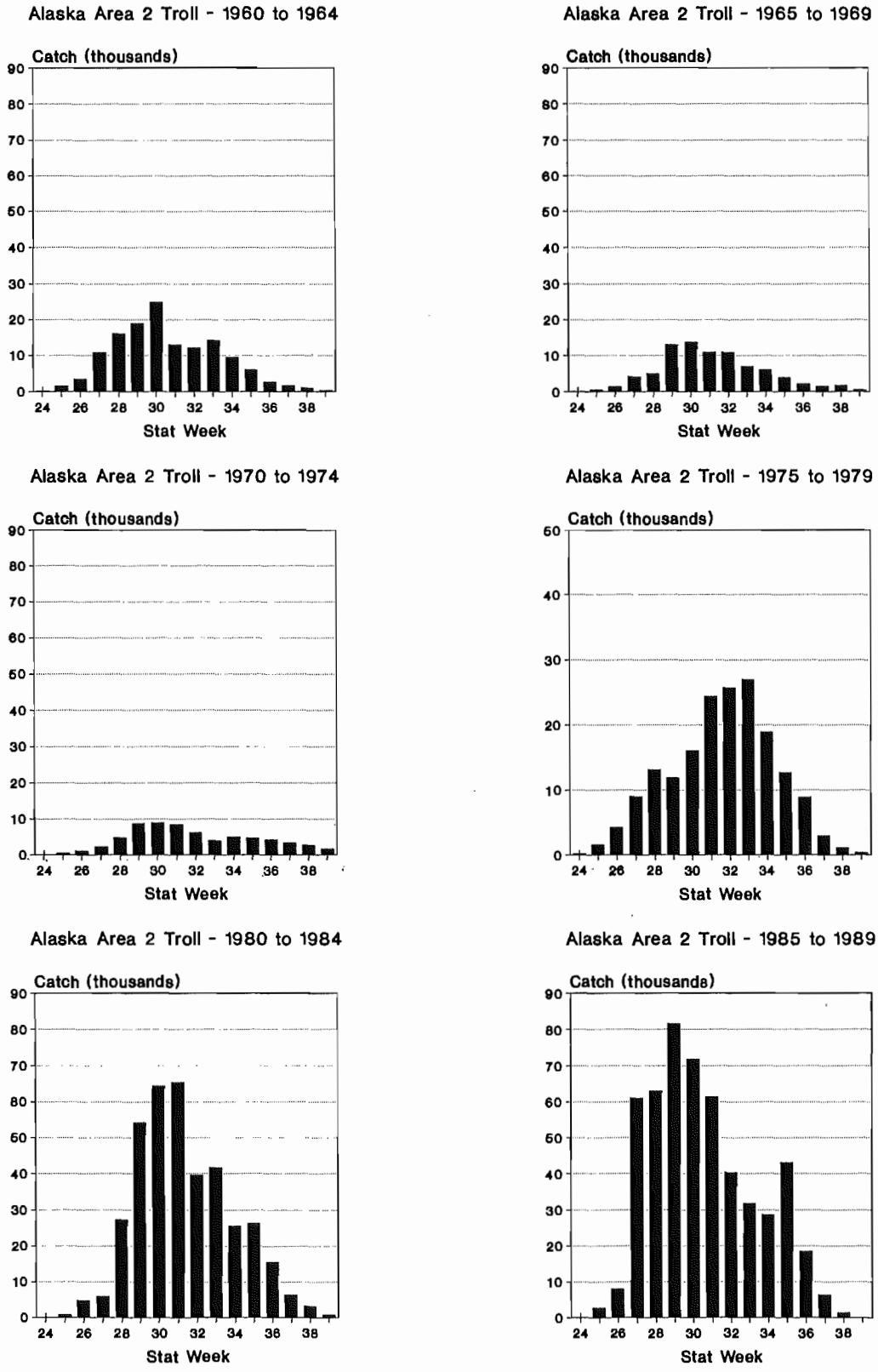




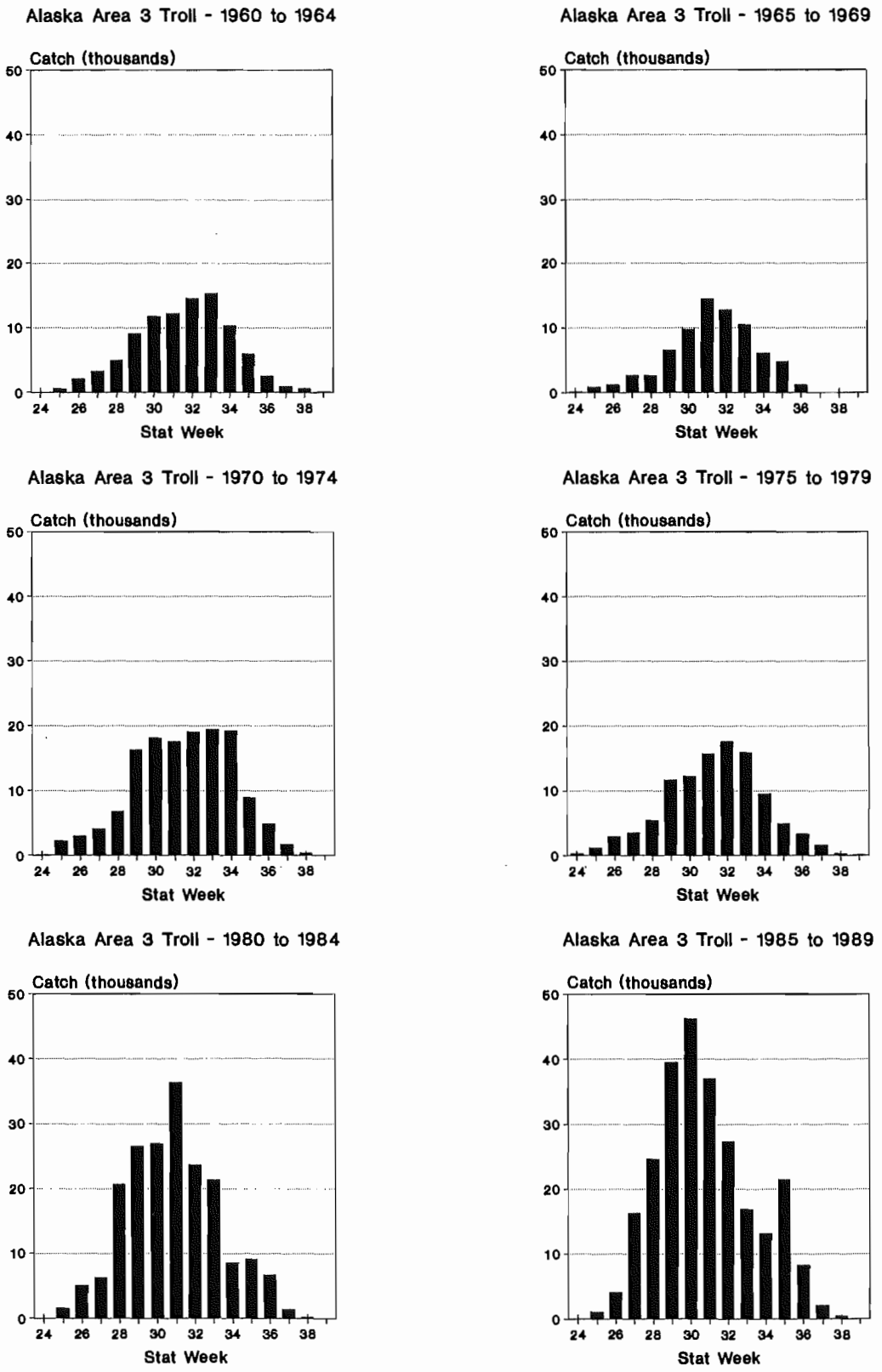
Appendix Figure 14. Area 10 weekly seine coho catch, 5 year averages, 1975 to 1989.



