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**SUMMARY OF DATA AND RESEARCH
PERTAINING TO THE PINK SALMON
POPULATION AT LITTLE PORT WALTER,
ALASKA, 1964-80**

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SUMMARY OF DATA AND RESEARCH PERTAINING TO THE
PINK SALMON POPULATION AT LITTLE PORT WALTER,
ALASKA, 1964-80

by

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Figure 1. Little Port Walter, Alaska, showing the location of the research station and associated facilities. A, barrier waterfall on Sashin Creek; B, U.S. Geological Survey stream-discharge gauge and water-temperature recording station; C, location where National Marine Fisheries Service measured water-temperature of stream. ---- 3

ABSTRACT

Since 1934, there has been a fisheries research station at Sashin Creek on Little Port Walter Bay, southeastern Alaska. This report, which updates a previous data report (Olson and McNeil 1967), summarizes in tables the data collected at the station between 1964 and 1980 on the freshwater ecology of pink salmon, Oncorhynchus gorbuscha. We have also included a list of published and unpublished reports that describe research on pink salmon at Little Port Walter since 1964.

INTRODUCTION

In 1934, the U.S. Bureau of Fisheries established a research station near Sashin Creek at Little Port Walter, Baranof Island, in southeastern Alaska (Figure 1). The original purpose of the station was to study the freshwater ecology of pink salmon, Oncorhynchus gorbuscha.

Over the years, the objectives of research at the station have changed. Under the auspices of the National Marine Fisheries Service, research programs are now directed primarily toward development and evaluation of aquaculture technology for Pacific salmon.

Certain parameters of the pink salmon population in Sashin Creek have been continuously recorded. Olson and McNeil (1967) summarize the voluminous data collected on pink salmon and the environment at Little Port Walter during the first 30 years the station operated (1934-64). Our report continues their summary for 1964-80.

In addition to tables of data, we have listed data files (Appendix 1) that are currently on computer tapes and are available from the Northwest and Alaska Fisheries Center Auke Bay Laboratory, P.O. Box 155, Auke Bay, Alaska. We have also listed published reports, theses, and unpublished manuscripts involving, in whole or in part, studies on pink salmon at Little Port Walter since 1964 (Appendix 2).

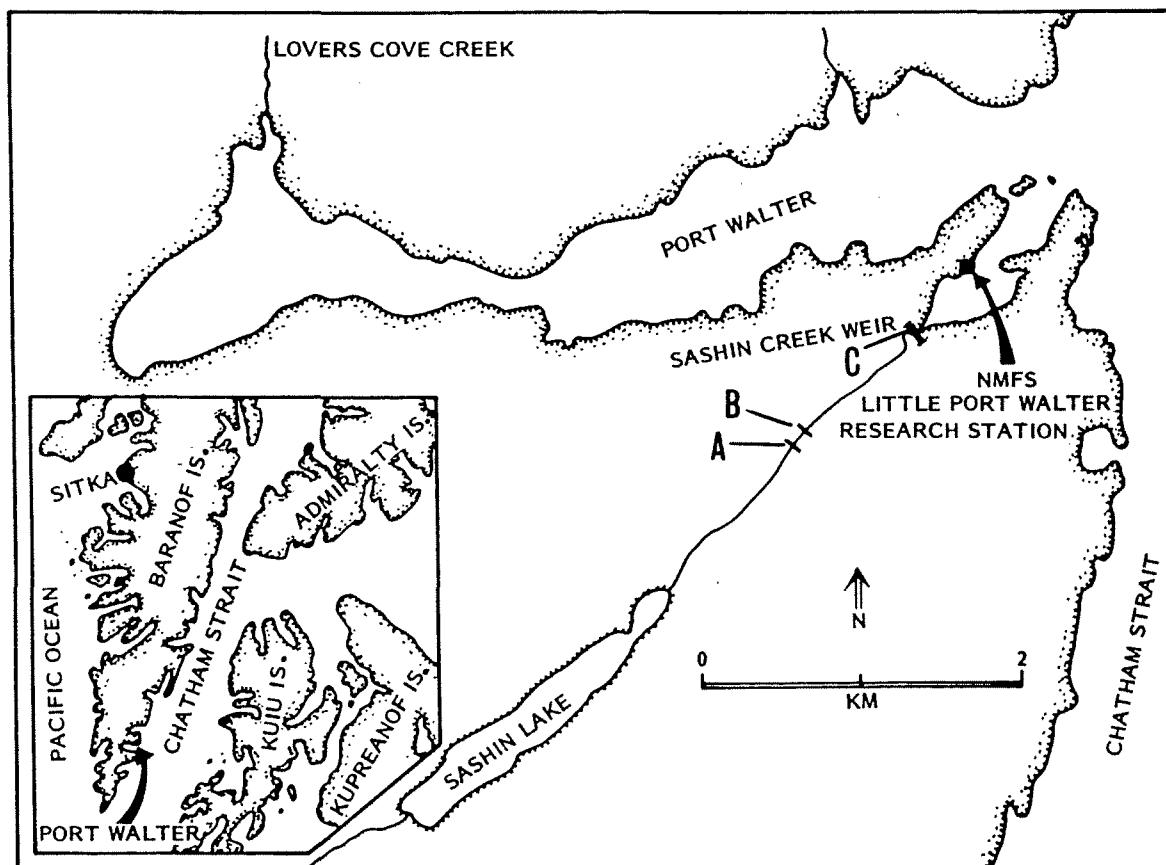


Figure 1.--Little Port Walter, Alaska, showing the location of the research station and associated facilities. A, barrier waterfall on Sashin Creek; B, U.S. Geological Survey stream-discharge gauge and water-temperature recording station; C, location where National Marine Fisheries Service measured water-temperature of stream.

STUDY AREA

The Sashin Creek watershed, a 13.4 km² (5.2 mi²) area, is mountainous and partially timbered; much is muskeg or bare rock. Two large lakes on the watershed, Round Lake and Sashin Lake, flow into and stabilize the discharge of Sashin Creek. The maximum waterflow recorded for Sashin Creek is 2,650 ft³/s; the minimum, 0.75 ft³/s. Sashin Creek, from the outlet of Sashin Lake to Little Port Walter Bay, is about 3 km (2 mi) long. A high waterfall in Sashin Creek about 1.1 km (0.7 mi) above Little Port Walter Bay restricts the salmon to the portion of the stream below the falls.

In 1934, adult salmon were counted at a temporary weir built on Sashin Creek near the mean high tide level. Five years later, a permanent weir was constructed at the same site. The facilities were expanded in 1941 to include a weir for counting pink salmon fry migrating seaward.

Pink salmon have spawned in the intertidal region below the weir when low creek discharge reduced access of fish through the weir into the stream. Olson and McNeil (1967) describe the intertidal zone of Sashin Creek as precipitous and mostly bedrock and state that little or no spawning occurs in this region. Their description is appropriate only for the upper intertidal zone, which extends 40 m downstream from the weir and is inundated by a 3.5 ft. tide (tidal range at Little Port Walter is -3.0-13.0 ft.). The intertidal zone below this level, however, consists of large cobble and substantial spawning did occur in this lower intertidal zone in 1967, 1969, 1975, and 1977.

In 1962, artificial spawning channels were constructed in one branch of Lovers Cove Creek on Big Port Walter Bay (Figure 1). These channels were used from 1962 to 1970 to study various aspects of the freshwater biology of

pink salmon. No data from the Lovers Cove Creek studies are presented here, but several papers (McNeil 1967; Heard 1972, Heard¹; Martin 1973) that deal with this work are listed in Appendix 2.

¹ Heard, W. R. 1973. Studies on 1966 brood year pink salmon, Oncorhynchus gorbuscha, and survival of their progeny in intertidal spawning channels, Lovers Cove Creek, Alaska. Manuscr. Rep. File 177, 45 p. National Marine Fisheries Service, Northwest and Alaska Fisheries Center Auke Bay Laboratory, P.O. Box 155, Auke Bay, AK 99821.

PHYSICAL MEASUREMENTS IN THE LITTLE PORT WALTER AREA

Little Port Walter, a weather station for the U.S. Weather Bureau, has a maritime climate governed by air masses moving from the Gulf of Alaska. Air temperatures do not vary greatly, and the precipitation is heavy (Table 1). The highest temperatures are in August (monthly mean, 54.7°F [12.6°C]); the lowest temperatures are in January (monthly mean, 30.5°F [-0.85°C]).² Average annual precipitation is 220 inches (5,588 mm). October is the wettest month (mean precipitation, 33.85 inches [859.8 mm]); July is the dryest month (mean precipitation, 8.34 inches [211.8 mm]). The average annual snowfall is 136.9 inches (3,477 mm).

Until September 1980, daily minimum and maximum stream heights of Sashin Creek were recorded at a gauging station near the uppermost end of the spawning ground, 950 m upstream from the weir. Personnel at Little Port Walter maintained the station until July 1965. The daily averages of stream heights for August 1964 - June 1965 have been converted to ft³/s by a waterflow rating curve (Olson and McNeil 1967). These waterflows are given in Table 2. From July 1965 to September 1980, the U.S. Geological Survey maintained the station, except for 12 months from October 1973 to September 1974 when no waterflow data on Sashin Creek are available.

Stream temperatures for Sashin Creek have been recorded continuously since 1934 with a Taylor³ thermograph located 76 m upstream from the weir. The U.S. Geological Survey has also recorded stream temperatures at a stream-gauging station since October 1966. Water temperatures recorded by

² Averages obtained from Climatology of the United States #20; Climate of Little Port Walter. 1978. U.S. Weather Bureau. NOAA Environmental Data Service, National Climatic Center, Asheville, N.C.

³ Reference to trade name does not imply endorsement by the National Marine Fisheries Service.

the U.S. Geological Survey, when available, appear in Table 3 and are supplemented by readings from the Taylor thermograph.

Water temperatures at 2 m depth in the estuary at Little Port Walter Bay (Table 4) have been recorded sporadically, usually in connection with fish-husbandry experiments there. Before 1975, estuarine water temperatures were measured with a Taylor recording thermograph; after 1975, a Ryan recording thermograph was used.

ESCAPEMENT AND SURVIVAL OF PINK SALMON

Since 1934, adult pink salmon entering Sashin Creek (escapement) have been counted and classified by sex. Because of the well-developed secondary sexual characteristics of pink salmon entering Sashin Creek (Davidson et al. 1943), adults can be classified by sex with reasonable accuracy. Data on the numbers of pink salmon returning to Sashin Creek are given in Tables 5-7. The data include dates the Sashin Creek weir operated (Table 5), daily counts of adults passing the weir for 1965-80 (Table 6), and the dates (Table 7) when 50% of the run had entered the stream (a parameter that has been correlated with freshwater survival (McNeil 1966)). At the end of the daily record for each year (Table 6), a total count and estimated count are shown. The total count is the actual number of fish counted at the weir. The estimated count includes estimates of fish entering the stream while screens in the weir were being cleaned and estimates of the number of pink salmon that spawned intertidally.

No count of adults passing the weir is listed for 1964. All 1962-brood pink salmon fry leaving Sashin Creek in 1963 were killed (McNeil et al. 1969); therefore, no adults from Sashin Creek returned to the weir in 1964. Of the 2,193 pink salmon that did spawn in Sashin Creek in 1964, 1,866 fish were transported from Bear Harbor on Kuiu Island, southeastern Alaska, and released above the Sashin Creek weir between 25 August and 29 August; 327 fish entered the stream between 30 August and 19 September. Forty of the 327 fish were tagged Bear Harbor fish that were released earlier into the estuary; the remainder were presumably strays from other streams. (The elimination of the 1964 Sashin Creek brood class and the transplant of pink salmon from Bear Harbor to Sashin Creek are summarized in McNeil et al. (1969)).

Average fecundity of female pink salmon in the escapement was estimated each year from fish periodically sampled at the weir. All eggs from each sampled female were counted. Average fecundities for the years 1963-80 are listed in Table 8. When available, the number of females sampled, average length and average weight of the females, and standard deviation of mean values are also given. Fecundity for the 1962 brood is an estimate from McNeil (1968).

Freshwater Survival

Potential egg deposition was determined by multiplying the number of females entering the stream by the average fecundity of the females (Table 8). Potential egg deposition is used to determine overall freshwater survival, the ratio of potential egg deposition to the number of fry that migrate from a stream.

Over the years, the number of fry emigrating from Sashin Creek has been estimated in two ways. Before 1965, and in 1967, the numbers of fry emigrating from Sashin Creek were counted or determined volumetrically at the fry weir (Table 9; dates when the fry weir was operated are given in Table 5). Beginning in 1965, the numbers of fry emigrating from Sashin Creek were estimated by hydraulically sampling the spawning area (Table 9, see McNeil (1964) for method). The estimate is based on 380 sample points (each 0.1-m^2) that are randomly assigned throughout the spawning area. The point estimate and confidence levels attained through this technique are based on the arithmetic mean of the numbers of fry counted at each sample point. In some years, hydraulic sampling was also used to estimate actual egg deposition, i. e. actual number of eggs deposited in the spawning beds and the number of embryos surviving to hatching (Table 9). The annual freshwater-survival data for Sashin Creek from 1962 to 1979, including (when

available) actual number of eggs deposited and the number of eggs that hatched, are presented in Table 9.

Marine Survival

Marine survival, the proportion of fry emigrating that return as adults, has been calculated for fry emigrating directly to the estuary each year either from Sashin Creek or hatchery incubators (Table 10). Beginning with 1971-brood fish, large numbers of hatchery-produced pink salmon fry were released--some marked, others unmarked--into the Little Port Walter estuary. Most of these fry were produced in research programs on hatchery techniques. In years that unmarked hatchery fry were released, the marine survival of unmarked adults is based on the combined total of creek and unmarked hatchery emigrants.

Other pink salmon fry were released from experiments that determined the effects of rearing on marine survival (data are summarized in Table 11). In these experiments, fry from the 1968-, 1973-, 1975-, and 1977-brood years of pink salmon were held and fed for varying lengths of time before release. Fry for experiments with the 1968 brood were captured as they emigrated from Sashin Creek; fry for the other experiments were reared in hatchery incubators. Fry from both the 1968 brood and 1973 brood were cultured in netpens suspended in the Little Port Walter estuary; fry from the 1975 and 1977 broods were reared in vertical raceways (see Heard and Martin 1979).

ACKNOWLEDGMENTS

Steve Ignell compiled the computer files listed in Appendix 1. We also wish to acknowledge the many people at Little Port Walter who have been involved in the collection of this data, especially Richard Crone, Hank Koppelman, and Roger Vallion.

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APPENDIX

APPENDIX 1

Data files for Sashin Creek pink salmon and associated environmental parameters currently summarized and available on computer file at the Northwest and Alaska Fisheries Center Auke Bay Laboratory, P.O. Box 155, Auke Bay, AK 99821. Some of the data span from 1940 through 1978; however, most of the files are from shorter periods and may be discontinuous.

(A) Population statistics.

- (1) Freshwater survival.
- (2) Potential egg deposition.
- (3) Entry time of 50% of spawners.
- (4) Exit time of 50% of fry.
- (5) Yearly residence time in freshwater.
- (6) Yearly residence time in saltwater.

(B) Environmental variables during freshwater residence.

- (1) Mean monthly streamflow of Sashin Creek.
- (2) Mean monthly temperature of Sashin Creek.
- (3) Mean monthly rainfall at Little Port Walter.
- (4) Mean monthly snowfall at Little Port Walter.
- (5) Mean, maximum, and minimum streamflow of Sashin Creek for 30 days after 50% of the spawners had passed the weir.
- (6) Mean, maximum, and minimum stream temperature of Sashin Creek for 30 days after 50% of the spawners had passed the weir.
- (7) The minimum monthly streamflow of Sashin Creek between December and March.

(C) Environmental variables during the saltwater residence of Sashin Creek pink salmon.

- (1) Sea-surface temperature at Cape Decision.
- (2) Mean surface temperature of the Little Port Walter estuary 1-30 days, 31-60 days, 61-90 days, 91-120 days after 50% of the fry had emigrated past the weir.
- (3) Upwelling indices for Gulf of Alaska, long. 137° W., lat. 57° N. (Bakun 1973) coastal upwelling indices, western coast of North America 1946-71.
- (4) Sea-surface temperature, dew point, and cloud cover for Marsden square 195.

APPENDIX 2

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Table 1.--Daily precipitation and monthly totals (inches), Little Port Walter, Alaska, August 1964 through September 1980.

1964 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1								0.09	0	2.17	0.84	0.24
2								0.05	0	0.62	1.88	0
3								0.02	0	0.16	0.74	0.17
4								0	0	0.62	0.51	1.36
5								0.01	0	0	5.30	6.22
6								0.01	0	0.03	0.61	14.84
7								0.18	0	0	0.29	2.33
8								0.12	0	1.21	1.18	1.11
9								0	0	1.15	2.41	0.27
10								0.53	0	0.77	0.82	0.28
11								0.04	0	1.37	1.54	0.06
12								1.64	0.03	2.90	0.46	0.87
13								1.36	2.38	2.35	0	0.64
14								1.15	0.84	1.65	2.26	0.21
15								3.14	2.09	0.76	2.05	0.19
16								0.74	1.06	1.12	0.29	0.42
17								0.11	0.15	0.25	0.99	1.69
18								0.15	.21	4.73	0.16	0.16
19								1.05	1.26	0.73	0.13	0
20								0.02	0.26	0.02	1.29	0
21								0	1.20	1.19	1.05	0
22								0	0.70	1.82	0.38	0
23								2.89	0.04	0.68	1.13	0
24								1.36	0.02	0.23	0	0.17
25								1.19	0	0.08	0	0.55
26								1.18	1.64	0.48	0	0.17
27								0.35	0	3.58	0	0.02
28								1.51	0.45	0	0	0.04
29								0.88	2.56	0	0	0
30								0	1.61	0.31	0.04	0
31								0.02	--	0.71	--	1.50
Total								19.79	17.50	31.69	26.35	33.51

Table 1.--Continued.