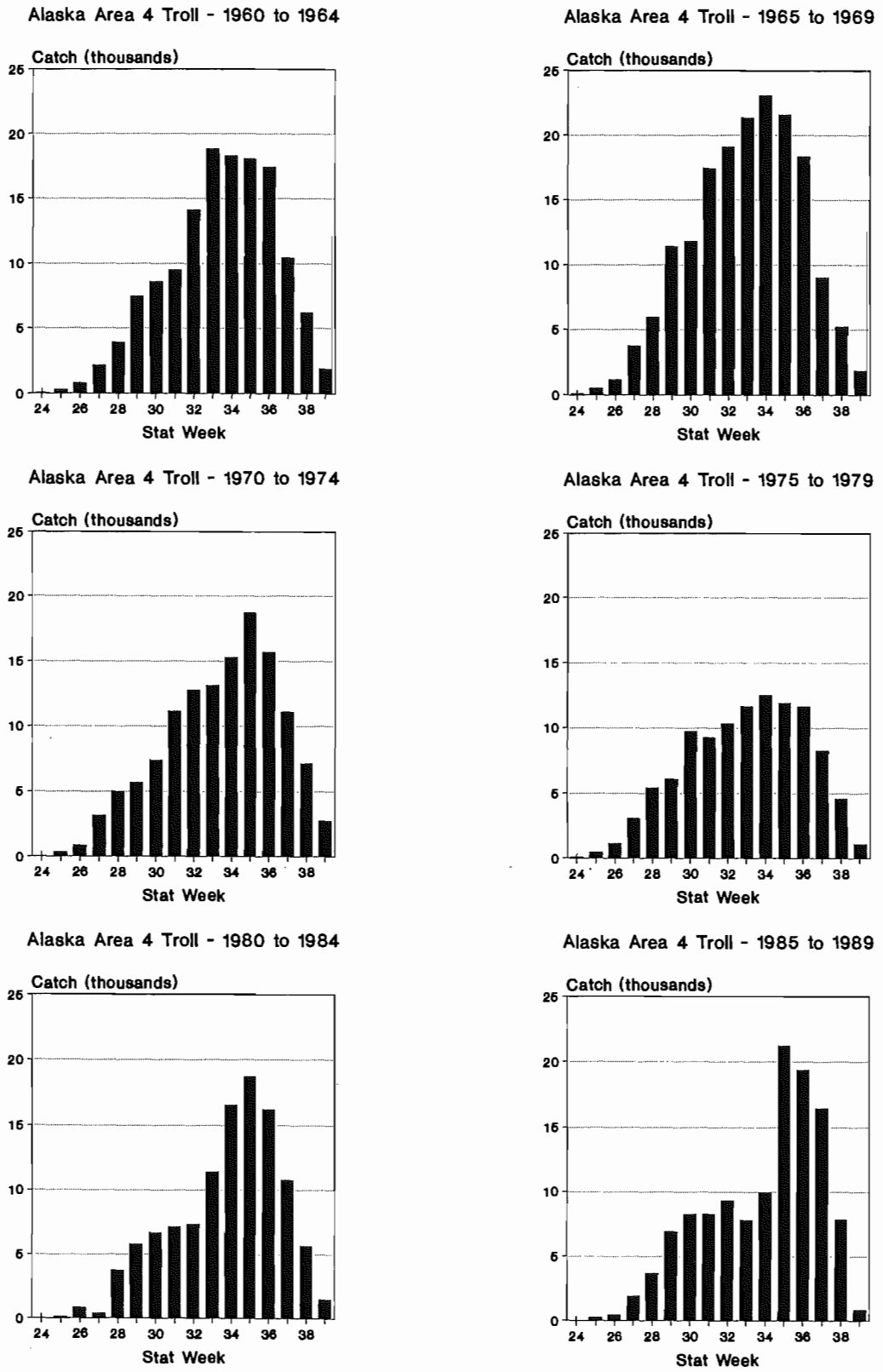
Appendix Figure 15. Southeast Alaska Area 1 troll average coho catch by week for 5-year periods, 1960-89.