1965 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.65	0.02	4.44	0	0	0.05	0.07	0	0	0.13	1.00	1.23
2	0	0	4.47	0.03	5.32	0.63	0	0	0	1.78	1.29	0.60
3	0.13	2.27	0.03	5.37	0.71	0.35	0.84	0	0	6.05	0.24	0.38
4	0	2.09	0	0.31	0.07	0.39	0.17	0	0	1.01	1.08	0.73
5	0	0.28	0.02	0	0	0.07	0	0	0	1.00	0	1.43
6	0.06	0.55	0.01	0	2.99	0	0	0	0	3.32	0	1.29
7	2.09	0.68	0.03	0	1.15	0	0	0	0	2.80	0	1.40
8	0.16	0.06	0	0.01	0.12	0	0	0.04	0	0.62	0	0.72
9	0.54	0.40	0	0.20	0.97	0.74	0	0	0	0.15	0.02	0.60
10	0.58	0.46	0	0	0.34	0.12	0	0	0	0.04	0	2.88
11	1.27	0.04	0	2.55	0	2.12	0	0.11	0	4.19	0	0.05
12	6.10	2.78	0	0.36	0.03	0.27	0	0	0	0.12	0	1.55
13	1.30	0.66	0	0	0	0	0.45	0	0	2.97	0	0.21
14	2.81	0.86	0	0	0.26	0	0.02	0	0.09	1.25	0	4.90
15	7.30	0.68	0	0	0.48	0	0	0	0.17	0.36	0.33	0.33
16	1.55	0.04	0	0	0	1.11	0	0	0.27	2.49	0	2.22
17	2.97	0.62	0	0.04	0	0.03	0	0	0.01	1.76	0	2.18
18	2.97	1.70	0	0	0	0.07	0.35	0	0	0.27	0	0.09
19	2.04	0.50	0.27	0	0	2.08	0.53	0	0	0.58	0	2.12
20	0.09	1.68	0.04	0	0	0.72	0.06	0	0.54	1.74	0.97	0.80
21	0.74	0.23	0	0.52	0	0.19	0.22	0	0.02	0.74	0	0.48
22	0.81	0.67	0	1.23	0	0.04	0	0	0	5.69	0	2.78
23	1.16	1.71	0	1.47	0	0.67	0.05	0	0	0.85	0	0.44
24	0.04	0.67	0	0.06	0.17	1.42	0.25	0	0.14	2.51	0	0
25	0.02	0.42	0	0.72	0.30	0	0	0	0	0.22	0.62	0.07
26	0.06	0.06	0	2.32	0	0	1.85	0.13	0	3.06	0	0
27	0.63	0.10	0.11	1.54	0	0.04	0.05	0	0.36	3.34	3.07	0
28	2.86	0.76	0.06	0.72	0	0.03	0	0	0	1.48	1.54	0
29	0.96	--	0	0.54	0	0	0	1.04	0.15	0.91	4.82	0
30	0.42	--	0.65	0	0	0	0	3.64	0.18	2.06	0.98	0
31	0	--	1.35	--	1.15	--	0	0.36	--	3.68	--	0
Total	40.31	20.99	11.48	17.99	14.06	11.14	4.91	5.32	1.93	57.17	15.96	29.48

Table 1.--Continued.

1966 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.69	1.64	0.01	1.32	3.60	0	0.01	2.04	0.50	0	4.42	0
2	0	0.28	0.02	0.80	4.78	0	0	0.68	0.19	0.37	0.68	0
3	0	0.81	0.01	0.25	0.74	0	0	0	2.55	1.09	0.44	0
4	0	0	0	0	2.52	0	0	0	2.23	2.34	2.43	0
5	0	0	0.32	0	3.75	0	0	0	0.31	0.43	0.35	0
6	0	0.41	0	0	0.16	0	0	0	0.53	1.06	0.03	0
7	0	1.02	0.01	0	0.97	0	0	1.62	2.13	4.27	0	0
8	0	1.01	0.45	0	0.98	0	0	2.86	0.26	1.28	2.02	0.04
9	0	0.22	0.78	0	0	0.90	0.94	1.71	0.72	3.33	1.79	1.92
10	0	1.40	0.48	0	0	0.16	0	0	0	0.56	0.50	0.35
11	0	0.17	0.39	0	2.74	0.80	0	0.02	0	0.16	1.90	0.63
12	0.97	0	0.98	0	0.14	0.13	0	0.28	0	0.04	0.50	3.78
13	1.09	0	1.01	0.68	0.04	0	0	0.16	0.34	4.01	0.25	0.33
14	0.06	0	0.39	0.65	0.94	0	0	2.40	0	0.71	0.25	1.15
15	3.88	0.86	0.04	0.28	0.47	0.48	0	0.56	2.14	5.33	0.30	2.84
16	2.36	0.21	0.02	0.05	0.04	0.55	0	0.32	0.90	0.88	0.35	0.09
17	1.88	0.03	0.25	0	1.43	0.26	0.20	0.02	0.57	0.58	0.25	3.20
18	0	1.03	0.07	0	6.14	0.52	Trace	0.01	0.27	6.32	0.04	1.09
19	0.54	0.41	0.60	0.03	0.57	0.01	Trace	0.01	3.64	0.85	0.02	1.01
20	0	0	0.06	0	0.34	0.02	0.09	0.29	0.91	0.32	0.66	0.35
21	0	0.45	0.17	0.57	0	0	0.01	0	2.73	0.12	0.37	1.09
22	0	4.08	3.96	1.06	1.65	0	0	0.03	0	1.00	0.20	0.33
23	0	0.27	1.85	0.13	0.25	0	0	0.31	0	0.05	0.04	0.98
24	0.25	0.96	2.80	0.02	0.02	0	0	0	0.15	0.34	2.95	1.15
25	1.10	1.27	4.42	0	0.08	0	0	0	1.38	0.26	0.74	0
26	1.01	0.37	2.67	0	0	0.10	0.01	0	3.49	0	0.12	0.04
27	0	0.03	0.93	0	0.15	0	0.46	0	1.47	0.53	0.15	1.48
28	0.18	0	4.31	0	0.26	0.01	0.07	0	0.53	1.37	0	2.25
29	0.04	--	2.30	0	0.06	0.19	0	0	2.54	2.51	0	0.13
30	0	--	0.88	0.18	0	0	0	0	1.54	0.47	0	2.04
31	0.03	--	0.28	--	0	--	4.37	2.26	--	1.72	--	1.53
Total	14.08	16.93	30.46	6.02	32.82	4.13	6.16	15.58	32.02	42.30	21.75	27.80

Table 1.--Continued.

1967 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.37	0.38	0.11	0	0	0.09	0		2.12	0.62	0.07	0.34
2	1.75	1.24	0.09	0.30	0	0	0		2.57	0	0	0.37
3	0.16	0.64	0.04	0.32	0	0	0.04		1.84	0	0	0.61
4	0.26	1.80	0	0	0	0	0		0.81	0.09	0.01	1.00
5	1.87	0.91	0	0	1.10	0	0.52		0.50	0.44	0	0.04
6	1.83	1.00	0	0.10	0.01	0	0.70		0.59	0.59	1.67	0
7	1.61	1.35	1.28	0	0	0	1.28		1.72	0	0.95	0.29
8	0.43	1.47	0.89	0.87	0	0	0.76		4.09	1.86	2.90	2.05
9	3.65	1.47	0	0.34	0	0	0.17		0.77	5.51	0.04	0.65
10	1.87	0.47	0	0.03	0	0.33	1.39		0.37	1.38	0	0.74
11	1.02	1.71	0	1.37	0	0.03	2.02		0	0.78	0	0.21
12	0.27	0.78	0	0.41	0	0	0		6.24	0.74	0	0.12
13	0.53	0	0	0	2.06	0.02	0.04		1.06	0.57	0.15	2.40
14	0.08	0.83	0	0	1.72	0.48	0.06		3.50	0.90	0.57	5.36
15	1.83	0	0	1.18	0.21	0.04	0		1.50	3.65	0.78	1.11
16	0.18	0	0	0	1.45	0	0.26		0.02	0.48	0.74	0.11
17	0.27	1.35	0.04	0	0.06	0	0		0.90	0.39	0.54	0
18	0.87	0.12	0	0	0.15	0	0		1.78	2.12	0.07	0
19	0	1.14	0.67	0	0	0.04	0		0.28	2.07	2.18	0
20	0	2.12	0.38	0	1.78	0	0		0	1.69	0	0
21	0	0.03	0	0	0.74	0	0.27		0.04	1.62	1.64	0
22	0	0.87	0	0	2.04	0	0.90		1.40	1.62	1.28	0.42
23	0	0.63	0	0	0	0	0.02		0.58	0.69	2.81	0.92
24	0	2.06	0	0.15	0	0	0		0.09	1.05	1.04	0.30
25	0	0.11	0	0	0	0	0		0.62	1.10	0.11	0.48
26	0	2.80	0	0	0.22	0	0.29		1.91	1.27	0	2.35
27	0	1.18	0.69	0	0.60	0.20	0.38		1.62	1.27	0	0.48
28	0.18	0.48	0.09	0	0.38	1.25	0.22		0	0.74	1.05	0
29	0.20	--	0	0	0.03	0.66	0.22		0.34	1.51	0	0
30	0.95	--	0	0	0	0.11	0.03		0.12	1.15	0.35	0
31	0.93	--	0	--	0	--	0		--	0.35	--	0.17
Total	21.11	26.94	4.28	5.07	12.55	3.25	9.57		37.38	36.25	18.95	20.52

Table 1.--Continued.

1968 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	0.06	1.95	0	0.25	0.43	0	0	0.10	0.13	1.85	0.14
2	0	0	1.34	0	0.34	1.87	0	0	0	4.57	0.80	0.67
3	0.89	0.84	1.84	0.91	0.06	0.65	0	0	0.86	1.03	0.70	0.86
4	0.10	0.47	2.67	0.65	0	0.15	0.22	0	0.63	2.00	0.11	0.38
5	0	2.27	2.32	1.45	0	0	0.33	0	2.25	2.10	2.28	0.29
6	0.40	5.04	0.05	0.42	0	0	0	0	0.40	0.05	0.12	1.22
7	0	0.53	0.53	0.65	0.05	0	0.60	0	2.50	0.03	0.25	0.72
8	0	0.23	0.56	1.31	0	0.05	1.13	0.30	0.39	0.04	2.44	0.27
9	0	1.39	0.06	0.12	0	0.02	0.09	0	2.32	0	1.16	0.61
10	0	0	0.25	0.18	0	0.04	0.41	0	2.07	0	1.08	0.70
11	0	0	0.35	0	0	0	0.83	0	1.60	0	0.37	0.02
12	0	0	0.31	1.31	0	0	0.73	0.12	1.19	0	0.03	1.96
13	0.04	0	0.04	1.55	0	0	0.14	0	0.95	0.03	0.59	0.36
14	0.13	0	0	0.07	0	0	0	0	1.59	0.02	0.11	0.50
15	0.87	0	0.03	0	0.05	0	0	0.04	0.13	0.03	0.04	0.27
16	0.30	0	0	0.12	0.04	0.07	0	1.30	1.43	4.02	0	1.10
17	0.81	0	0.25	5.44	0	0.39	0	2.06	0.15	1.30	0.67	0.14
18	0.28	0	0.27	0.64	0	0.97	0	1.07	0	2.02	2.24	0.39
19	0.39	0.88	2.95	0.17	0	1.65	0	0	0	1.42	1.35	0.04
20	0	3.37	1.62	0	0.33	1.20	0	0	0.24	0.04	0.16	0
21	0.11	2.04	0.78	0.83	0.22	0	0.02	2.07	1.02	1.52	1.31	0
22	1.71	2.31	0.40	1.58	0.07	0	0	0.77	0.28	1.22	1.63	0
23	4.54	0	0.40	1.19	0.88	0	0	0.79	1.37	2.80	0.51	0
24	0.60	0.38	0	2.54	0.63	1.67	0	0.02	6.26	0.45	0	0
25	0	2.41	0.18	0.87	0.49	0.20	0	0	0.33	0.12	2.58	0
26	0	1.63	1.13	1.19	1.19	0.07	0.53	0	0.01	0.30	1.25	0
27	0.23	0.13	0.80	0.04	0	0.19	0.87	0	6.30	1.73	0.02	0
28	0	0.78	0.63	1.02	0	0.04	0.66	1.38	4.43	0	1.63	0
29	0	0.04	0	0.25	0	0	0	2.53	0.43	0	1.05	0
30	0	--	0.22	0.15	0	0	0	6.02	0.25	0	1.23	0.01
31	0	--	0	--	0	--	0	5.35	--	2.23	--	0
Total	11.40	24.80	21.93	24.65	4.60	9.66	6.56	23.82	39.48	29.20	27.56	10.65

Table 1.--Continued.

1969 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	1.07	0	0.19	0.37	0.32	0	0.34	0	0.46	3.35	0.18
2	0.91	0.23	0.38	0.24	0.95	1.90	0.11	0	0	0.02	4.17	1.61
3	2.92	0.31	0.55	0.15	0.48	0.53	0.01	0	0	1.11	0.07	0.46
4	0.32	0	0.87	0.19	2.04	0.31	0	0	0	3.91	0.11	0.29
5	0.31	0.08	0.43	0	0.98	0	0	0	0.02	0.83	0	0.61
6	1.42	0.17	0	0	0.02	0	0.24	0.04	0.91	0.02	1.67	2.48
7	0	1.14	0.08	1.00	1.49	0	0.11	0	0.79	0.94	0.78	8.19
8	0.47	0.08	0.38	2.12	0.04	0	2.13	0.26	0.17	0.46	1.01	1.60
9	0.14	5.03	0.13	0.12	0	0	9.55	0.15	6.00	1.65	1.81	1.75
10	0.04	0.10	0	0.42	0.64	0	2.86	0.36	4.69	0.07	0.28	0.11
11	0.04	0.54	0.31	0.52	0.51	0	0.48	1.56	2.22	Trace	0.93	0.07
12	0.02	0	0.04	0.09	0	0	0.23	0.17	0.06	0	0.46	1.49
13	0	0	0.66	0	0	0	0.11	2.10	0	0	2.56	1.08
14	0	0	1.63	0.49	0	0	0.05	0.30	0	0	0.63	0.80
15	0	0	0.55	2.05	0	0	0	0.24	0	0	0	0.09
16	0	0.04	0	4.33	0	0	0	1.08	0.61	0	0.26	0
17	0	0.37	0	0.96	0	0	0	3.22	0.54	0	0.11	0
18	0	0.66	0	0.87	0	0	0	0.73	0	1.14	0.10	0.35
19	0	0	0.10	0.40	0	0	0.32	0.04	0	0.12	0.86	0
20	0	0.56	0.90	0.82	0	0	0.61	0.28	0	1.16	0.64	0
21	0	1.05	0.45	0.77	0.21	0.02	1.20	0.02	1.83	0.43	0.93	0
22	0.29	0.57	0.80	2.83	0	0.18	0.06	0.02	0.25	0.05	1.47	0.39
23	0.28	0	0.27	0	0	0.18	1.48	0	0.37	0.12	2.88	0.24
24	0	0	3.13	0.12	0.12	0.04	0.06	0	0.02	0	0.78	0.63
25	0	0	0.85	0.27	0.18	0	0.73	0	0.04	0	0.14	1.05
26	0	0	0.28	2.02	0	0	0.06	0.20	0	0	5.71	0
27	0	0	0	0.16	0	0	0	0	0.02	0	0.11	1.59
28	0.08	0	0	0	0	0	0	0	0.37	0	9.08	2.58
29	0	--	0	0	0.17	0	0.17	0.21	1.79	2.24	0.87	0.08
30	2.79	--	0.70	0	0.02	0	0.42	0.99	4.78	2.26	0.64	1.72
31	1.76	--	0.60	--	1.51	--	0.06	1.47	--	4.73	--	2.54
Total	11.79	12.00	14.09	21.13	9.73	3.48	21.05	13.78	25.48	21.72	42.41	31.98

Table 1.--Continued.

1970 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.92	0.10	0	0.18	0	0.40	1.34	0	0.98	0.80	1.63	0
2	0.14	3.43	0	0	0.38	1.51	0.04	0	2.98	0.42	0.02	0.04
3	0	0.55	0.78	2.51	0.03	1.57	0.91	0.01	0.30	0.20	0	0.01
4	0.04	2.52	0.11	0.40	0.40	0.27	0.02	0.02	0.78	0.06	0	0.09
5	0.07	2.58	1.54	1.18	1.64	0	1.16	0	1.09	0	0	0.31
6	1.66	0.99	0.25	0.55	1.03	0.01	2.73	0.03	0.15	0.03	0	0.36
7	0.07	0.98	0.47	0.23	2.33	0.26	2.06	0.02	0.23	1.34	0	0.36
8	0	0	0.45	1.88	0.22	0.67	0.13	2.65	0.19	0.16	0	0.61
9	0	0.09	0.11	1.17	0.01	0.08	0.04	0.03	0.18	0	0.24	0.73
10	0	0.04	0	0.31	0	0.03	0	0.20	0	1.51	2.39	1.23
11	0	0	0	0.15	0	0	0	2.40	0	0.09	3.14	2.04
12	0	0	0.68	0	0	0	0	1.41	0	0.70	0.45	0.89
13	0.38	0	1.47	0	1.77	0.13	0.85	0.01	0	0.07	0.87	1.12
14	0.02	0	0.52	0	0.10	0	1.73	5.55	0	0.49	3.60	0.50
15	0.09	0.49	1.43	0	0.28	0	0.02	0.37	0.04	3.90	1.72	0.81
16	0.33	0	0.26	0.68	0.42	0	0.07	0.02	1.86	0.12	0.12	0
17	0	0.36	0.21	1.18	0.04	0	1.59	0.01	1.31	0.12	0.68	0
18	0.02	2.14	3.10	0.03	0.09	0	0.16	0.44	0.41	0.48	0.42	0.01
19	0.48	3.56	0	0	0.37	0	0.12	1.69	0.03	2.22	0.04	0.57
20	0.83	2.59	0	0	0.02	0	0.60	0.02	0.06	0.27	0	0.09
21	2.54	0.16	1.66	0.54	1.50	0.01	0	0.84	0.84	0.67	0.91	0
22	4.46	1.21	0.61	0.73	1.22	0.08	1.54	0	0.39	0.91	1.31	0.10
23	0.43	0.24	1.93	1.48	0.10	0.56	0.10	0	0.04	0.46	0.08	0.12
24	1.65	1.34	0.18	0.40	3.57	1.17	0.02	0	0.96	0.21	0.03	0.69
25	1.03	0	1.80	0	0.92	1.46	0	0	0.87	1.90	0.10	0.33
26	1.00	0	0.67	0	0.13	0.65	0	0	1.67	1.24	0.14	1.05
27	0.18	0	0.37	0.04	0.01	0.49	0	0	1.41	0.80	0	0.39
28	3.55	0	0.26	2.25	0	0	0	0	1.11	1.95	0.11	0.67
29	2.11	--	0	0.06	0	0.02	0	0.97	3.91	4.18	0.51	0.23
30	0.86	--	0.03	2.45	0.05	0.72	0	0.05	0.70	4.64	0	0.95
31	1.59	--	0.86	--	1.82	--	0	0.05	--	0.54	--	1.03
Total	24.45	23.37	19.75	18.40	18.45	10.09	15.23	16.79	22.49	30.48	18.51	15.33

Table 1.--Continued.

1971 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.74	0.04	0.43	1.00	0.28	0.02	0	0	0.35	0.62	0.13	0.24
2	0	0.47	1.64	0.22	0.07	0	0.47	0.27	0.02	0.03	0.49	0.02
3	0.97	0.84	0.51	2.59	1.68	0	0.51	0.81	4.22	0.28	0.84	0.07
4	3.70	0	0.46	0.39	0.01	0	0.58	0.09	1.66	0.79	0	1.24
5	2.46	0.02	0.26	0.43	0	0	0.01	0	4.04	1.78	0	0.11
6	1.65	0.01	3.02	1.35	1.41	0	0	0	0.35	0.14	1.83	0.37
7	1.47	0.54	0.31	0.48	1.72	0.02	0	0.06	3.27	0.08	1.37	2.15
8	0	1.27	1.38	0.55	0.23	0	0	0	1.52	3.30	0.66	0.72
9	0	1.32	0.90	0	0	0.72	0	0	0.94	0.01	0.35	0
10	0	0	0.18	0	4.39	0.92	0	0	3.23	1.37	0	0.03
11	0	1.76	0.73	0.02	4.28	0.65	0	0	2.43	0.28	3.07	1.08
12	0	1.38	0	0.12	0.15	0.06	0	0	1.48	0.91	0.61	0
13	0	1.85	0	0.10	0	0	0	0	0.19	0.44	0	0.59
14	0.01	2.78	0.92	0.97	0	0	0.02	0	0	0.62	1.16	0.05
15	0.01	0.85	0.70	0.10	0	0	0.52	0.07	0.11	0	1.09	0.18
16	0.05	0.34	0.07	0.34	0	0	0.48	0.84	0.19	2.00	1.96	2.16
17	0.56	0.09	0.14	0.42	0	0	0	0.77	0	0.46	0.85	0
18	0.63	0.29	2.07	2.33	0.64	0	0	3.09	0.02	0.68	3.02	0.57
19	0.39	0.04	0.22	0	0	0.06	0	3.11	0	0.10	0.54	0.29
20	0.55	2.18	0	0	0	0.53	0.11	0.63	0	0.35	0.83	0.18
21	0.95	2.53	0.04	0	0.81	0.07	0	3.54	0	0.84	0.36	0
22	0.04	0.06	0	0.10	0	0.73	0	1.83	0	0.48	0.33	0
23	0.18	2.07	0.77	0.30	1.17	0.28	0	3.95	0	0.59	1.17	0
24	1.25	0.17	0.02	0	0.08	0	0	3.17	0	1.00	1.37	0
25	0.19	0.48	0	0	0.09	0	0	1.83	0	0.35	0.28	0
26	0.79	0.68	0	0.09	0.08	0	0	0.79	0	0.01	0.63	0
27	0.95	0.04	0.03	0	--	0	0	0	0	0	0.20	0.41
28	0.04	0.07	0.89	0	1.34	0.02	0	0.30	0	1.48	0.05	0.38
29	0	--	0.59	0.08	0.04	0.17	0	0.02	0	4.10	1.31	--
30	0	--	0	0.23	0	0.05	0	0.42	1.35	0.30	0.61	--
31	0.02	--	0.19	--	--	--	0	0.08	--	1.40	--	--
Total	17.60	22.17	16.47	12.21	18.46	4.30	2.70	25.67	25.37	24.79	25.11	13.72

Table 1.--Continued.

1972 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.04	0	0.02	0	0.04	0.93	0	0	0	0.12	0.18	0.05
2	0.28	0.01	1.96	0	0.07	0.29	0	0.47	0	4.31	0.08	0.02
3	2.73	0	0	0.01	0	1.27	0	3.57	0	0.82	0.24	0
4	1.07	0.10	0.71	0	0	1.52	0	1.49	0	0.38	0.18	0
5	1.20	0.14	3.09	0	0	1.42	0	2.84	0	8.12	1.07	0
6	0.35	1.38	0.41	0.17	0	0.57	0	0.07	0.60	3.06	0	0
7	0.68	1.33	0.38	0.55	0	0.68	0	0.42	0.18	0.01	0	0
8	1.78	1.08	0.43	0	0	0	0	0.08	0.20	0.01	1.90	0
9	1.03	3.62	1.54	0	0	0	0	0.02	0	0	2.65	0
10	0.36	0.06	1.33	0.72	0.49	0	0.04	0	0.16	0	0.52	0.25
11	0.13	1.46	1.05	0.14	0.97	0.07	0	0	0.09	0	0.15	0
12	0.02	2.54	2.75	0	0.15	0.10	1.45	0	0	1.39	0.09	0.03
13	0.52	0.07	1.39	0.04	0.04	0.23	0.52	0	0.71	0.03	0.10	0.06
14	2.52	0.89	1.98	0.09	0	0.04	0.24	0.63	2.31	0	0.09	0.88
15	1.77	0.87	0.72	0.56	0	0.25	0.16	0.85	0.90	0	0.27	4.11
16	0.66	0.25	1.45	0	0.54	0.04	0.16	0.55	0.22	0	0.28	2.42
17	0.14	0.38	0.35	0.44	0	0	0.17	0.06	0.43	0.01	0.04	0.92
18	0.04	0.28	0.82	2.05	0.09	0	0	0	0.08	0.52	0	0.93
19	0.12	0.39	1.61	0.47	0.48	0	0	0	0	0	0.73	0.04
20	0	1.32	0	0.18	0.44	0	0	0	0	0	5.88	0
21	0	0.34	0	0.54	0	0	0	0	0	0.11	6.77	0
22	0	0.36	0.63	0	0.01	0	0	0.28	0	2.10	2.63	0
23	0	0	0.04	1.21	0	0	0	6.10	0	4.84	1.01	0.78
24	0	0.09	0	1.60	0	0	0	0.25	0	1.40	0.30	0.75
25	0	0	0	0.19	0.40	0	0.02	1.84	0	0.69	2.47	1.50
26	0	0	0	1.69	0.98	0.19	1.60	1.07	0	0.01	0.84	0.48
27	0	0	0	0	0.08	0.29	2.11	0.09	0.83	0.26	0	0
28	0	0	0	0	0.07	0.55	2.31	2.03	1.57	0	0.92	0.36
29	0	0	0	0	0.07	0.42	0.02	0.43	5.19	1.40	0.73	3.24
30	0	--	0.42	0	0.62	0	0	0.52	1.47	1.66	0.51	0.56
31	0	--	0.39	--	0	--	0	0.28	--	0.94	--	1.24
Total	15.44	16.96	23.47	10.65	5.54	8.86	8.80	23.94	14.94	32.19	30.63	18.62

Table 1.--Continued.

1973 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1.64	0.58	0.45	0.24	1.83	0	0	0	3.34	0.14	0	0
2	0	0	0.18	2.19	0.76	0	1.50	0	0.81	0.52	0	1.10
3	0	0	0.47	0.43	0	0.38	0.32	2.74	1.11	0.56	0	1.86
4	0	0	0.37	0.10	0.08	1.80	0.70	0.23	1.50	0.32	0	2.01
5	0	0	0	0	1.30	0.46	0	0	0.35	0.08	0	1.34
6	0.52	0	0	0	0.12	1.11	0	0	0.06	1.79	0	2.27
7	0	0	0	0.01	0.89	1.08	0	0.06	0.71	0.51	0	0.40
8	0	0	0.84	1.52	1.20	0.29	0	0	3.54	0.04	0	0.78
9	0	0	0.09	1.02	0.83	0.24	0	0	0.36	2.82	0	2.87
10	0	0	0.36	0.88	0.24	0	0	0	0.32	0.73	0	0.09
11	0.22	0	0.47	0	0	0	0.13	0.33	0.22	1.49	0.01	0
12	0.51	0.11	0.53	0	0.84	0.31	0.97	0.66	0	0.63	1.29	1.12
13	1.40	0.76	0.55	0	0.44	0.03	0.98	0.56	0	0.46	0.06	0
14	0.31	1.60	0.60	0.12	0	0	0	0.37	0	1.31	0	0.28
15	0	2.30	0	0.32	0	0	0	0	0	1.72	0	2.04
16	0.60	3.40	0.11	1.12	0	0	0	0	0	1.25	0	0.03
17	0.97	2.49	0.99	0	0.94	0	0	0	0	0.01	0.22	0.61
18	0.26	1.48	0.12	0	2.52	0	0	0	0	1.75	0.03	1.39
19	0.88	0.03	0.12	0	0.07	0.18	0.25	0	0	0.95	0.76	1.51
20	0.02	3.78	0	1.27	0.17	0	0.04	0	0	1.25	0.05	2.89
21	1.28	1.83	0.13	3.10	2.00	1.33	0	0	0.35	0.43	0.04	0
22	6.82	0	1.81	0.08	0.57	0.12	0	0	0.12	0.16	0.01	0
23	0	0	1.02	0	1.23	0.08	0.29	3.05	0	0.15	2.22	0.35
24	0.36	0	0	0	0.07	1.70	0	0.09	0	1.06	1.76	0.98
25	0.29	0	0	1.56	0.97	0	0	0.15	0.35	0.96	0.30	0.04
26	0.04	0.50	1.27	1.53	0	0	0	0	1.30	4.64	0.96	0.28
27	0.03	1.82	0	0.15	1.61	0.71	0	1.07	0.82	3.20	1.27	0
28	0.01	0.98	3.66	0.17	0.20	0.04	1.32	0.81	0.42	0.88	0.72	0.41
29	0.04	--	3.37	0	0	0	0.02	0.10	0.95	4.04	0.04	0.42
30	0.69	--	Trace	0.14	0	0	0.30	0	Trace	1.10	0	0
31	1.09	--	0.11	--	0	--	0	0.04	--	0.47	--	0
Total	17.98	21.66	17.62	15.95	18.88	9.86	6.82	10.26	16.63	35.42	9.74	25.07

Table 1.--Continued.

1974 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	0.14	0	0	0	0.30	0.22	0	0	0.87	2.27	0.30
2	0	1.94	0	0.01	0.84	0.47	0	0.04	0	0.49	9.39	0.32
3	0	0.43	1.05	0.30	0.94	0.40	0	0	0	0.56	4.28	0.07
4	0	0.14	0.49	0.48	6.13	0.12	0	0	0.05	0.10	0.66	0.05
5	0	0.71	0.68	0.50	2.08	0.69	0	0	0.10	4.10	1.18	1.65
6	0	1.43	0	0.96	1.42	0.52	0	0	0.78	3.89	2.77	1.02
7	0	1.78	0	0.37	1.01	0	0	0	0	0.89	0.86	6.50
8	0	4.00	0	0	0.81	1.04	0	0	1.95	1.49	1.32	1.70
9	0	2.70	1.02	0.13	0.48	0.06	0	0	1.09	0.01	1.22	0.28
10	0	1.06	0.90	1.75	0.34	1.49	0	0	0	4.00	0.71	0.48
11	0.40	0.54	0.18	0.75	0.18	0.42	0	0	0.43	0.32	0.01	1.04
12	0.09	1.03	0	0.22	0	0	0	0	0.48	0.28	0	0.23
13	0	0.97	0	0.65	0.85	0	0	0	0.05	1.57	0	0.92
14	0	0.25	0	0.88	0.63	0	0	0	0	4.38	0.57	0.55
15	0.04	1.14	0	0.04	0	0.08	0	0	2.60	1.10	1.50	0.81
16	0.01	0.12	0	1.46	0	0	0	0	0.87	1.53	0.30	0.51
17	1.33	1.98	0	0.37	0	0.38	0.49	0	0.37	1.10	0.60	0.47
18	2.94	0.37	0	0.97	0	0.04	0	0	0.21	1.01	0.15	1.86
19	0.96	0.18	0	1.04	0	0	0	0	3.35	0.44	0	0.83
20	0.44	2.03	0	0.76	0	0.33	0	0	0	0.39	1.30	0.69
21	0.31	0.24	0	0.88	0	0	0	0.22	0	5.26	0.47	0.05
22	2.19	0.32	0	0	0	0.66	1.16	1.05	0	11.20	0.75	0.34
23	1.14	1.51	0	0	0	0.57	2.72	0.52	0.04	0.30	2.15	1.19
24	0.94	1.24	0	0	0	0.43	0.47	0.60	0.80	5.50	0	0.89
25	0.14	0.38	0	0	0.37	1.03	0.08	0.56	0	8.39	2.02	0.91
26	0.19	0	0.27	0	0	0.14	0.04	0.32	0.19	3.30	3.47	0.62
27	0	0	0.47	0.18	0	0	0	0	1.16	0.58	0.30	0.25
28	1.02	0	0	0	0	0.14	0	0	0.14	1.13	3.84	1.05
29	0.21	--	0.70	1.07	0	0	0	0	0.06	1.05	0.78	2.15
30	0	--	0	1.32	0	0	0	0	4.26	2.74	0.22	0.25
31	0	--	0	--	0	--	0	0	--	1.38	--	2.64
Total	12.35	26.63	5.76	15.09	16.08	9.31	5.18	3.31	18.98	69.35	42.09	30.62

Table 1.--Continued.