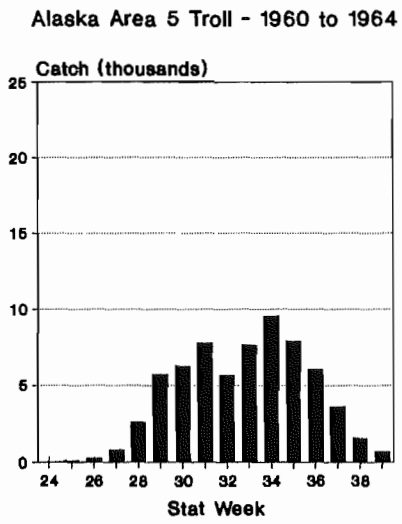
Appendix Figure 16. Southeast Alaska Area 2 troll average coho catch by week for 5-year periods, 1960-89.

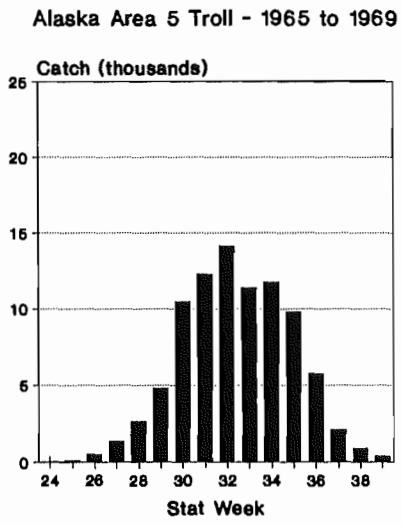


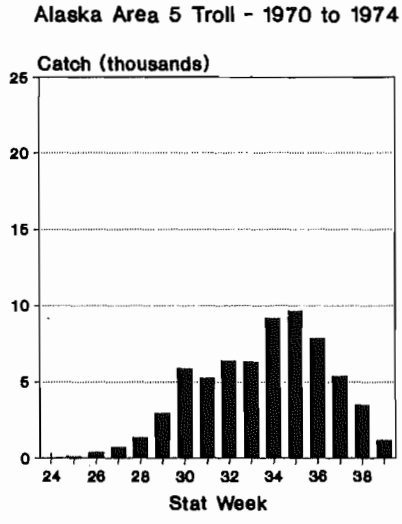
Appendix Figure 17. Southeast Alaska Area 3 troll average coho catch by week for 5-year periods, 1960-89.

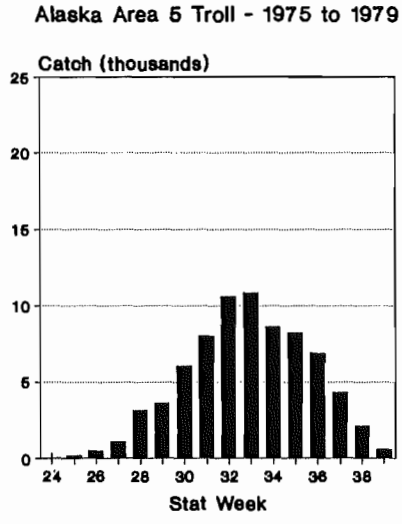


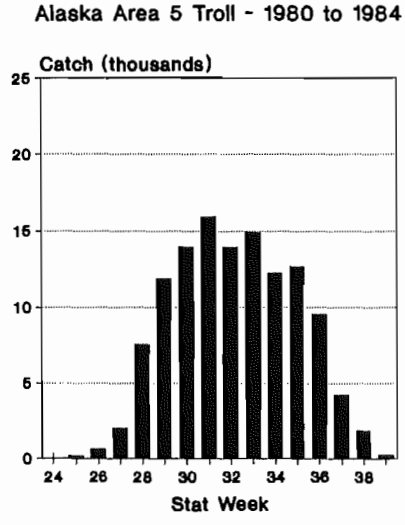
Appendix Figure 18. Southeast Alaska Area 4 troll average coho catch by week for 5-year periods, 1960-89.