1975 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.32	0	0	0.97	0.07	0.67	0	0.19	0.27	0.48	0.27	0.23
2	1.70	0	0	0	0.28	0.44	1.22	0	0.26	0.99	1.82	0.33
3	0.43	0	0.03	0	Trace	0.74	0.30	0	1.19	0.49	1.42	0
4	0.21	0	0.03	0	0.16	0.59	0.03	Trace	2.77	2.49	1.07	0.09
5	0.67	0	1.02	0	0.03	1.68	0	0	0.21	0.45	0.97	0.84
6	0.49	0	0	0.41	Trace	0.68	0	0.73	2.70	1.01	0	1.30
7	0.14	0	0	0.02	0	0.17	0	0	0.48	0.02	0.08	3.49
8	0.05	0	0	0	0.68	0.93	0	0.86	0.35	0	0.42	0.67
9	0	0	0	0	0	2.47	0	0.58	0.72	0	0.19	0.27
10	0	0	0.04	T	0	0.02	0	0.24	0	0	0.37	0.15
11	0.23	0	1.01	0.63	0.15	0	0	0	0	0	1.16	0.17
12	1.47	0	0.02	0.28	0.06	1.53	Trace	0	0	1.85	0.03	0.68
13	0.38	0.25	0.51	0	0.30	0.86	0.08	0	0.57	0.25	0.04	0.19
14	0.39	5.02	1.59	0	0	0	0.29	0	0.20	1.23	Trace	3.40
15	0	1.08	0	0	0.37	0	0.02	0.35	0.17	1.27	0.64	Trace
16	0.85	1.18	0	0	0.47	0	1.22	0.04	0.02	2.05	0.09	1.57
17	0.12	2.68	0.24	0.20	0.77	0	0.31	0.94	0	0.44	0.65	2.08
18	0.44	3.78	0.38	Trace	0	0	Trace	0	0	1.27	0.04	4.30
19	1.13	2.56	0	0.22	0	0	0.56	1.13	0.21	2.36	0	3.46
20	0.42	0.89	0.43	0	1.31	0	0.14	0.22	0	1.18	0	Trace
21	1.23	1.56	0	0.83	0.68	0	0.15	0	0	0.26	2.83	1.37
22	0.47	0.37	0.21	0.31	Trace	0	0	0	0	0.39	0	1.36
23	2.09	0.38	0.60	0.09	0	0	2.57	0	0	Trace	1.37	2.38
24	0.02	0.22	0.27	0	0	1.25	1.97	0	1.01	1.02	0.29	2.15
25	0.39	0	0.43	0.14	0	0.04	1.93	0	0.17	0.48	1.74	5.23
26	0	0.43	0	Trace	0.02	0	1.18	0	2.44	0.09	0	0.60
27	0.21	0.26	0.52	Trace	0.08	0	0.27	Trace	1.44	0	0	1.19
28	0.15	0	0.88	0.42	0.49	0	0	0.41	0.75	0	0	Trace
29	0	--	0.30	0.13	0	0	0	0	1.17	0.14	0.03	0
30	0.29	--	0	0	0	0	0.40	0	3.60	0.90	0.48	0
31	0	--	0.19	--	0	--	0.37	0	--	0.53	--	0.64
Total	14.29	20.66	8.70	4.65	5.92	12.07	13.01	5.69	20.70	21.64	16.00	38.14

Table 1.--Continued.

1976 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2.86	3.87	0	1.11	0.62	0	0.29	0	0.03	3.72	0.86	1.56
2	0.96	0.28	0	0.74	0.37	0	0.03	0	0.76	0.51	8.24	0.15
3	0.47	0	0.49	1.93	3.70	0	0.27	0	0.14	1.50	5.58	0.07
4	0.22	0	0.13	0.84	1.70	0	0	0	0.24	2.23	0.26	Trace
5	Trace	0	0.09	0.17	0.29	0	0.34	0	Trace	0	1.85	1.54
6	--	Trace	0.99	0.15	3.43	0	0.27	0	0	2.19	2.00	1.27
7	0.18	5.84	0.18	0.23	0.53	0	0.31	Trace	0	0.06	0.83	0.09
8	0.20	2.07	0.59	0.08	Trace	0	0.09	0.26	1.89	0.97	0.70	0.19
9	0.80	0.35	0	0.13	2.32	Trace	0.26	0.14	0.68	0.66	0.22	1.75
10	0.85	0.66	0	0.31	1.39	0.22	0	3.37	0	0.54	0.09	1.72
11	0.35	Trace	1.74	0.52	1.85	0.03	0	2.12	0	0.62	0.19	0.09
12	0	0.09	0.55	Trace	1.27	0	0.65	2.09	0.14	2.07	0.25	2.31
13	--	0	--	0.65	0.03	0.02	0.16	0.89	1.42	0.12	0.61	0.18
14	0.49	0	0.26	1.13	0.29	0.91	0.19	0	0.94	0	Trace	1.18
15	1.67	0.55	0.62	0.02	0.36	0.15	2.56	0	5.52	0	1.53	1.89
16	1.60	0.26	2.60	0.12	0	0	0.81	0	0.17	0	1.69	0
17	0.54	0	2.49	0.91	0	0.12	3.14	0	0	0	0.82	0
18	1.33	Trace	2.07	1.26	0	0.18	0.91	1.20	0	0.42	1.64	0
19	2.47	0	0	2.81	0	0	0	2.84	0.88	0	1.13	3.20
20	1.30	1.28	0.77	0.43	0.85	0.08	0.05	0.04	0	0	0.19	0.19
21	2.43	1.25	0.53	0	0.28	0	0.09	0.23	Trace	0	1.69	3.23
22	1.13	1.19	0.18	0	0.73	0	1.36	0	0.36	0	2.69	0.21
23	0.42	0.23	1.42	0.45	0.63	0.70	0.03	0	0	0	0.41	0.19
24	0.30	0.22	0.48	0.38	0	Trace	0.60	0	3.09	0.16	0.36	1.39
25	1.37	Trace	0.12	0.36	0.64	0	1.40	0	2.98	1.52	0	2.73
26	3.07	0.16	1.01	0	0.42	0.19	0.32	0.10	1.45	5.42	0.32	0.67
27	1.78	Trace	0.72	0	0	0	1.18	2.62	1.61	0.59	1.13	2.41
28	1.16	0	0.41	0	0.04	0	0.54	1.55	3.07	0.49	0	2.71
29	1.89	0	1.18	0	0.15	0.07	0	0.41	0.72	1.21	0.22	0.25
30	5.78	--	0.40	0	0	0	0	0	1.08	2.09	0.12	1.01
31	0.58	--	0.25	--	0	--	0.02	Trace	--	0.78	--	0.05
Total	36.20	18.30	20.27	14.73	21.89	2.67	15.87	17.86	27.17	27.88	35.61	32.23

Table 1.--Continued.

1977 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	0.41	0.58	0.16	0	0	0.15	0.08	0	0	0.03	0.97
2	0	3.04	0.75	0	1.71	0	0	0.06	0	0	0.32	0.27
3	0	2.14	0.67	0	0.56	0.99	0.08	0	0	0	0.94	0.48
4	0.05	0.39	1.97	0.02	0.30	0	0	0	0.27	2.32	2.42	Trace
5	0.91	0.75	0.31	Trace	0	1.07	0	0	1.76	0.23	0	0
6	1.74	1.35	0.23	1.21	0	0.26	0	0	0.21	0	2.00	0
7	0	2.08	0.65	0.32	0	0.15	0	0.20	0.10	2.00	0.29	0
8	0	0.70	0.44	Trace	0	0.03	0	0.85	1.64	0.23	0.32	0
9	0.39	1.32	0.06	0.82	0	0	0	0.75	0.16	0	0.03	0
10	0.16	0.29	0.26	0.59	0	0	0.84	0.03	0.56	1.10	0.22	0
11	0.68	1.02	1.32	0.87	0	0	0.15	0	0.66	4.22	1.22	0.26
12	0	0.83	0.79	3.20	0	0	0	0	1.05	0.75	2.00	0.60
13	0.46	2.17	0	0.09	0.08	0	0	0	0	0.58	0.59	0.59
14	1.62	2.76	0.33	0.54	0	0	0.38	0	Trace	5.13	1.64	1.44
15	0.38	0.42	0	0.23	0	0	0.20	0	0	4.54	0.75	0.71
16	1.60	0.93	0.26	1.42	0	0	1.30	0	0	6.00	0.09	0.48
17	2.26	0.98	0.15	0.72	0	0.20	0.07	0	0	2.95	0.08	1.01
18	0.55	3.52	0	0.72	0	0.20	0	0	0.08	2.00	0	0.94
19	0.59	0.55	0.29	0.07	0.81	0.50	0	0	0.04	0.19	0	0.45
20	0.93	0.19	0.22	1.06	0	0.70	0.04	0	0	0.47	0	1.77
21	2.15	0.45	0	0	0	0.14	0	0	1.06	0.74	0	0
22	0.08	0.53	0	0.04	0.22	0.32	1.65	0.10	3.65	2.40	0	0
23	2.03	0.59	0.19	0.53	0.98	0.41	1.30	0.19	0.20	0.14	0	0
24	0.46	1.34	0.26	0	0	2.44	1.65	0	0	0.06	0	0
25	0	0.71	2.82	0.38	0.23	0.40	0	0	0	0.60	1.57	0.27
26	0.15	1.08	0.51	0	0	0.27	0	0	0	1.32	0.62	0.58
27	0	1.79	0.54	0.51	0.03	0.89	0	1.60	0	3.20	0.71	0.12
28	0.27	0.46	0	0.55	0	0.94	0	0.42	0	0.44	2.52	0
29	1.89	--	0	Trace	0	0	0	0.05	0.44	2.41	0.71	0
30	1.79	--	0.56	0	0	0.51	0.50	0	0.87	0.35	0.27	0
31	1.52	--	0	--	0.06	--	0.60	0	--	0.42	--	0
Total	22.66	32.79	14.16	14.05	4.98	10.42	8.91	4.33	12.75	44.79	19.34	10.94

Table 1.--Continued.

1978 Date	Jan	.Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	0	0	0.29	2.01	0.64	0.05	0	0.01	0.87	2.32	0.52
2	0	0	0.35	0.10	0.87	0	0.53	0	0.10	8.73	1.76	0.40
3	0	0	0.08	0	0.41	0	3.44	0	Trace	1.05	0.70	0.24
4	0	1.26	0	0	0.02	0	1.25	0.18	0	0.81	1.02	0.27
5	0	1.85	0.13	0	0	0	0	0.82	0	2.57	1.76	0.36
6	0	1.65	2.10	0	0	0	0	1.09	0	5.25	0.52	0
7	0.49	1.51	2.00	1.98	0.25	0	0	0.82	0.07	1.42	0.75	2.82
8	0.43	0	1.38	0.32	0.07	0.91	0	0.63	0	1.83	0.21	8.91
9	0	0.28	1.65	5.03	0	0	0	0.84	0	2.45	0	1.84
10	0.94	0	0.08	1.74	0	0	0	0.40	0.21	0.44	0	0
11	0.13	Trace	0	0.18	0	0	0	0.01	0.12	1.12	4.13	0
12	Trace	0	0.24	0.31	0.33	0	0.44	0	4.11	0.55	0	1.63
13	0	0.05	0.98	0	0	0	0	0.35	1.32	3.49	0	2.38
14	0	0.43	0.20	0	0	0	0.12	0	3.62	0.44	1.31	0.92
15	0	0.49	1.08	0	0	0	0.35	0.05	1.27	0.89	1.29	1.37
16	0	0.21	0.94	0	1.29	0.11	Trace	0	0.20	0	0.13	0.03
17	Trace	1.16	0	0	0.21	0.32	0	0.70	0	4.20	0	0
18	0.17	1.48	2.00	0	1.96	0	0	0.07	0	3.16	0	0.61
19	0.03	4.47	1.10	0	0.37	0	0	0.03	10.99	0.26	0	3.25
20	1.19	0.25	0.19	0	0.05	0	0	0	1.54	0.78	0	0
21	0.62	0.32	0.29	0	0	0	0	0	1.41	0.97	0	1.38
22	Trace	1.32	0	0	0	0	0.20	0	1.19	5.10	0.73	Trace
23	2.12	0	0.51	0	0	0	0	0	0.36	0.85	0	1.59
24	4.87	0	1.02	0	0	0	0.03	0	0.45	1.58	1.45	0.34
25	0.67	0	1.61	0.21	1.43	0.35	0	0	0	3.75	0.04	0.14
26	0	0	0.12	1.31	0.47	0.19	0	0	0	0.28	4.00	0.09
27	0	0	1.36	0	1.37	0.11	0	0	0.31	0.47	4.62	0
28	0	0	0.42	0.58	1.48	0	0	0	3.85	0.54	0.25	0.05
29	0	--	0	0.70	0.43	0	0	1.26	0.91	0.28	1.40	0
30	0	--	0.14	1.02	0	0.46	0.02	2.44	0.05	6.11	0	0
31	0	--	1.07	--	0.81	--	0	2.34	--	2.19	--	0
Total	11.66	16.73	21.04	13.77	13.83	3.09	6.43	12.03	32.09	62.43	28.39	29.14

Table 1.--Continued.

1979 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.29	0.10	0.72	0	0	0.94	0	1.02	0.24	0.26	0	0.97
2	0	0.36	2.19	0.27	0.36	0.14	0	0.41	0.73	0.65	0	0
3	0	0.03	0.67	0.29	1.54	1.06	0	0	0	6.87	0	1.02
4	0	1.90	4.05	0.11	0.53	2.75	0.18	0.02	0.60	1.87	0	0.49
5	0	0.87	3.17	0.77	0.44	0.60	0	0	0.08	4.24	0	3.25
6	0	0.67	1.76	0	0	0	0	0	0	0	0	0.10
7	0	0.35	1.31	1.64	0	0.05	0.45	0	0	0	0	1.13
8	0	0.23	0.89	0.67	0.05	0.39	0.05	0	0.05	0.48	0	0.41
9	0	0	3.40	0.11	0.09	1.13	0.71	0	0.14	7.21	0	0.67
10	0	0	0.09	0	1.70	0.05	0.48	0	0	0.15	0	0.83
11	0	0	1.10	0	0.46	0	0.18	0	1.00	0.87	0	1.27
12	0	0	1.82	0	0	0.17	0.04	0	2.80	0.13	0.88	Trace
13	0	0	1.02	0	0.70	0	0	0	4.30	0.72	3.30	0.23
14	0	0.52	0.12	0	0	0.53	0.37	0	1.22	0.55	12.00	0
15	1.37	1.17	0	0	0	0.15	0.27	0	0.05	0	2.05	0
16	3.27	0	0	0	0.32	0	1.02	0.05	2.61	0.22	1.51	0.61
17	0.52	0	0	0	1.24	0	4.48	0.30	1.15	0.75	1.00	1.52
18	1.80	0	0.32	0	0.35	0	0.63	0	1.13	0	1.30	1.83
19	0.24	0	0	0	0.10	0	1.69	0	0	0	6.19	0.85
20	0	0	0.72	0	0	0	1.65	0	0	0	1.63	2.11
21	0.36	0	0	0	0	0.04	1.40	0	0.33	0	1.23	0.42
22	2.96	0	0	0	1.27	0.03	0.30	0	0.18	0.05	0.39	0.43
23	1.07	0	0	0	0.65	0	0.10	0	1.55	0.93	0.82	0.62
24	0.19	0	0	0	1.40	0	0	0	0.01	0.28	0	0
25	2.27	0	0	0	1.95	0	0	0	0.22	0.07	1.00	2.37
26	1.03	0	0	0	0.14	0	0	0	0.75	0.50	0.40	0.98
27	0	0.03	0	0	0	0	0	0	2.45	0.68	0	0.56
28	0.95	0	0	0	0	0.54	0	0	0.15	1.45	0	2.90
29	0	--	0	0	0	0.09	0	0	0.82	1.18	0.75	0.20
30	0.65	--	0	0	0.16	0	0.95	0	2.62	0.64	1.68	0
31	0	--	0	--	1.32	--	2.30	0	--	0.04	--	0.09
Total	16.97	6.23	23.35	3.86	14.77	8.66	17.25	1.80	25.18	30.79	36.13	25.86

Table 1.--Continued.

1980 Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.52	3.39	0.88	0	1.82	0.10	0.27	0.17	0.30			
2	0.80	1.26	0.12	0	0.19	0	0.64	0.08	0.02			
3	0.19	1.07	0	0	0.10	0	0	0.08	0.88			
4	0.15	0.75	0	0	0	0	0	0	0.28			
5	Trace	1.18	0	0.15	0	0	0	0	0.81			
6	0.45	2.23	0	0.12	0.08	0	0	0	0.22			
7	0	4.19	0	0.30	0.59	0	0.10	0	0			
8	0	0.10	0.30	0	0.48	0	0.07	0.03	5.65			
9	0	0	0	0	0	0	0	Trace	0.35			
10	0	0	0	Trace	0	0	0	0	0			
11	0.02	0	0	3.39	0	0.06	0	0	0			
12	0.05	0	0.35	1.63	0	0.71	0.01	0	0			
13	0.39	0	0.73	0.10	0	1.00	0.20	0.15	0.01			
14	0.55	0	0	0.57	0	0.15	0.05	1.53	0			
15	0.39	0	0.55	1.44	0	0.29	0	0.09	0			
16	0.43	0	2.02	2.38	0.42	0.07	0	1.30	0			
17	0.13	0	0.28	0.97	0.95	0.06	0	0.72	0			
18	0.07	0.16	0.93	0.75	0.50	0	0.11	0.02	1.08			
19	2.88	0.03	1.76	1.14	1.84	0	1.70	0.27	0.68			
20	3.08	1.05	0.53	1.00	0.54	0.22	0.08	0	0			
21	1.02	1.37	0.80	1.79	0.14	2.15	0.48	0	0.99			
22	3.63	1.27	1.41	1.96	0	1.08	0.84	0.06	0.96			
23	0.05	0	0	0.08	0	0	0.11	0.05	0.15			
24	0	1.06	0.70	0.28	0	0	0.21	0	0.57			
25	0	0.28	1.27	0.26	0	0.16	0.29	0.60	0.76			
26	0	1.39	0.61	0.54	0	0	0.19	0.12	0			
27	0	0.46	0.51	2.04	0	0	0	0	0.87			
28	Trace	0.21	0.48	0.70	0	0	0.23	0.21	1.46			
29	0.59	0.44	0	0.71	0	0	0.11	2.10	2.06			
30	1.02	--	1.19	3.54	0.10	0	2.37	0	1.43			
31	2.55	--	0.11	--	0.10	--	1.25	1.18	--			
Total	18.96	21.89	15.53	25.84	7.85	6.05	9.31	8.76	19.53			

Table 2.--For each day, August 1964 though September 1980, average rate (ft³/s) of discharge of Sashin Creek, Alaska. Values in this table for 1 August 1964 - 30 June 1965 were measured and recorded as stream heights by the Bureau of Commercial Fisheries; we converted their data to ft³/s. All waterflow data after 30 June 1965 were recorded and published by U.S. Geological Survey in their annual Water Resource Data records.

Water flow (ft ³ /s) of Sashin Creek, 1964												
Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	--	--	--	--	--	--	--	65	38	190	14	8
2	--	--	--	--	--	--	--	47	32	155	--	5
3	--	--	--	--	--	--	--	35	26	100	--	28
4	--	--	--	--	--	--	--	26	22 [↑]	105	--	105
5	--	--	--	--	--	--	--	22	18	70	--	340
6	--	--	--	--	--	--	--	20	15	51	--	450
7	--	--	--	--	--	--	--	18	14	38	--	390
8	--	--	--	--	--	--	--	18	14	95	--	255
9	--	--	--	--	--	--	--	17	13	115	--	130
10	--	--	--	--	--	--	--	26	12	120	--	85
11	--	--	--	--	--	--	--	28	11	145	--	60
12	--	--	--	--	--	--	--	75	10	235	--	42
13	--	--	--	--	--	--	--	90	70	225	--	28
14	--	--	--	--	--	--	--	160	125	230	--	18
15	--	--	--	--	--	--	--	260	165	200	--	20
16	--	--	--	--	--	--	--	175	140	160	--	13
17	--	--	--	--	--	--	--	160	90	110	--	9
18	--	--	--	--	--	--	--	150	130	145	--	10
19	--	--	--	--	--	--	--	130	130	115	--	9
20	--	--	--	--	--	--	--	75	140	20	--	8
21	--	--	--	--	--	--	--	51	165	12	--	--
22	--	--	--	--	--	--	--	38	120	42	--	--
23	--	--	--	--	--	--	--	28	90	17	--	--
24	--	--	--	--	--	--	--	110	60	12	42	--
25	--	--	--	--	--	--	--	140	51	7	28	--
26	--	--	--	--	--	--	--	105	60	24	20	--
27	--	--	--	--	--	--	--	85	38	65	15	--
28	--	--	--	--	--	--	--	110	85	28	13	--
29	--	--	--	--	--	--	--	125	200	12	11	9
30	--	--	--	--	--	--	--	65	190	10	9	8
31	--	--	--	--	--	--	--	47	--	10	--	10

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1965											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	11	13	90	14	80	--	50	32	44	16	286	174
2	9	9	240	13	--	85	60	28	35	90	193	112
3	8	38	165	70	--	60	45	26	29	240	127	82
4	8	47	110	42	80	110	40	23	25	167	104	101
5	8	8	80	28	51	95	35	22	21	172	76	102
6	6	10	65	26	51	65	30	19	18	320	59	125
7	7	17	51	25	70	47	45	18	16	216	47	125
8	8	10	42	25	60	47	80	16	14	141	38	86
9	11	7	47	28	42	65	150	16	12	94	33	87
10	22	7	51	28	47	60	100	15	11	78	28	129
11	115	5	47	100	32	145	70	14	9.8	196	24	75
12	345	35	42	75	26	105	60	13	8.8	110	21	106
13	330	12	38	60	22	60	45	12	8.3	505	18	101
14	105	10	32	60	22	51	37	11	7.8	272	16	262
15	--	12	26	70	26	42	34	10	7.3	185	17	145
16	--	9	22	100	26	85	31	9.8	8.3	222	17	176
17	--	8	20	110	35	60	29	9.3	7.8	176	14	187
18	--	8	18	80	28	42	32	8.8	6.8	117	13	117
19	--	7	17	57	28	120	48	8.3	6.3	104	11	112
20	--	8	17	35	32	105	37	7.8	16	131	12	86
21	--	5	18	65	28	100	33	7.3	17	119	13	81
22	--	9	15	85	26	70	31	6.8	14	373	11	141
23	--	26	15	90	28	120	31	6.8	13	231	9.8	78
24	--	14	18	100	28	120	33	6.3	13	185	8.8	59
25	--	9	18	235	42	70	33	6.0	11	119	9.3	46
26	--	7	15	85	42	57	119	5.6	10	216	11	38
27	--	5	14	175	51	42	75	5.6	14	306	86	31
28	--	6	13	145	51	28	59	5.2	13	253	123	26
29	42	--	13	115	51	24	50	14	12	163	328	22
30	28	--	15	90	51	24	43	129	13	265	186	18
31	18	--	18	--	--	--	36	61	--	515	--	15

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1966											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	13	8.0	33	193	222	47	32	150	46	84	353	25
2	12	8.0	31	130	461	55	32	123	35	71	165	22
3	11	9.0	24	112	278	61	32	84	100	81	228	20
4	10	10	20	85	259	66	32	61	300	176	165	18
5	9.5	10	18	69	300	64	32	49	150	112	120	16
6	9.0	11	16	61	187	64	32	39	100	125	100	15
7	8.5	12	14	57	207	65	33	67	80	331	80	15
8	8.0	13	13	52	137	66	33	246	60	173	100	15
9	8.0	16	13	47	102	65	43	213	79	259	80	17
10	9.0	20	14	40	86	69	41	115	62	130	70	25
11	10	13	12	30	154	71	37	79	49	91	60	40
12	11	12	14	35	105	61	34	62	38	66	55	70
13	13	12	22	45	87	56	32	62	36	272	50	60
14	20	9.9	26	40	103	54	31	101	35	132	47	54
15	243	19	20	35	90	67	30	87	140	306	45	95
16	373	19	17	33	71	89	27	87	118	207	40	60
17	121	17	21	30	147	85	25	70	91	131	38	100
18	58	15	21	30	357	86	24	55	115	393	36	70
19	46	13	22	39	198	66	23	45	147	207	35	80
20	37	11	22	43	137	57	24	35	162	116	35	60
21	29	13	17	68	97	52	24	28	163	81	35	54
22	24	216	69	103	109	50	21	25	94	72	60	50
23	20	150	167	79	85	47	20	29	65	55	165	56
24	18	147	106	67	68	43	20	27	53	47	120	62
25	18	107	231	58	58	40	20	23	82	45	90	54
26	18	76	149	52	53	39	19	19	187	40	70	49
27	14	56	142	45	48	38	19	16	146	35	55	92
28	12	43	393	42	49	37	19	15	108	30	45	136
29	11	--	338	40	45	35	19	14	159	40	37	50
30	10	--	240	56	44	33	19	13	130	45	32	100
31	8.8	--	139	--	44	--	222	60	--	55	--	80

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1967											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	72	25	80	20	61	120	56	28	100	50	100	30
2	80	30	60	22	69	100	53	26	228	45	70	35
3	60	35	50	20	71	90	50	24	165	40	60	50
4	50	25	45	25	67	80	47	22	90	37	50	35
5	70	26	40	20	117	70	52	21	70	33	35	25
6	80	28	45	20	101	70	85	19	60	30	45	22
7	80	30	50	20	86	70	94	35	100	25	80	23
8	70	35	35	25	84	75	104	187	353	60	150	50
9	150	40	25	25	85	77	79	116	165	100	120	64
10	100	35	20	19	89	77	187	97	110	170	80	50
11	80	30	18	28	85	74	292	73	100	100	50	35
12	65	28	17	23	79	70	140	56	485	70	35	31
13	50	26	16	19	149	69	97	47	228 ¹	80	30	93
14	40	25	15	18	170	77	75	38	292	150	35	310
15	35	24	15	19	128	75	58	32	228	350	50	196
16	30	23	15	18	190	68	60	28	100	200	130	112
17	25	23	15	18	136	65	62	42	90	150	90	74
18	22	23	15	20	100	68	50	60	165	200	60	51
19	20	43	16	26	110	67	44	80	120	190	150	39
20	18	42	20	27	165	68	40	70	90	300	120	31
21	17	32	15	26	190	70	36	70	60	200	150	25
22	16	48	13	28	228	67	45	80	100	120	200	22
23	16	33	11	29	190	64	39	120	80	100	300	21
24	15	63	10	33	140	61	35	100	70	250	150	19
25	15	48	10	34	100	58	32	120	80	180	100	18
26	15	94	12	36	90	55	30	165	165	120	50	74
27	15	103	16	41	120	71	35	70	120	200	30	74
28	16	125	13	44	292	89	37	50	90	130	35	44
29	17	--	14	48	265	77	38	45	70	100	27	35
30	20	--	15	53	204	67	34	40	60	250	25	30
31	22	--	16	--	165	--	30	70	--	150	--	34

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1968											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	29	20	219	21	64	73	28	14	187	75	158	70
2	24	19	171	19	64	193	25	12	108	176	111	56
3	39	18	231	58	47	142	23	11	102	165	97	47
4	31	18	289	44	41	108	24	10	93	159	85	41
5	24	18	296	53	38	79	37	9.0	145	204	126	30
6	22	150	145	43	38	62	30	8.0	132	118	80	28
7	19	117	101	42	36	51	47	7.5	142	81	72	25
8	16	89	99	71	38	45	68	7.5	95	63	182	23
9	14	112	83	56	45	41	43	7.0	196	49	124	21
10	13	67	68	39	53	42	39	6.5	213	39	126	20
11	12	51	55	32	64	38	43	6.0	210	32	92	20
12	11	42	51	36	64	34	58	5.7	199	26	67	20
13	11	34	44	41	67	32	54	5.7	162	24	57	21
14	10	28	34	30	64	30	43	5.0	256	28	46	25
15	10	25	29	25	58	28	35	4.6	135	30	36	30
16	10	20	24	31	55	26	31	49	135	217	32	38
17	10	18	22	165	54	31	27	130	88	140	35	31
18	10	16	19	77	58	65	23	128	62	182	175	23
19	10	42	73	61	62	190	21	73	47	194	142	20
20	10	135	152	47	77	171	19	54	39	123	82	18
21	11	231	213	46	81	104	17	79	61	168	123	16
22	100	204	140	110	74	74	16	88	55	138	186	14
23	150	114	95	137	97	55	15	97	160	213	134	13
24	81	89	68	160	104	91	13	67	373	140	84	12
25	64	219	51	119	101	73	12	50	171	93	120	11
26	50	279	50	117	102	53	12	41	101	80	168	10
27	35	168	42	89	76	46	27	33	405	114	143	8.5
28	28	142	37	71	62	39	38	101	448	72	171	7.5
29	25	112	31	67	55	35	21	179	193	56	112	7.0
30	24	--	26	54	50	32	18	338	112	51	113	6.5
31	22	--	23	--	46	--	16	349	--	117	--	6.0

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1969											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	6.0	5.0	8.4	67	75	150	39	41	40	82	425	107
2	6.0	5.0	8.2	65	90	200	38	38	34	89	520	175
3	8.0	4.5	8.5	57	80	350	37	35	28	216	213	130
4	10	4.5	13	55	70	250	37	32	24	129	115	104
5	9.0	4.0	30	50	200	150	34	30	21	101	75	121
6	8.0	4.0	23	44	80	100	32	35	35	115	193	213
7	7.5	9.0	17	47	90	110	32	40	40	115	120	640
8	7.0	8.0	14	160	100	130	120	35	43	143	144	320
9	6.5	12	13	150	90	150	603	45	250	102	117	216
10	6.0	20	12	130	150	130	447	35	215	76	95	118
11	5.6	18	12	100	100	120	257	70	149	53	89	78
12	5.2	15	12	80	80	110	162	35	93	42	60	105
13	5.0	14	11	60	70	108	119	100	65	33	150	147
14	4.8	12	11	50	80	106	90	75	50	28	116	95
15	4.5	11	29	250	70	102	68	60	43	23	75	70
16	4.3	11	18	200	90	99	55	100	55	20	57	55
17	4.0	12	13	180	110	94	45	120	44	23	45	45
18	4.0	14	12	200	120	84	38	150	35	27	37	35
19	3.7	15	11	147	150	80	36	100	29	41	52	30
20	3.5	13	11	123	130	71	43	80	90	38	49	27
21	3.5	12	20	151	150	64	67	55	65	29	63	25
22	3.2	16	18	164	200	62	53	45	57	23	116	25
23	3.0	14	17	101	250	64	107	37	46	19	113	30
24	3.0	11	57	95	300	55	69	32	36	17	100	40
25	2.8	10	65	120	250	51	79	28	31	16	102	80
26	2.7	9.5	55	182	200	49	68	24	25	15	341	50
27	2.6	9.0	41	108	130	48	54	21	25	14	168	100
28	2.5	8.5	34	79	100	46	46	19	102	20	480	400
29	2.5	--	34	75	110	44	45	18	231	66	265	130
30	2.5	--	50	70	130	43	48	47	121	125	162	250
31	2.5	--	83	--	200	--	40	45	--	306	--	350

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1970											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	200	310	28	39	93	78	130	20	29	152	203	14
2	140	132	26	39	71	140	94	18	206	106	126	13
3	90	213	23	51	55	164	137	17	119	89	84	12
4	60	303	49	48	59	129	98	16	98	65	61	11
5	45	162	44	70	101	92	128	16	120	51	48	11
6	35	179	41	52	179	72	173	15	104	47	39	11
7	30	100	57	43	253	65	243	15	78	59	32	11
8	25	71	46	61	129	81	150	21	63	54	27	15
9	20	55	37	96	89	66	99	62	53	45	34	56
10	17	44	34	75	66	56	72	49	143	88	208	72
11	15	37	28	55	54	49	55	153	36	56	255	68
12	13	32	40	44	54	45	46	159	29	78	167	111
13	12	29	108	39	53	42	58	100	25	67	158	123
14	11	44	93	34	121	41	91	307	22	63	360	92
15	10	34	110	32	85	39	56	180	19	174	212	71
16	9.5	32	75	35	83	39	46	105	77	93	128	50
17	9.0	144	58	58	65	36	134	✓72	118	69	108	40
18	8.5	341	150	46	58	33	90	57	89	66	86	32
19	8.0	275	79	40	64	32	72	72	60	138	65	36
20	8.0	170	59	37	70	31	61	63	49	80	49	29
21	20	172	78	44	152	31	47	65	56	71	42	25
22	50	157	82	61	165	30	72	51	57	65	46	23
23	150	160	107	65	115	43	59	41	43	90	35	24
24	110	98	98	50	246	69	47	34	72	70	29	67
25	90	71	87	40	180	103	41	29	74	55	25	59
26	70	53	76	37	137	94	35	25	113	132	23	55
27	60	42	87	33	95	94	31	22	141	113	20	41
28	184	35	69	109	73	66	29	19	124	187	18	36
29	152	--	56	59	59	55	27	22	338	362	17	32
30	137	--	46	119	57	73	23	26	225	415	15	30
31	100	--	41	--	114	--	21	22	--	201	--	28

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1971											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	28	12	20	30	43	85	95	46	46	15	93	64
2	28	12	19	50	74	85	100	40	64	20	88	45
3	30	12	18	110	64	90	100	46	173	26	72	37
4	92	12	17	150	55	90	110	40	216	39	50	35
5	144	13	17	88	68	95	100	36	246	110	40	31
6	206	13	17	82	114	100	100	33	144	52	49	30
7	303	14	17	76	108	110	100	31	306	59	55	71
8	208	28	18	60	84	120	100	28	216	170	100	51
9	130	58	22	50	175	130	100	25	157	77	82	36
10	91	44	24	42	389	130	91	23	353	118	52	30
11	69	45	24	38	275	120	91	22	320	91	160	24
12	56	75	22	37	190	110	86	21	282	112	99	36
13	43	96	20	42	134	100	79	19	176	93	65	42
14	36	149	18	95	108	90	74	17	106	72	71	21
15	30	153	20	65	95	90	74	16	76	54	97	23
16	26	116	18	55	84	85	97	20	62	102	180	33
17	22	82	19	52	86	80	91	51	49	91	148	24
18	20	69	20	51	102	80	76	165	39	82	306	28
19	18	57	20	47	99	90	72	320	33	64	188	36
20	16	49	20	42	106	100	71	190	27	60	138	24
21	15	60	18	38	100	100	70	421	23	110	102	39
22	14	67	16	37	100	110	62	306	19	95	86	59
23	14	56	15	36	102	110	56	345	17	99	122	70
24	13	45	14	36	104	110	50	275	16↑	118	106	45
25	13	38	13	36	104	100	47	258	14	76	76	17
26	13	32	13	36	102	95	47	180	13	56	62	18
27	12	26	13	38	110	90	51	116	12	45	47	16
28	12	23	13	38	122	90	52	88	10	178	39	16
29	12	--	16	40	106	90	54	86	9.5	158	70	30
30	12	--	19	40	88	95	51	64	26	104	70	38
31	12	--	22	--	86	--	49	50	--	130	--	31

Table 2.--Continued.