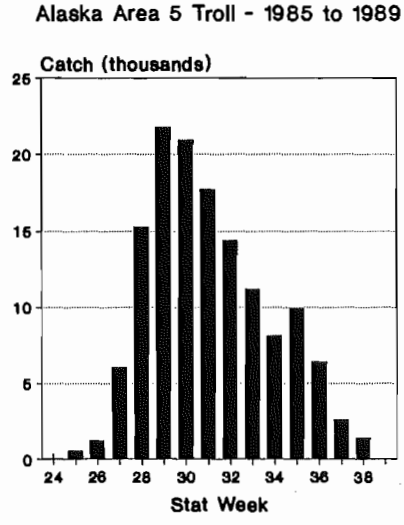




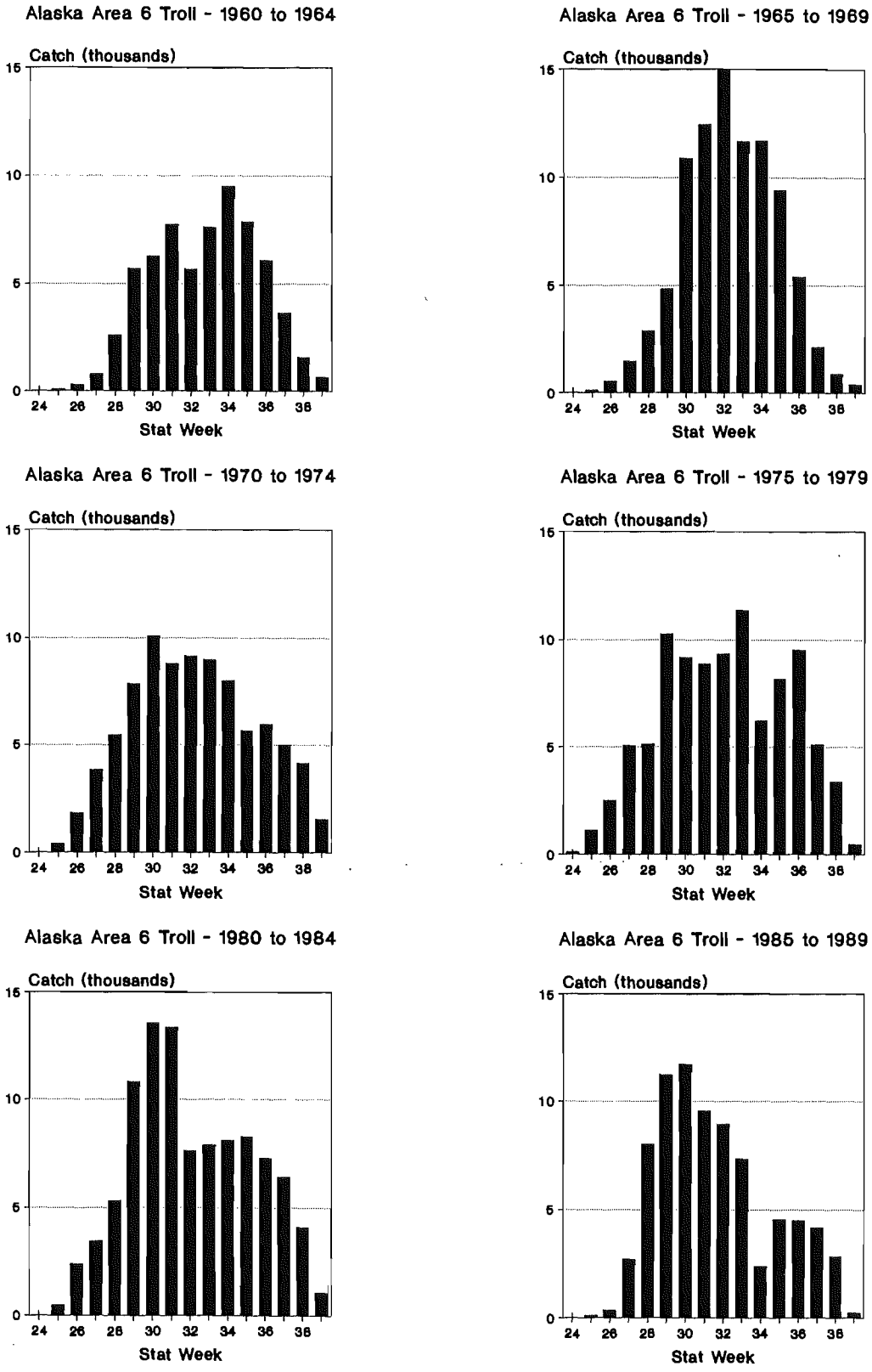




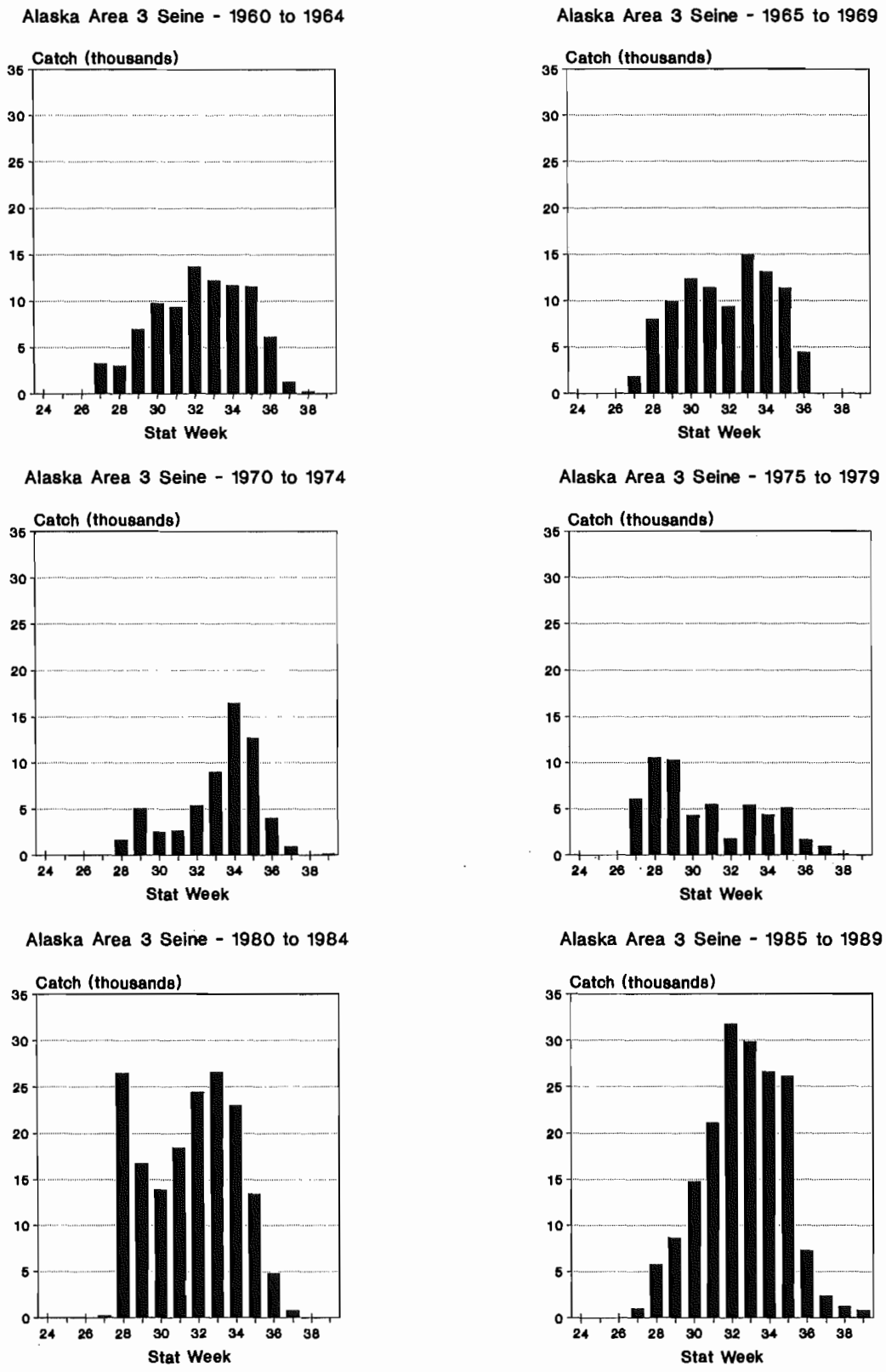




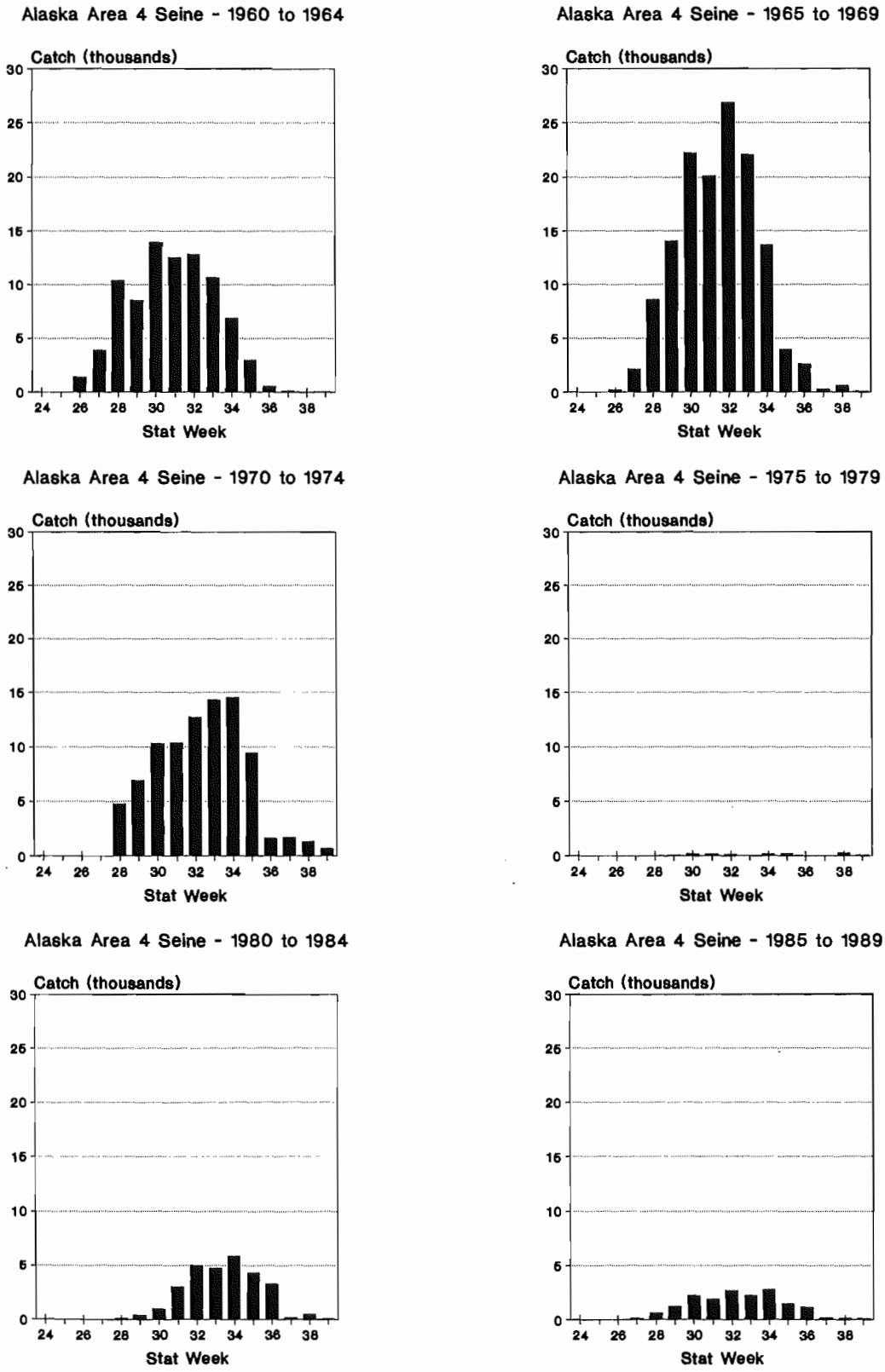
Appendix Figure 19. Southeast Alaska Area 