Water flow (ft ³ /s) of Sashin Creek, 1972												
Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	24	13	14	23	32	188	60	60	78	252	77	37
2	22	10	13	23	33	155	80	90	62	403	61	21
3	32	10	12	19	42	165	100	150	53	177	52	15
4	31	9.5	11	16	47	200	150	200	46	127	45	13
5	44	9.0	15	16	57	220	130	150	38	459	43	11
6	37	9.5	15	16	72	230	120	110	38	488	38	13
7	30	12	15	16	85	220	110	90	42	176	29	22
8	38	106	13	15	96	200	100	81	36	106	216	16
9	28	200	13	15	96	150	90	65	29	77	245	15
10	25	52	14	15	130	150	80	54	29	61	139	14
11	23	36	58	15	142	160	120	44	31	52	94	18
12	42	38	300	15	118	170	150	38	27.4	63	77	42
13	50	34	200	15	101	170	250	33	56	70	60	23
14	150	24	150	15	94	170	150	30	225	50	49	23
15	130	24	99	15	81	160	120	35	205.4	31	45	21
16	88	22	120	14	76	140	100	✓38	135	28	43	18
17	55	23	150	12	73	120	80	32	105	24	35	16
18	46	24	120	45	69	100	100	28	77	28	30	15
19	100	24	100	39	91	90	120	25	58	28	75	14
20	39	46	80	27	128	80	150	23	46	22	766	13
21	27	47	70	20	115	70	110	21	38	20	922	39
22	24	39	60	19	101	75	90	88	32	105	356	47
23	36	31	50	21	88	80	70	290	28	303	195	33
24	76	25	43	54	79	100	600	142	23	233	148	27
25	89	20	38	50	95	90	45	222	21	152	153	65
26	65	17	33	62	148	80	40	182	19	94	105	79
27	46	17	26	49	170	65	60	112	34	77	73	71
28	30	15	27	37	158	60	100	237	180	54	70	79
29	15	15	27	32	150	55	60	165	372	74	56	54
30	13	--	29	29	182	50	40	125	270	123	49	44
31	13	--	28	--	175	--	35	109	--	116	--	36

Table 2.--Continued.

Water flow (ft ³ /s) of Sashin Creek, 1973												
Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	29	50	34	52	162	65	64	40	160	Discontinued until October 1974		
2	27	38	31	192	142	64	110	40	99			
3	25	35	29	195	104	76	100	122	106			
4	23	30	26	132	93	231	110	93	132	--	--	--
5	22	26	25	88	97	205	89	72	95	--	--	--
6	20	25	23	64	76	192	72	64	71	--	--	--
7	18	25	22	52	142	168	64	55	100	--	--	--
8	18	28	23	82	148	142	59	51	213	--	--	--
9	42	25	24	110	142	110	56	46	110	--	--	--
10	38	23	26	115	110	89	54	40	76	--	--	--
11	28	19	28	86	91	77	54	36	59	--	--	--
12	23	17	29	66	110	77	76	56	49	--	--	--
13	23	19	31	58	100	82	95	59	42	--	--	--
14	24	58	32	52	112	76	71	71	35	--	--	--
15	21	278	29	51	118	71	64	54	32	--	--	--
16	22	192	27	68	102	68	56	47	29	--	--	--
17	21	192	25	59	122	66	54	44	25	--	--	--
18	132	168	23	54	192	68	51	37	23	--	--	--
19	168	102	22	51	132	66	50	32	20	--	--	--
20	89	180	20	68	118	62	49	29	18	--	--	--
21	62	165	30	118	152	122	46	28	18	--	--	--
22	60	115	51	79	104	99	45	23	18	--	--	--
23	56	79	58	66	110	89	40	68	16	--	--	--
24	54	59	43	59	128	148	38	44	15	--	--	--
25	51	50	38	110	165	108	36	42	22	--	--	--
26	47	42	38	213	106	84	34	37	46	--	--	--
27	40	38	36	145	145	97	33	71	40	--	--	--
28	34	37	84	97	112	77	59	77	37	--	--	--
29	30	--	132	77	89	71	51	59	62	--	--	--
30	31	--	70	76	77	68	46	51	50	--	--	--
31	42	--	60	--	71	--	45	45	--	--	--	--

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1974											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	--	--	--	--	--	--	--	--	--	440	207	62
2	Discontinued until October 1974					--	--	--	--	350	521	48
3	--	--	--	--	--	--	--	--	--	230	622	36
4	--	--	--	--	--	--	--	--	--	130	270	30
5	--	--	--	--	--	--	--	--	--	100	222	170
6	--	--	--	--	--	--	--	--	--	120	266	226
7	--	--	--	--	--	--	--	--	--	400	198	559
8	--	--	--	--	--	--	--	--	--	700	190	364
9	--	--	--	--	--	--	--	--	--	560	146	187
10	--	--	--	--	--	--	--	--	--	350	100	118
11	--	--	--	--	--	--	--	--	--	200	62	120
12	--	--	--	--	--	--	--	--	--	190	42	66
13	--	--	--	--	--	--	--	--	--	193	34	57
14	--	--	--	--	--	--	--	--	--	296	34	53
15	--	--	--	--	--	--	--	--	--	193	103	41
16	--	--	--	--	--	--	--	--	--	118	47	36
17	--	--	--	--	--	--	--	--	--	98	38	34
18	--	--	--	--	--	--	--	--	--	120	34	42
19	--	--	--	--	--	--	--	--	--	82	28	53
20	--	--	--	--	--	--	--	--	--	57	24	53
21	--	--	--	--	--	--	--	--	--	470	21	37
22	--	--	--	--	--	--	--	--	--	659	27	50
23	--	--	--	--	--	--	--	--	--	238	87	229
24	--	--	--	--	--	--	--	--	--	554	40	166
25	--	--	--	--	--	--	--	--	--	770	82	168
26	--	--	--	--	--	--	--	--	--	410	415	96
27	--	--	--	--	--	--	--	--	--	241	216	54
28	--	--	--	--	--	--	--	--	--	162	412	53
29	--	--	--	--	--	--	--	--	--	151	214	51
30	--	--	--	--	--	--	--	--	--	256	103	78
31	--	--	--	--	--	--	--	--	--	155	--	197

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1975											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	78	16	13	27	48	125	62	54	14	246	45	19
2	136	15	14	22	74	146	131	44	17	155	76	17
3	60	14	16	18	80	183	120	40	32	155	100	16
4	41	12	19	16	78	173	108	39	47	476	66	14
5	32	11	20	15	80	238	94	36	41	238	46	14
6	27	10	21	23	68	206	70	64	86	254	40	24
7	22	9.5	15	34	50	169	79	51	54	125	33	61
8	18	9.0	13	30	78	169	87	61	49	78	30	67
9	17	8.6	11	23	118	310	97	67	54	48	24	30
10	16	8.2	11	22	159	246	100	64	36	36	34	25
11	14	7.8	11	51	218	162	90	50	30	30	213	22
12	13	8.3	10	47	198	221	79	43	26	80	86	20
13	12	8.9	10	36	198	238	70	39	27	57	48	22
14	13	10	14	31	149	187	56	36	27	78	38	30
15	14	12	11	29	202	143	52	33	25	162	34	20
16	75	15	10	28	198	125	54	31	22	302	28	80
17	52	20	9.2	35	202	110	60	30	19	172	30	134
18	84	26	9.0	41	140	105	65	28	18	350	34	372
19	198	50	12	34	120	110	74	24	18	360	25	477
20	94	100	13	30	195	108	68	22	16	262	21	206
21	76	45	11	39	183	88	59	20	15	134	36	247
22	104	24	10	88	146	74	53	20	14	90	29	269
23	140	18	9.8	72	113	70	188	21	14	57	71	622
24	74	16	10	56	94	100	271	21	28	105	51	638
25	45	15	9.5	50	86	86	224	20	46	100	100	629
26	34	14	9.0	51	84	66	176	19	68	56	43	312
27	30	14	12	39	88	67	111	17	75	41	33	257
28	26	13	62	47	230	70	79	16	62	34	26	115
29	24	--	39	56	166	68	61	15	87	30	22	70
30	21	--	23	47	134	66	54	15	186	51	22	45
31	18	--	18	--	120	--	57	14	--	40	--	37

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1976											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	35	533	12	26	149	54	57	47	42	404	251	66
2	48	280	12	29	169	64	54	41	37	329	1300	27
3	47	122	11	38	914	66	72	37	53	352	644	26
4	45	74	11	27	621	62	70	34	61	349	191	37
5	32	48	11	23	279	59	80	31	60	226	149	49
6	25	40	22	20	245	61	78	29	58	156	149	67
7	21	339	20	22	146	62	73	28	56	149	146	43
8	19	116	27	22	100	62	69	100	52	146	105	34
9	21	61	17	29	407	57	63	150	48	146	78	97
10	19	47	14	35	498	57	60	180	37	146	61	97
11	17	36	28	48	336	51	59	210	31	146	49	18
12	15	31	22	41	224	50	61	200	33	166	45	16
13	14	27	20	69	128	64	72	110	165	181	45	38
14	13	23	15	53	98	110	82	70	261	135	55	17
15	37	21	21	39	88	98	100	37	487	114	101	22
16	68	20	101	40	72	92	120	33	136	95	75	8.7
17	70	18	173	47	66	86	160	29	72	89	77	6.8
18	126	16	128	56	59	80	120	28	47	89	63	7.5
19	265	16	68	77	50	66	88	28	47	86	51	8.1
20	232	21	48	45	101	59	68	32	35	77	87	10
21	279	16	57	38	101	54	64	42	31	69	138	19
22	162	18	70	43	92	53	65	47	27	66	178	18
23	90	16	59	58	86	80	68	28	23	63	27	15
24	61	15	41	68	74	64	72	25	237	57	12	19
25	50	14	34	59	96	64	90	33	265	70	7.8	15
26	144	14	34	54	78	64	110	48	187	529	8.1	27
27	195	14	28	54	68	56	130	58	361	265	27	45
28	140	13	24	66	59	56	100	74	828	201	16	66
29	183	13	23	84	57	59	81	90	341	177	36	93
30	587	--	20	98	54	59	68	80	273	671	51	60
31	351	--	18	--	48	--	55	53	--	322	--	31

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1977											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	32	88	64	26	46	31	138	32	16	34	84	36
2	10	247	69	45	188	29	70	28	16	27	66	29
3	8.7	192	67	62	135	60	52	24	15	24	181	25
4	13	165	165	65	97	37	45	21	15	165	334	21
5	33	186	74	56	73	122	40	18	34	122	168	19
6	67	390	58	80	61	163	36	17	23	66	147	17
7	36	315	93	117	55	90	32	17	30	178	88	18
8	22	172	66	77	48	64	29	28	83	108	63	13
9	32	132	45	81	42	46	27	38	28	70	46	11
10	34	83	54	65	37	36	27	27	29	190	35	11
11	38	100	62	58	33	30	28	22	67	301	39	12
12	31	131	45	114	29	26	25	19	135	177	90	15
13	40	218	35	100	29	23	24	17	77	127	104	125
14	97	284	33	74	30	21	23	17	58	702	115	51
15	89	202	28	61	31	19	132	16	43	517	79	53
16	169	141	30	66	30	18	140	16	31	708	53	43
17	212	136	32	50	30	17	70	15	25	393	42	34
18	109	311	27	41	31	16	50	15	20	240	33	29
19	98	187	24	42	68	16	40	15	17	139	27	28
20	179	134	29	72	47	22	34	15	16	132	19	25
21	202	142	23	45	39	30	32	14	72	263	16	21
22	116	117	21	44	45	42	35	14	95	273	14	18
23	123	84	19	79	81	57	44	15	48	145	12	17
24	101	89	17	104	51	226	75	15	36	97	16	21
25	73	107	26	85	46	118	57	14	27	93	35	45
26	54	127	31	79	40	94	44	14	23	290	59	32
27	41	162	33	87	36	111	36	29	20	533	99	28
28	38	93	23	66	32	207	31	45	17	265	84	25
29	115	--	21	51	30	98	25	23	38	387	55	20
30	141	--	36	44	28	120	31	19	37	183	46	17
31	141	--	30	--	28	--	46	17	--	124	--	16

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1978											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	14	21	20	39	236	118	21	6.6	163	81	306	95
2	14	18	16	33	280	85	39	6.4	88	603	236	263
3	12	17	17	33	154	76	126	6.0	61	269	138	165
4	15	16	16	28	100	68	83	6.0	45	159	114	93
5	23	80	15	28	73	60	56	43	33	206	240	77
6	27	70	27	27	55	54	45	55	27	416	163	59
7	24	56	52	84	49	52	37	56	22	353	111	179
8	22	106	46	53	49	70	31	54	14	475	78	726
9	46	56	40	82	46	55	27	53	16	224	57	524
10	30	48	38	66	41	46	24	46	15	131	47	247
11	22	49	32	70	39	40	21	34	14	103	54	78
12	19	34	29	74	59	36	20	29	231	91	46	85
13	18	24	31	47	61	34	19	25	129	274	37	281
14	17	28	26	58	54	33	18	23	471	101	40	105
15	15	37	35	35	50	31	21	21	215	144	37	75
16	14	34	33	32	80	30	20	18	126	102	31	57
17	12	42	27	34	69	35	17	32	80	431	31	44
18	11	51	42	33	128	35	15	25	67	600	26	38
19	11	117	51	32	107	31	14	21	733	210	20	58
20	67	40	40	32	78	29	13	18	401	154	19	79
21	49	54	35	38	62	28	12	17	325	345	17	47
22	32	49	31	45	54	26	11	15	204	698	51	44
23	92	31	29	43	54	25	11	14	121	270	83	39
24	214	27	66	42	49	23	11	13	91	279	98	37
25	54	27	60	51	103	21	10	11	63	481	81	31
26	49	25	43	127	97	21	9.6	10	48	202	350	28
27	43	23	41	75	208	21	8.9	9.6	83	128	917	25
28	45	26	37	72	209	21	8.4	9.0	299	95	774	23
29	36	--	29	90	189	20	7.7	37	149	86	233	21
30	30	--	26	137	114	21	7.2	177	99	517	135	19
31	24	--	40	--	112	--	6.9	198	--	491	--	17

Table 2.--Continued.

Water flow (ft ³ /s) of Sashin Creek, 1979												
Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	16	31	12	27	67	154	24	85	26	108	55	52
2	16	30	71	26	87	112	24	89	32	117	42	47
3	15	30	143	23	215	126	22	57	19	689	33	43
4	14	31	264	22	192	278	21	45	25	305	27	38
5	14	26	202	42	183	236	21	37	16	393	23	94
6	13	24	272	46	124	178	19	31	14	147	20	109
7	13	23	295	101	105	151	27	27	12	92	17	78
8	13	23	135	104	87	87	23	23	11	82	15	68
9	13	22	156	93	78	140	42	20	10	562	13	61
10	12	20	120	48	172	80	41	17	9.4	196	12	55
11	12	19	108	45	149	64	35	15	34	127	11	49
12	12	18	123	45	97	57	30	13	145	104	13	44
13	12	17	123	45	101	51	27	12	249	86	96	38
14	12	17	90	41	76	55	27	10	112	84	830	33
15	17	16	75	36	64	58	26	9.8	74	53	510	29
16	36	16	64	33	83	49	49	9.1	129	44	340	25
17	60	15	62	33	91	45	180	11	201	49	250	24
18	91	15	72	33	82	41	76	10	160	36	190	40
19	68	14	76	34	73	40	133	9.0	54	28	320	33
20	50	14	105	34	65	36	193	8.2	40	23	480	58
21	61	14	76	35	56	33	245	7.5	33	20	230	27
22	77	13	60	39	131	32	117	6.6	29	18	140	26
23	96	13	53	47	143	31	75	5.7	61	112	90	33
24	48	12	50	50	208	30	54	5.5	31	113	72	22
25	63	13	46	53	281	28	43	5.2	27	62	57	80
26	70	12	45	53	196	27	35	5.0	31	60	46	59
27	52	12	37	59	118	26	30	5.0	183	90	37	43
28	44	11	37	66	92	27	26	4.7	66	180	34	109
29	38	--	33	72	72	28	22	4.6	66	155	38	62
30	34	--	31	69	63	26	58	4.4	184	121	45	28
31	32	--	28	--	79	--	128	4.3	--	75	--	32

Table 2.--Continued.

Date	Water flow (ft ³ /s) of Sashin Creek, 1980											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	40	60	112	32	297	43	24	310	62	--	--	--
2	56	51	85	29	171	39	43	190	52	--	--	--
3	45	40	60	28	106	39	31	120	56	--	--	--
4	35	32	45	27	77	44	26	80	66	--	--	--
5	28	43	35	34	66	51	23	55	63	--	--	--
6	26	68	29	39	61	54	21	40	59	--	--	--
7	21	105	25	50	96	51	20	30	56	--	--	--
8	18	159	29	42	103	50	18	24	190	--	--	--
9	16	86	26	37	78	46	17	19	440	--	--	--
10	14	58	22	43	70	40	15	16	180	--	--	--
11	11	43	19	469	66	37	14	13	92	--	--	--
12	10	35	18	513	60	36	13	11	61	--	--	--
13	12	29	18	166	56	46	12	9	43	--	--	--
14	15	25	15	103	48	62	12	11	31	--	--	--
15	18	21	14	182	45	49	11	15	23	--	--	--
16	17	18	37	160	62	43	11	20	21	--	--	--
17	17	16	26	150	83	40	10	25	19	--	--	--
18	16	15	28	204	110	34	10	32	18	--	--	--
19	43	13	28	184	208	29	23	40	38	--	--	--
20	90	14	27	160	132	27	29	50	35	--	--	--
21	72	34	58	301	95	30	38	63	34	--	--	--
22	67	54	108	264	73	112	49	80	66	--	--	--
23	27	49	55	134	59	117	70	56	62	--	--	--
24	17	82	48	111	52	71	75	38	58	--	--	--
25	12	69	81	107	48	54	84	27	70	--	--	--
26	11	143	61	132	47	44	77	20	60	--	--	--
27	9	138	64	293	47	38	71	15	90	--	--	--
28	8	112	55	199	48	31	66	11	122	--	--	--
29	11	101	38	202	46	28	62	36	180	--	--	--
30	20	--	39	254	42	24	200	42	250	--	--	--
31	14	--	40	--	41	--	560	50	--	--	--	--

Table 3.--Daily maximum and minimum stream temperatures ($^{\circ}\text{C}$) for Sashin Creek, Alaska, August 1964 - September 1980. Data were recorded in $^{\circ}\text{F}$ by both the National Marine Fisheries Service and the U.S. Geological Survey. We converted all the data to $^{\circ}\text{C}$. Unless noted otherwise, the data were obtained from the U.S. Geological Survey. On this page, data for 1 August through 31 December were recorded with a Taylor thermograph by the National Marine Fisheries Service.

Water temperature ($^{\circ}\text{C}$) of Sashin Creek, 1964

Date	January		February		March		April		May		June		July		August		September		October		November		December	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	10.0	12.8	11.1	8.3	7.2	4.4	3.3	1.7	0.6
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.2	9.4	12.8	10.6	7.8	7.2	--	--	2.2	1.7
3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.3	11.1	12.2	10.6	7.8	7.2	--	--	2.2	0.6
4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.3	12.2	11.1	10.0	7.8	7.8	--	--	1.1	0.0
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	10.0	11.1	9.4	8.9	7.8	--	--	2.2	0.0
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.8	11.7	12.2	10.0	9.4	8.9	--	--	2.8	2.2
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.7	11.1	11.7	10.0	8.9	8.3	--	--	3.9	3.3
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.2	11.1	11.7	8.9	8.9	8.3	--	--	3.9	3.3
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.9	11.1	11.7	9.4	8.9	7.2	--	--	3.9	2.7
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.3	12.8	11.1	8.9	7.2	7.2	4.4	4.4	2.8	1.1
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.4	12.8	10.6	8.3	7.8	7.2	4.4	3.3	1.1	0.0
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.8	12.2	10.0	8.9	8.3	7.8	3.3	2.8	0.6	-0.6
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.2	11.1	10.0	9.4	8.3	7.8	2.8	2.2	0.0	-0.6
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	10.6	10.0	10.0	8.3	7.8	2.8	2.2	0.0	0.0
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.0	10.0	10.6	10.0	7.8	6.7	--	--	0.6	0.0
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.6	10.0	10.6	10.0	6.7	6.7	3.3	2.2	0.6	0.6
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	10.6	9.4	8.9	6.7	5.6	4.4	3.3	0.6	0.0
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	11.1	8.9	8.3	7.2	6.7	5.0	4.4	0.0	-0.6
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	10.6	8.9	8.3	7.2	5.6	5.6	5.0	-0.6	-0.6
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.6	10.0	8.9	8.9	7.8	7.2	5.6	5.0	-0.6	-1.1
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.6	9.4	10.0	8.9	8.3	7.2	5.0	4.4	0.0	-0.6
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	9.4	10.0	10.0	8.3	6.1	4.4	3.3	0.6	-0.6
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.7	10.0	10.0	10.0	6.1	5.6	3.3	2.8	0.6	0.6
24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.7	10.0	10.0	8.3	5.6	5.0	3.3	2.2	0.6	0.0
25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.2	11.1	8.3	7.8	5.6	4.4	--	--	0.0	-0.6
26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.7	11.1	8.9	8.3	6.1	5.6	--	--	-0.6	-0.6
27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	10.0	9.4	8.3	6.7	6.1	--	--	0.0	-0.6
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.0	10.0	8.9	7.8	6.7	5.6	--	--	0.0	-0.6
29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.0	10.0	8.9	8.9	5.6	4.4	--	--	0.0	0.0
30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.6	9.4	8.9	8.3	4.4	3.3	0.6	0.6	0.0	0.0
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.7	10.0	--	--	3.9	3.3	--	--	0.0	-0.6

Table 3.--Continued. All data on this page were recorded by the National Marine Fisheries Service with a Taylor thermograph.

Date	Water temperature (°C) of Sashin Creek, 1965																								
	January		February		March		April		May		June		July		August		September		October		November		December		
Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	0.0	-1.1	0.6	0.0	0.0	0.0	2.2	0.6	2.2	1.7	3.3	2.8	10.0	8.3	16.1	13.9	12.2	11.1	11.1	10.6	6.1	4.4	3.3	3.3	
2	-1.1	-1.1	0.6	0.6	1.1	0.0	1.7	0.6	1.7	1.1	5.0	3.3	10.6	8.9	15.6	14.4	12.2	11.1	10.6	10.0	6.1	5.6	3.9	3.3	
3	-0.6	-1.1	0.6	0.0	1.1	0.0	1.1	0.0	1.7	0.6	3.9	3.3	10.6	10.0	14.4	12.8	12.8	11.1	10.0	10.0	6.1	6.1	4.4	3.9	
4	0.0	-0.6	0.0	-0.6	1.7	1.1	1.7	0.0	2.8	1.1	3.9	3.3	10.0	10.0	13.3	12.2	12.8	11.7	--	--	6.1	6.1	4.4	3.9	
5	0.6	0.0	-0.6	-0.6	1.1	1.1	2.2	0.6	3.3	2.2	3.9	2.8	12.2	10.0	15.0	12.2	13.3	11.7	--	--	6.1	6.1	3.9	2.8	
6	0.6	0.0	0.0	-0.6	1.1	1.1	2.2	1.1	2.8	1.7	4.4	2.2	11.1	8.9	15.6	13.3	11.1	10.6	--	--	6.1	5.6	2.8	2.2	
7	0.6	0.0	0.0	-0.6	1.1	0.6	3.3	1.1	2.2	1.7	5.6	3.9	11.7	8.9	16.1	13.9	11.1	10.6	--	--	5.6	4.4	2.8	2.2	
8	0.0	-0.6	--	--	1.7	1.1	3.3	1.1	2.2	1.1	6.1	3.3	12.8	10.0	15.6	14.4	11.1	10.6	--	--	4.4	2.8	3.3	2.8	
9	-0.6	-0.6	--	--	2.8	1.7	2.2	1.7	1.7	0.0	5.0	4.4	13.9	10.6	16.7	13.3	10.6	10.6	--	--	5.0	4.4	3.9	3.3	
10	-0.6	-0.6	--	--	2.2	1.1	2.8	0.6	2.8	1.1	5.0	3.9	15.0	12.2	15.6	13.9	10.6	10.6	--	--	5.0	4.4	4.4	3.9	
11	0.0	-0.6	--	--	2.2	0.6	1.1	0.6	3.3	1.1	4.4	4.4	14.4	12.2	14.4	12.8	11.7	11.7	--	--	4.4	3.9	4.4	3.9	
12	0.6	0.0	--	--	2.2	0.6	-	--	3.9	2.2	4.4	3.3	12.8	11.7	13.9	12.2	11.7	11.7	6.7	6.1	4.4	3.9	3.3	2.7	
13	0.6	0.6	--	--	1.1	0.0	--	--	3.9	2.2	4.4	3.3	12.8	12.8	14.4	12.2	--	--	7.8	7.8	4.4	4.4	--	--	
14	0.6	0.0	--	--	1.1	0.0	--	--	2.2	1.7	5.6	3.9	12.8	11.7	14.4	12.2	--	--	8.3	7.8	4.4	3.3	--	--	
15	0.6	0.0	--	--	1.7	0.0	--	--	1.7	1.7	6.1	4.4	13.3	11.7	14.4	13.3	--	--	8.3	8.3	--	--	3.3	3.3	
16	0.6	0.6	--	--	1.7	0.6	--	--	3.3	2.2	7.2	5.6	14.4	11.7	14.4	12.8	--	--	8.3	8.3	--	--	3.3	3.3	
17	1.1	0.6	--	--	1.7	0.6	--	--	3.3	2.2	6.1	5.6	15.0	12.8	14.4	12.8	--	--	8.3	7.8	--	--	3.9	3.3	
18	1.1	1.1	--	--	1.1	0.0	--	--	4.4	1.7	--	--	12.8	12.8	14.4	12.8	--	--	7.8	7.2	--	--	3.9	3.3	
19	2.2	1.1	--	--	0.6	0.0	2.8	1.1	5.0	2.2	--	--	12.2	11.1	14.4	12.8	--	--	6.7	6.7	--	--	3.3	2.8	
20	2.2	2.2	--	--	1.1	0.6	3.3	1.1	5.0	2.8	--	--	13.3	11.1	15.6	13.3	--	--	6.1	5.6	--	--	2.8	1.7	
21	2.2	1.7	--	--	2.2	0.6	2.2	2.2	3.3	2.2	6.7	5.0	12.2	11.7	15.6	13.3	--	--	6.7	6.1	--	--	2.8	2.2	
22	1.7	0.6	--	--	2.2	0.0	2.8	1.7	3.3	2.2	5.6	5.0	12.2	11.1	15.6	13.3	12.8	12.2	7.2	6.7	2.2	1.7	2.2	2.2	
23	0.6	0.0	--	--	2.8	1.1	1.1	1.1	4.4	1.7	5.6	5.0	12.2	11.1	15.0	12.8	13.3	12.2	8.9	7.8	2.2	1.7	2.8	2.2	
24	0.6	0.0	--	--	3.3	1.7	2.2	1.1	2.8	2.2	5.6	5.0	12.8	11.7	15.0	12.8	13.3	13.3	8.3	7.8	1.7	1.1	3.3	2.8	
25	1.1	0.6	--	--	2.8	1.0	1.1	1.1	3.9	2.8	7.2	5.0	12.8	11.7	13.3	11.7	13.3	12.2	7.2	6.7	1.7	1.1	2.8	2.2	
26	1.1	0.6	--	--	1.7	0.0	1.7	1.1	5.0	2.8	8.3	6.1	15.0	10.0	11.7	11.1	12.2	11.1	7.8	7.2	2.2	1.7	1.1	1.1	
27	1.1	0.6	--	--	0.6	0.0	2.2	1.1	5.0	3.3	7.8	7.2	10.6	9.4	12.2	11.7	10.0	10.0	7.8	6.7	2.2	2.2	0.6	0.0	
28	0.6	0.0	--	--	1.1	0.0	2.2	2.2	4.4	2.8	9.4	7.8	11.7	10.0	13.3	11.1	10.6	10.0	7.8	7.8	2.8	1.7	0.6	0.0	
29	0.6	0.0	--	--	1.7	0.0	2.8	1.7	4.4	2.2	8.3	6.1	13.3	10.6	12.2	11.7	10.6	10.0	7.8	7.8	2.8	2.2	1.1	0.6	
30	0.0	0.0	--	--	0.6	0.6	3.3	1.1	4.4	2.2	9.4	6.7	13.9	12.2	12.8	11.1	11.1	10.6	7.8	7.8	2.8	2.8	1.1	1.1	
31	0.6	0.0	--	--	0.6	0.6	--	--	3.9	2.2	--	--	15.6	13.3	12.2	11.7	--	--	8.3	7.8	--	--	1.7	1.1	

Table 3.--Continued. From 1 January through 23 October 1966, the National Marine Fisheries Service recorded data with a Taylor thermograph.

Date	Water temperature (°C) of Sashin Creek, 1966																								
	January		February		March		April		May		June		July		August		September		October		November		December		
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1	--	--	1.7	1.1	2.2	1.7	3.3	2.8	2.2	2.2	7.8	5.6	12.8	10.0	12.8	12.2	13.3	12.8	9.4	8.9	4.4	4.4	2.8	2.8	
2	--	--	1.7	1.7	1.7	1.7	2.2	1.7	3.3	2.8	7.8	5.6	12.8	11.1	13.3	12.8	12.2	12.2	8.9	8.3	4.4	4.4	2.8	2.2	
3	--	--	1.7	1.7	1.7	1.7	2.8	1.7	3.3	3.3	7.8	5.0	12.2	11.1	14.4	13.3	12.2	10.6	9.4	7.8	4.4	4.4	2.2	1.7	
4	--	--	1.1	0.6	2.2	1.7	3.3	1.1	3.3	2.8	6.1	5.0	12.2	11.1	15.0	13.3	11.1	10.6	9.4	5.0	4.4	4.4	1.7	1.1	
5	--	--	0.6	0.6	1.7	0.6	3.9	2.2	2.8	2.8	6.1	5.0	13.9	11.7	14.4	12.8	11.1	10.6	10.0	10.0	4.4	4.4	1.1	1.1	
6	--	--	0.6	0.6	1.1	0.6	4.4	2.2	2.8	2.8	8.3	6.7	15.0	12.2	15.6	13.9	11.1	11.1	10.0	9.4	5.0	4.4	1.1	1.1	
7	--	--	--	--	1.1	1.1	3.9	2.2	3.3	2.2	8.9	6.1	13.9	13.3	14.4	13.3	11.1	11.1	10.0	8.9	5.0	4.4	1.1	1.1	
8	--	--	--	--	1.7	1.1	3.3	1.7	2.8	2.8	8.9	7.2	15.0	13.3	12.2	12.2	11.1	10.6	8.9	8.3	4.4	3.9	1.1	1.1	
9	--	--	--	--	1.7	1.7	2.8	1.7	3.9	2.8	8.9	7.8	12.8	11.1	12.2	12.2	10.6	10.0	8.3	7.8	3.9	3.9	1.1	1.1	
10	1.1	1.1	--	--	1.7	1.1	1.1	0.6	4.4	2.8	7.2	6.7	13.3	11.1	12.2	11.7	10.6	9.4	7.8	6.1	3.9	3.9	1.1	1.1	
11	1.7	1.1	--	--	1.1	0.6	3.9	2.2	4.4	3.9	6.7	6.1	14.4	13.3	12.2	11.7	10.6	9.4	7.8	7.8	3.9	3.9	1.1	1.1	
12	1.7	1.7	--	--	0.6	0.6	3.9	1.1	3.9	3.3	6.7	6.1	15.0	12.2	11.7	11.1	11.1	10.0	7.8	7.2	3.9	3.9	1.1	1.1	
13	1.7	1.1	--	--	1.1	0.6	2.2	2.2	3.9	2.8	8.3	7.8	15.0	13.3	11.1	11.1	11.7	11.1	7.8	7.8	3.9	3.3	1.1	1.1	
14	1.1	0.6	1.1	1.1	2.2	1.7	2.2	1.7	3.3	2.8	10.0	7.8	16.1	13.9	11.1	11.1	12.2	11.1	7.8	7.2	3.3	3.3	1.1	1.1	
15	0.6	0.6	2.2	1.7	2.8	1.7	2.8	1.7	3.3	2.8	10.0	8.9	15.0	14.4	11.7	11.1	12.2	11.1	7.2	6.7	3.3	3.3	1.1	1.1	
16	1.1	0.6	2.8	2.2	2.8	2.2	2.8	1.7	3.3	3.3	9.4	8.9	14.4	13.3	12.2	11.1	11.1	10.6	6.7	6.1	3.3	3.3	1.1	1.1	
17	11.1	0.6	2.2	1.7	2.2	1.7	2.8	1.7	4.4	3.3	8.3	7.8	14.4	13.9	13.3	12.2	10.0	10.0	--	--	3.3	2.8	1.1	1.1	
18	1.7	1.1	1.7	1.1	2.2	1.7	--	--	4.4	4.4	8.3	7.8	15.6	14.4	13.3	12.2	10.0	9.4	--	--	2.8	2.8	1.1	1.1	
19	1.7	1.7	1.1	0.6	1.7	1.1	--	--	4.4	3.9	8.3	7.8	15.6	15.0	12.8	11.1	10.6	10.0	6.1	5.6	3.3	3.3	1.1	1.1	
20	1.7	1.7	1.1	0.6	2.2	1.1	--	--	3.9	3.3	10.0	7.8	15.6	15.0	12.8	11.7	10.0	10.0	6.1	6.1	3.3	2.8	1.1	1.1	
21	1.1	1.1	1.7	1.1	2.2	1.7	--	--	3.9	2.8	10.0	8.3	15.6	14.4	12.2	11.1	10.6	10.0	6.1	5.6	2.8	2.8	1.1	1.1	
22	1.1	0.6	1.7	1.1	2.2	1.7	--	--	4.4	3.3	11.1	9.4	16.7	14.4	12.2	12.2	10.0	10.0	5.6	4.4	2.8	2.8	1.1	1.1	
23	0.6	0.6	2.2	2.2	2.2	1.7	--	--	--	--	10.6	10.0	16.7	14.4	13.3	12.2	10.0	10.0	5.0	4.4	2.8	2.8	1.1	1.1	
24	1.1	1.1	2.2	2.2	2.2	1.7	--	--	--	--	11.1	8.9	17.8	15.0	14.4	13.3	10.0	10.0	3.9	3.9	2.8	2.8	1.1	1.1	
25	1.7	1.1	1.7	1.7	1.7	1.1	3.3	2.2	6.1	3.9	10.6	8.9	18.3	15.6	14.4	12.8	10.6	9.4	3.9	3.9	2.8	2.8	1.1	1.1	
26	1.7	1.7	1.1	1.1	1.7	1.1	3.9	2.2	6.1	3.9	10.0	10.0	16.7	15.6	13.9	12.2	10.6	8.9	3.9	3.9	2.8	2.8	1.1	1.1	
27	1.7	1.1	1.7	1.1	1.7	1.7	3.9	2.8	4.4	3.3	11.7	10.0	16.7	15.6	12.2	11.7	11.1	10.0	3.9	3.3	2.8	2.8	1.1	1.1	
28	2.2	1.7	1.1	0.6	2.2	1.7	4.4	2.8	5.0	3.9	11.1	10.0	15.6	15.0	13.9	11.7	10.6	10.6	3.3	3.3	2.8	2.8	1.1	1.1	
29	0.6	0.6	--	--	2.8	2.2	3.3	2.2	6.1	3.9	11.1	10.6	15.6	15.0	11.1	10.6	10.0	10.0	3.3	3.3	2.8	2.8	1.1	1.1	
30	1.1	0.6	--	--	3.3	2.8	2.8	2.8	7.2	5.6	11.7	10.6	15.6	14.4	13.3	12.8	10.0	9.4	3.9	3.3	2.8	2.8	1.1	1.1	
31	1.1	0.6	--	--	2.8	2.2	--	--	7.8	4.4	--	--	14.4	12.2	13.3	13.3	--	--	4.4	3.9	--	--	1.1	1.1	

Table 3.--Continued. From 4 July through 5 December 1967, the National Marine Fisheries Service recorded data with a Taylor thermograph.