5 troll average coho catch by week for 5-year periods, 1960-89.



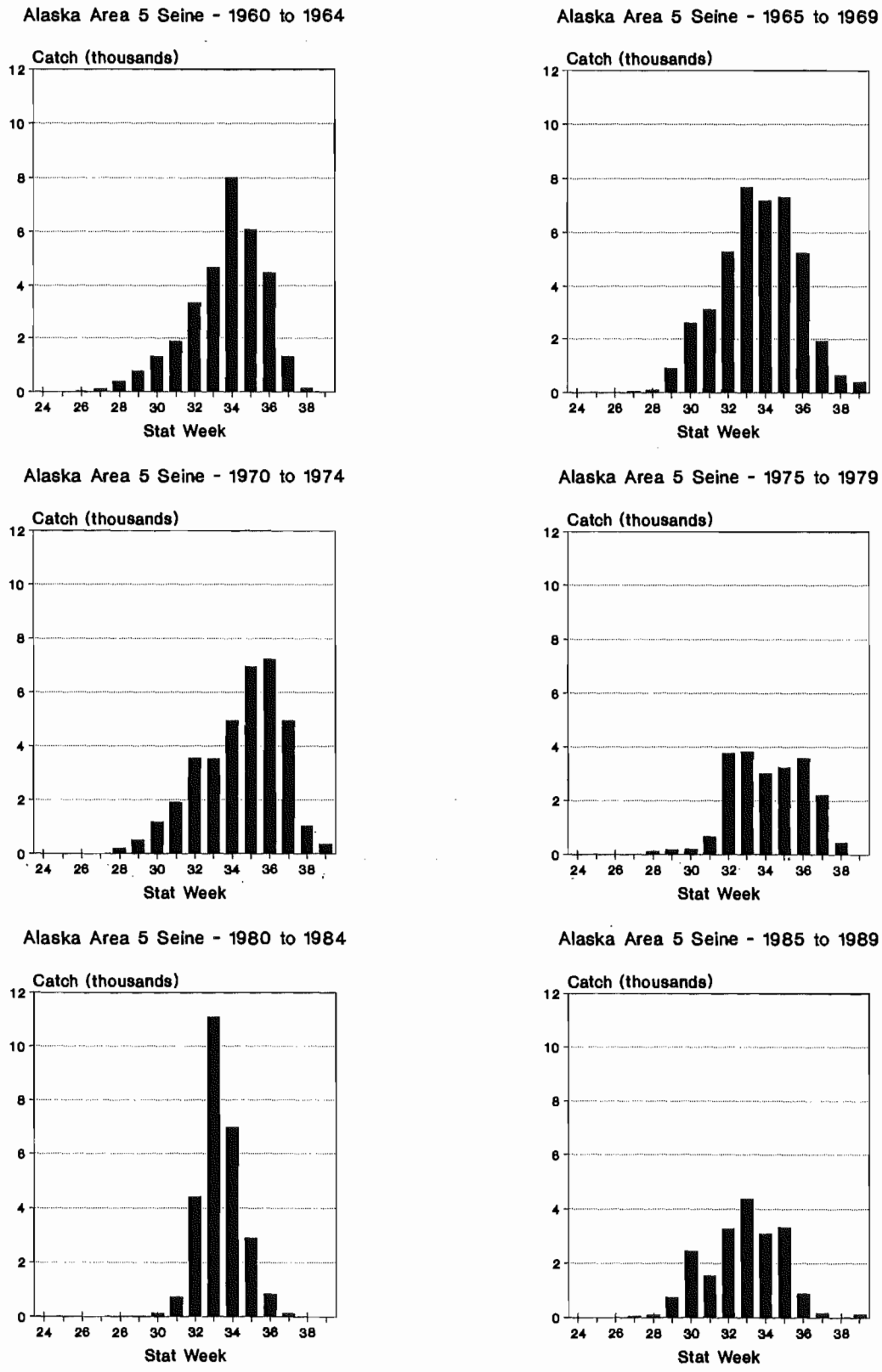
Appendix Figure 20. Southeast Alaska Area 6 troll average coho catch by week for 5-year periods, 1960-89.



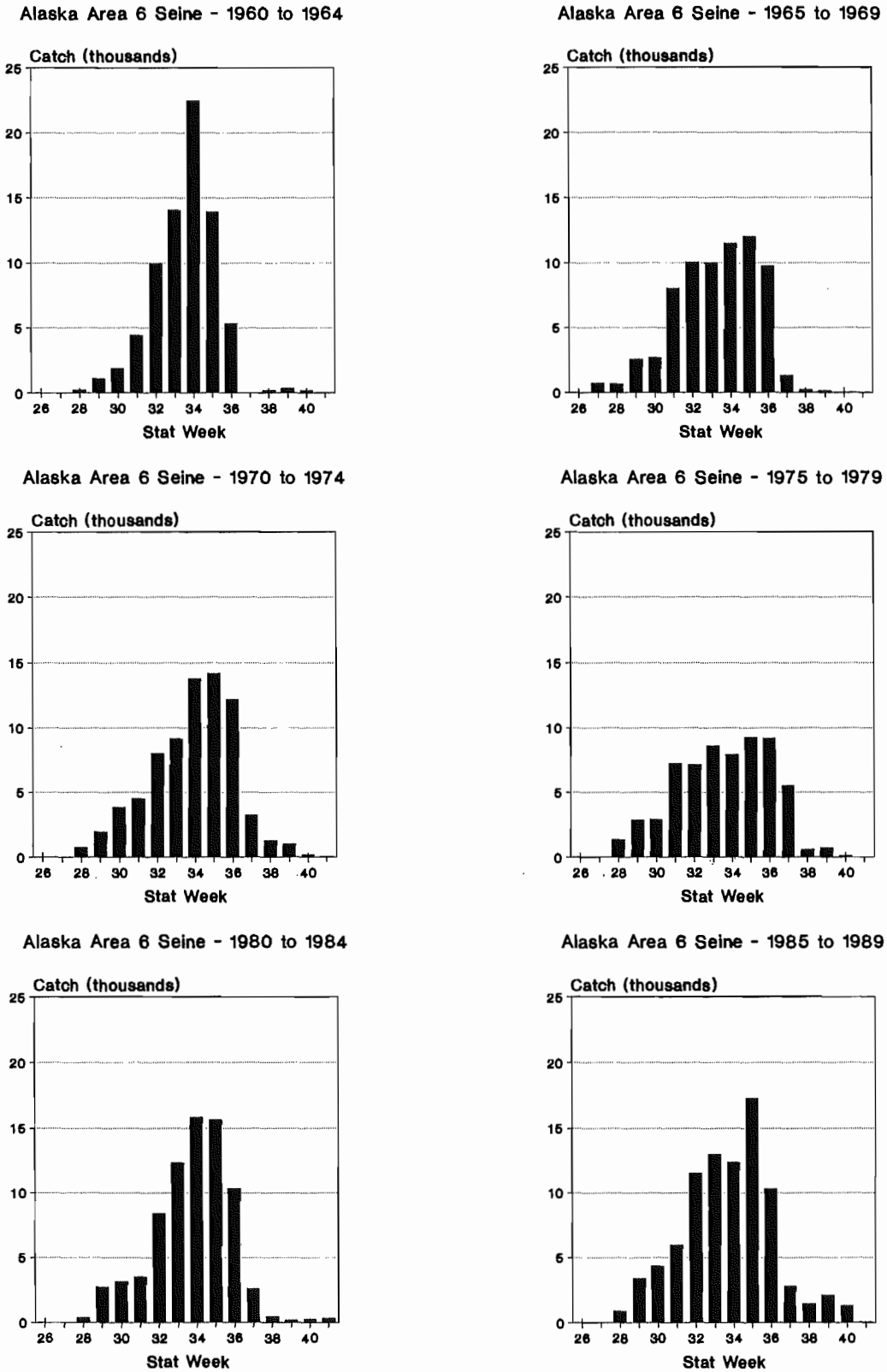
Appendix Figure 21. Southeast Alaska Area 3 purse seine average coho catch by week for 5-year periods, 1960-89.



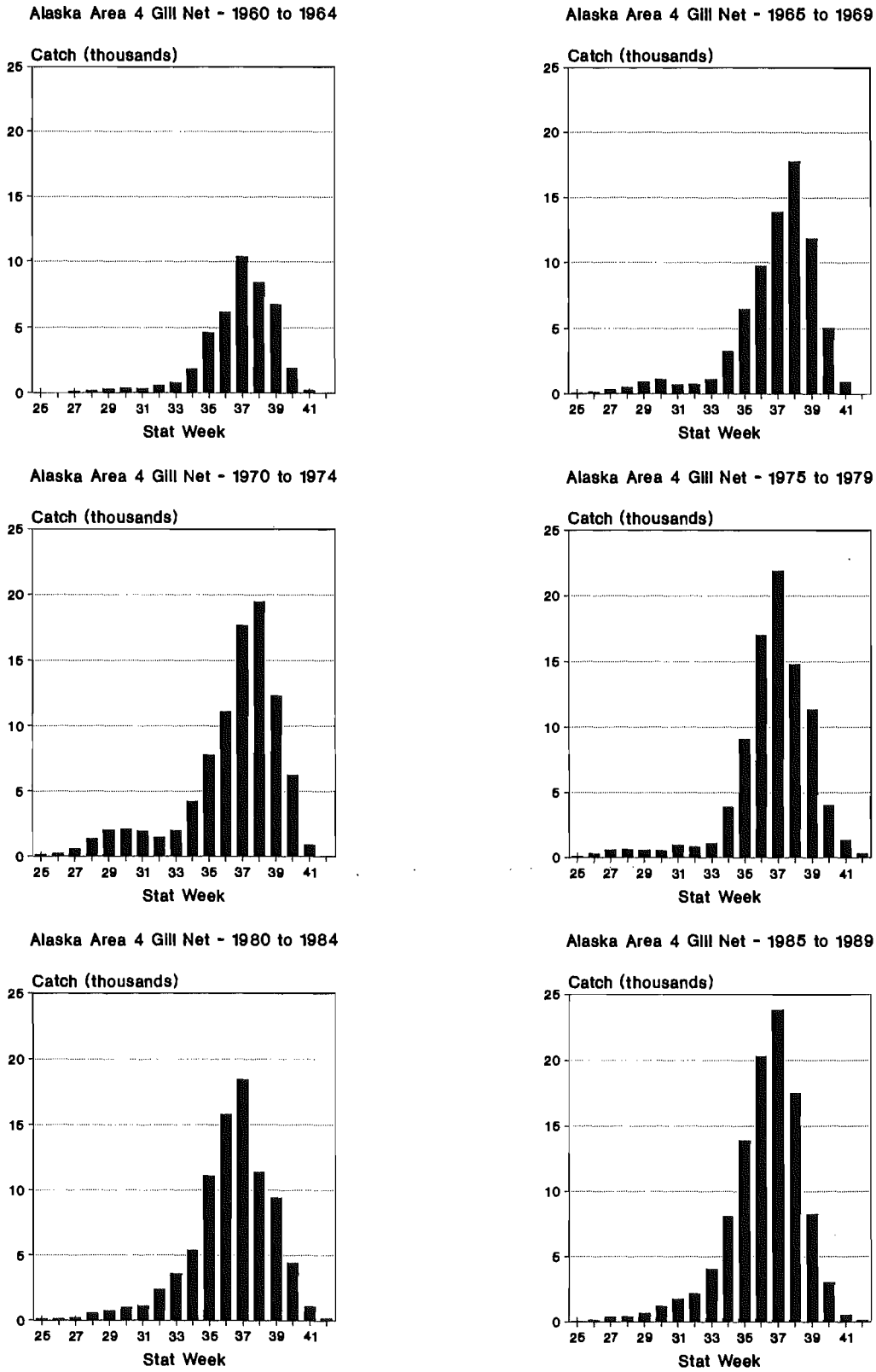
Appendix Figure 22. Southeast Alaska Area 4 purse seine average coho catch by week for 5-year periods, 1960-89.



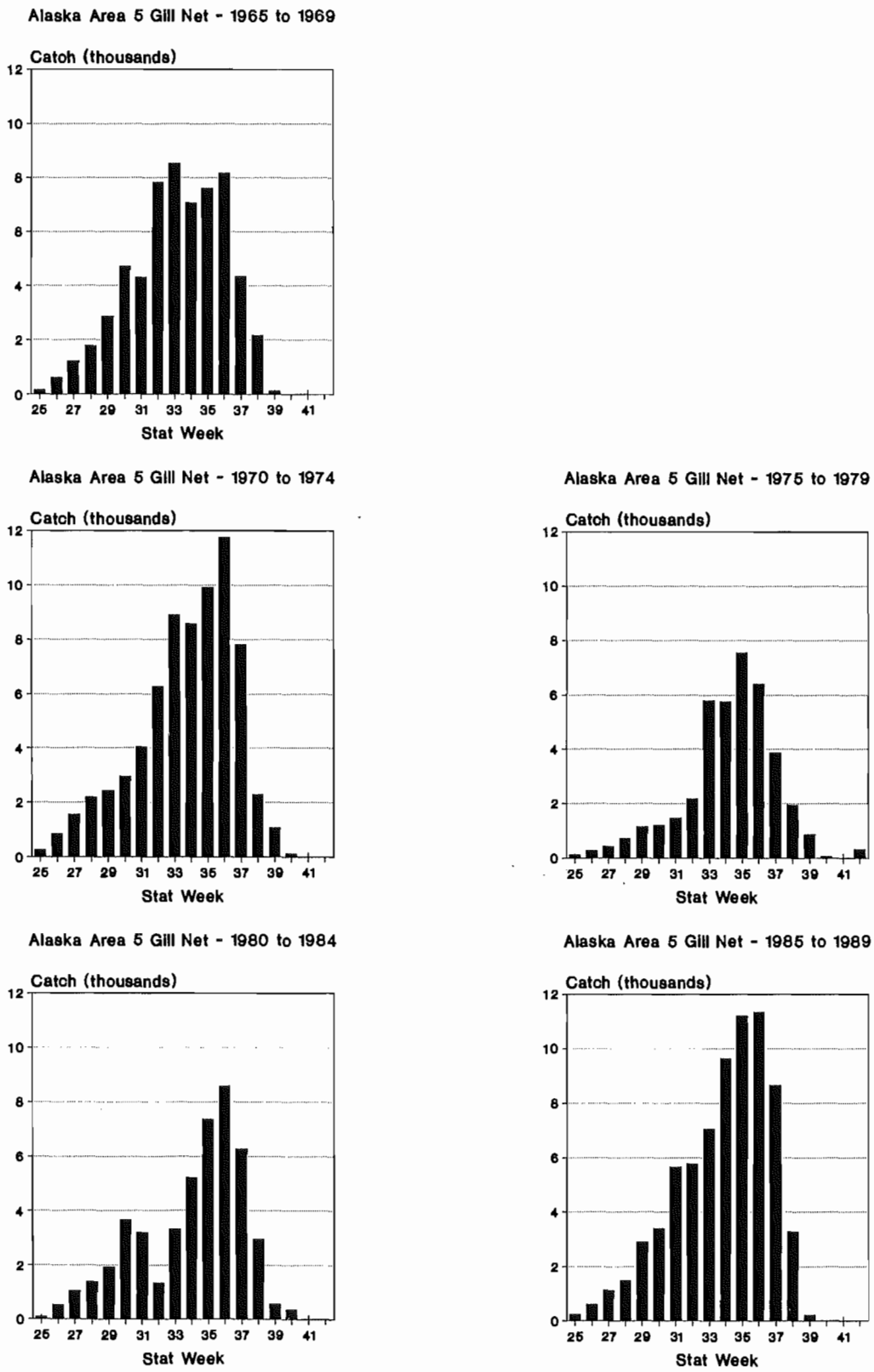
Appendix Figure 23. Southeast Alaska Area 5 purse seine average coho catch by week for 5-year periods, 1960-89.



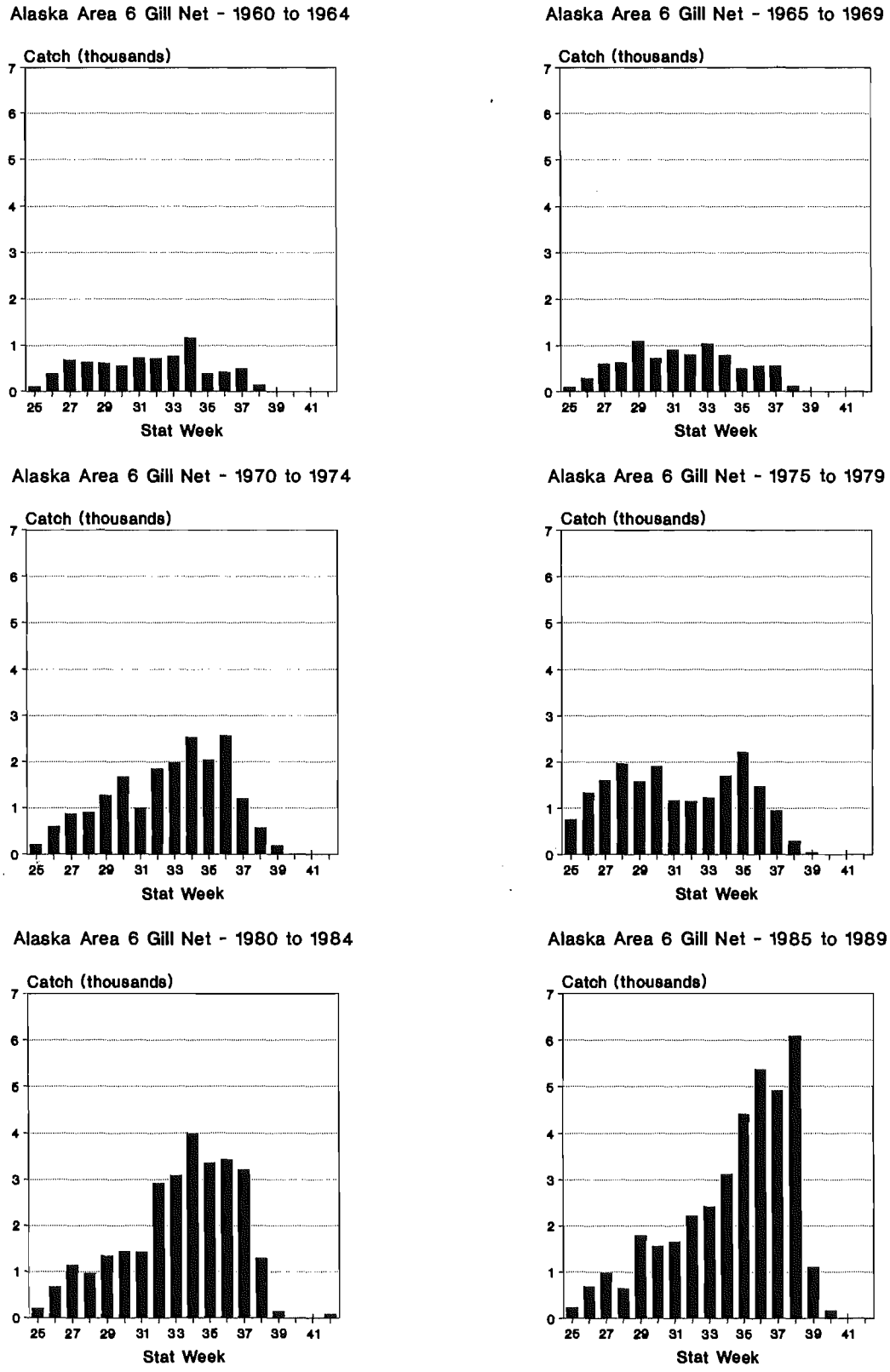
Appendix Figure 24. Southeast Alaska Area 6 purse seine average coho catch by week for 5-year periods, 1960-89.



Appendix Figure 25. Southeast Alaska Area 4 drift gill net average coho catch by week for 5-year periods, 1960-89.



Appendix Figure 26. Southeast Alaska Area 5 drift gill net average coho catch by week for 5-year periods, 1965-89.



Appendix Figure 27. Southeast Alaska Area 6 drift gill net average coho catch by week for 5-year periods, 1960-89.