	Water temperature ($^{\circ}\text{C}$) of Sashin Creek, 1967																								
	January		February		March		April		May		June		July		August		September		October		November		December		
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
1	1.1	1.1	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	3.3	3.3	7.2	7.2	14.4	13.9	12.2	11.7	8.9	8.9	6.7	6.7	3.3	2.2	
2	1.1	1.1	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	3.3	3.3	7.2	7.2	15.0	13.9	12.2	12.2	9.4	8.9	6.7	5.6	3.9	2.8	
3	1.1	1.1	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	3.9	3.3	7.2	7.2	15.0	12.8	12.2	11.7	9.4	8.9	5.6	5.0	3.3	2.8	
4	1.1	1.1	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	3.9	3.9	11.1	10.0	15.0	12.2	11.7	11.1	8.9	8.3	5.6	5.0	3.3	2.2	
5	1.1	1.1	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	3.9	3.9	10.6	10.0	16.1	13.3	11.1	11.1	8.3	7.8	5.6	5.0	3.3	2.8	
6	1.1	1.1	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	3.9	3.9	10.6	10.0	16.7	13.9	11.1	11.1	8.3	7.8	6.7	6.1	3.0	2.0	
7	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.0	1.1	1.1	3.9	3.9	10.6	10.0	15.6	15.0	11.1	10.0	8.3	7.2	7.2	6.7	3.0	2.0	
8	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	3.9	3.9	10.6	10.0	14.4	13.9	10.6	10.0	8.9	7.8	7.2	6.7	3.0	2.0	
9	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	5.6	5.6	10.0	8.9	13.9	13.3	11.1	10.6	10.0	9.4	6.1	5.0	2.0	2.0	
10	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	5.6	5.0	8.9	8.3	13.3	13.3	11.1	10.0	10.0	9.4	5.0	5.0	2.0	2.0	
11	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	5.0	4.4	--	--	13.9	12.8	11.1	10.0	9.4	8.9	5.0	5.0	2.0	2.0	
12	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	4.4	4.4	--	--	14.4	12.8	11.7	11.1	8.9	8.3	5.0	4.4	2.0	2.0	
13	1.1	1.1	1.7	1.7	1.1	1.1	-0.6	0.6	1.1	1.1	4.4	4.4	--	--	15.6	13.3	11.1	10.6	8.3	8.3	5.0	4.4	2.0	2.0	
14	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	4.4	4.4	--	--	15.6	13.9	10.6	10.6	8.9	8.3	5.6	5.0	2.0	2.0	
15	1.1	1.1	1.7	1.7	1.1	1.1	0.6	0.6	1.1	1.1	4.4	4.4	--	--	15.6	13.3	10.6	10.0	8.9	8.9	6.1	5.6	2.0	2.0	
16	1.1	1.1	1.7	1.7	0.6	0.6	0.6	0.6	1.1	1.1	5.0	4.4	--	--	15.0	13.3	10.6	10.0	8.9	8.3	5.6	5.0	2.0	2.0	
17	1.7	1.1	1.7	1.7	0.6	0.0	0.6	0.6	1.7	1.1	5.0	5.0	11.1	10.0	14.4	12.8	11.1	10.0	8.9	7.8	5.0	5.0	2.0	2.0	
18	1.7	1.7	1.7	1.7	0.0	0.0	0.6	0.6	1.7	1.7	5.0	5.0	11.7	9.4	13.9	13.3	11.1	10.6	7.8	7.8	5.0	4.4	2.0	2.0	
19	1.7	1.7	1.7	1.7	1.1	0.0	0.0	0.6	0.6	1.7	1.7	5.0	5.0	12.2	10.6	13.3	13.3	10.6	10.0	7.2	6.7	6.1	5.0	2.0	2.0
20	1.7	1.7	1.1	1.1	0.0	0.0	0.6	0.0	1.7	1.7	5.6	5.0	13.3	10.6	13.9	13.3	10.0	9.4	6.7	6.7	6.7	5.0	2.0	2.0	
21	1.7	1.7	1.1	1.1	0.0	0.0	0.6	0.6	1.7	1.7	5.6	5.6	12.8	12.2	14.4	13.9	9.4	8.9	7.2	6.7	7.2	6.7	2.0	2.0	
22	1.7	1.7	1.1	1.1	0.0	0.0	0.6	0.6	1.7	1.7	5.6	5.6	13.3	10.0	14.4	13.3	9.4	8.9	7.2	7.2	7.2	6.7	2.0	2.0	
23	1.7	1.7	1.1	1.1	0.6	0.0	0.6	0.6	2.2	1.7	6.1	5.6	13.3	12.8	13.3	12.2	10.0	9.4	7.2	7.2	6.7	5.0	2.0	2.0	
24	1.7	1.7	1.1	1.1	0.0	0.0	0.6	0.6	2.2	2.2	6.1	6.1	13.9	11.7	12.2	11.7	10.0	9.4	7.8	7.2	5.0	3.9	2.0	2.0	
25	1.7	1.7	1.1	1.1	0.0	0.0	1.1	0.6	2.8	2.2	6.1	6.1	14.4	12.2	11.7	11.7	10.0	9.4	7.8	7.2	3.9	3.9	2.0	2.0	
26	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	2.8	2.8	6.1	6.1	13.3	12.2	12.8	11.7	10.0	10.0	7.2	6.1	4.4	3.9	2.0	1.0	
27	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	2.8	2.8	7.2	6.1	13.9	13.3	13.3	12.8	10.6	10.0	6.1	6.1	4.4	3.9	1.0	1.0	
28	1.7	1.7	1.1	1.1	0.0	0.0	1.1	1.1	2.8	2.8	7.2	7.2	--	--	13.3	12.8	10.0	8.3	6.7	6.1	4.4	3.9	1.0	1.0	
29	1.7	1.7	--	--	0.0	0.0	1.1	1.1	2.8	2.8	7.2	7.2	--	--	13.9	12.8	8.3	8.3	7.2	6.7	4.4	3.9	1.0	1.0	
30	1.7	1.7	--	--	0.0	0.0	1.1	1.1	3.3	2.8	7.2	7.2	--	--	13.9	13.3	8.9	8.3	6.7	6.7	3.9	3.3	1.0	1.0	
31	1.7	1.7	--	--	0.0	0.0	--	--	3.3	3.3	--	--	14.4	12.8	13.3	12.2	--	--	6.7	6.7	--	--	1.0	1.0	

Table 3.--Continued. From 15 July through 15 November 1968, National Marine Fisheries Service recorded data with a Taylor thermograph.

		Water temperature (°C) of Sashin Creek, 1968																					
		January		February		March		April		May		June		July		August		September		October		November	
Date		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	4.0	4.0	10.0	10.0	15.6	13.3	12.8	12.2	9.4	8.9	6.1	6.1	
2		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	4.0	4.0	11.0	10.0	16.7	13.3	12.8	12.8	9.4	8.9	6.1	5.6	
3		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	4.0	4.0	11.0	11.0	16.7	14.4	12.8	12.2	8.9	8.3	6.1	5.6	
4		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	4.0	4.0	11.0	11.0	17.8	14.4	12.2	12.2	8.3	8.3	6.7	6.1	
5		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	4.0	4.0	11.0	11.0	17.8	15.6	12.2	12.2	8.9	8.3	7.2	6.1	
6		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	5.0	4.0	12.0	11.0	17.2	15.0	12.2	11.7	9.4	8.9	7.2	7.2	
7		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	6.0	5.0	12.0	11.0	15.6	13.9	12.2	12.2	8.9	8.9	6.7	6.7	
8		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	2.0	6.0	6.0	11.0	11.0	14.4	13.9	12.2	12.2	8.9	8.9	6.7	6.1
9		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	2.0	6.0	6.0	11.0	11.0	15.6	13.3	12.2	11.7	8.9	7.8	6.7	6.1
10		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	2.0	6.0	6.0	12.0	11.0	17.2	13.9	11.7	11.1	7.8	6.7	6.7	6.1
11		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	2.0	6.0	6.0	12.0	11.0	16.7	14.0	11.1	10.0	7.2	6.7	6.1	6.1
12		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	6.0	6.0	13.0	12.0	15.6	15.0	10.0	9.4	7.8	6.7	6.1	6.1	6.1
13		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	7.0	6.0	14.0	13.0	16.7	13.9	10.0	10.0	7.2	6.7	6.1	5.6	--
14		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	8.0	7.0	17.0	14.0	15.6	13.9	10.6	10.0	7.8	7.2	5.6	4.4	--
15		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0	9.0	8.0	15.6	13.3	14.4	13.9	10.6	10.0	7.8	7.2	4.4	3.9	--
16		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	9.0	9.0	15.0	13.3	14.4	13.3	10.6	10.6	7.8	7.2	--	--	--
17		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	9.0	9.0	14.4	12.8	13.3	13.3	10.6	10.6	7.2	6.7	No data available until 9 February 1969		
18		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	9.0	8.0	15.0	12.2	13.9	13.3	10.0	9.4	7.2	6.1			
19		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	8.0	8.0	16.1	13.3	14.4	13.3	9.4	8.9	7.8	6.7			
20		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	8.0	8.0	16.1	14.4	14.4	13.3	9.4	8.9	7.8	7.2	--	--	--
21		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	8.0	8.0	16.1	15.0	14.4	13.9	10.0	9.4	7.8	7.8	--	--	--
22		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	8.0	8.0	16.7	14.4	13.9	12.8	10.6	10.0	7.8	7.2	--	--	--
23		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	8.0	8.0	16.7	14.4	12.8	12.2	10.6	10.0	7.2	6.7	--	--	--
24		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	9.0	8.0	16.7	13.9	13.3	12.2	10.6	9.4	6.7	6.7	--	--	--
25		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	9.0	9.0	16.1	13.9	13.3	12.8	9.4	8.9	6.7	6.1	--	--	--
26		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	9.0	9.0	16.1	15.0	13.9	13.3	8.9	8.9	6.7	6.7	--	--	--
27		1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	2.0	9.0	9.0	15.6	15.0	13.9	13.3	10.0	8.9	6.7	6.7	--	--
28		1.0	1.0	1.0	1.0	2.0	2.0	2.0	1.0	3.0	3.0	9.0	9.0	16.1	15.0	13.3	12.2	10.0	10.0	6.7	6.1	--	--
29		1.0	1.0	2.0	1.0	2.0	2.0	1.0	1.0	3.0	3.0	9.0	9.0	16.1	14.4	12.2	11.7	10.0	9.4	6.7	6.1	--	--
30		1.0	1.0	--	--	2.0	2.0	1.0	1.0	3.0	3.0	10.0	9.0	15.6	15.0	12.2	11.7	10.0	9.4	6.7	6.1	--	--
31		1.0	1.0	--	--	2.0	2.0	--	--	4.0	3.0	--	--	15.6	15.0	12.8	12.2	--	--	6.1	6.1	--	--

Table 3.--Continued.

Water temperature (°C) of Sashin Creek, 1969

Date	January		February		March		April		May		June		July		August		September		October		November		December			
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1					1.0	1.0	1.0	1.0	3.0	2.5	4.5	4.0	15.5	13.0	12.0	11.5	10.5	10.0	9.0	9.0	8.5	8.0	5.5	5.5		
2	No data available				1.0	1.0	1.0	1.0	2.5	2.0	5.0	4.0	14.0	12.5	12.0	10.0	11.0	10.0	9.0	9.0	8.0	7.0	6.0	5.5		
3	until 9 February 1969				1.0	1.0	1.0	1.0	2.5	1.5	4.0	4.0	15.0	13.0	12.0	11.0	11.0	10.5	9.0	9.0	7.0	6.5	6.0	5.5		
4				1.0	1.0	1.0	1.0	2.5	1.5	4.5	4.0	14.0	13.5	13.0	11.0	11.0	10.0	9.0	9.0	6.5	6.5	5.5	5.5			
5	--	--	--	--	1.0	1.0	1.5	1.0	2.5	2.0	6.0	4.5	14.5	12.5	13.0	11.0	11.0	10.5	10.0	9.0	9.0	6.5	6.0	5.5	5.5	
6	--	--	--	--	1.0	1.0	1.5	1.5	3.0	2.5	6.5	5.0	14.5	13.5	13.0	12.5	12.5	10.5	10.5	9.0	9.0	6.0	5.0	5.5	5.0	
7	--	--	--	--	1.0	1.0	1.5	1.0	3.0	2.5	8.5	5.5	14.0	13.5	13.0	12.5	12.5	10.5	10.0	9.0	9.0	6.0	5.5	6.0	5.5	
8	--	--	--	--	1.0	1.0	1.5	1.0	3.0	2.5	8.5	7.0	13.5	11.5	12.5	12.0	10.5	10.0	9.0	8.5	8.5	5.5	5.0	5.5	5.5	
9	--	--	0.5	0.5	1.0	1.0	1.5	1.0	3.0	2.5	9.0	7.0	11.5	10.5	12.0	11.0	10.0	10.0	8.5	8.5	5.5	5.5	5.5	5.5		
10	--	--	0.5	0.5	1.0	1.0	1.5	1.5	3.0	2.5	10.5	7.0	11.0	10.0	12.0	10.0	10.0	9.5	8.5	8.5	5.5	5.5	5.5	5.5		
11	--	--	0.5	0.5	1.0	1.0	1.5	1.5	3.0	2.5	10.5	8.5	10.0	10.0	12.0	10.0	10.0	9.5	8.5	8.5	5.5	5.5	5.5	5.0		
12	--	--	0.5	0.5	1.0	1.0	2.0	1.5	3.5	3.0	10.0	8.5	10.5	10.5	11.5	10.0	9.5	9.0	8.5	8.0	5.5	3.5	5.0	4.5		
13	--	--	0.5	0.5	1.0	1.0	2.0	2.0	3.5	2.5	11.0	9.0	10.5	10.5	10.5	10.0	9.5	9.0	8.5	8.0	5.5	3.5	5.0	4.5		
14	--	--	0.5	0.5	1.0	1.0	2.0	2.0	3.0	2.5	10.5	9.5	11.5	10.5	10.5	10.0	9.5	9.0	8.0	7.0	4.5	3.5	5.0	4.5		
15	--	--	0.5	0.5	1.0	1.0	2.0	1.5	3.5	2.5	12.0	9.5	12.0	11.0	10.5	10.0	9.5	9.0	7.0	6.5	5.0	4.5	5.0	5.0		
16	--	--	0.5	0.5	1.0	1.0	1.5	1.5	4.0	2.5	12.5	11.0	11.5	11.5	10.0	8.5	9.5	9.0	6.5	6.5	5.0	5.0	5.0	5.0		
17	--	--	1.0	0.5	1.0	1.0	1.5	1.5	4.5	3.0	16.0	12.0	12.0	11.5	8.5	8.5	9.0	9.0	6.5	6.0	4.5	4.5	5.0	4.5		
18	--	--	1.0	1.0	1.0	1.0	1.5	1.5	4.5	3.0	14.5	10.5	13.0	11.0	8.5	8.5	9.5	9.0	6.5	6.0	4.5	4.5	4.5	4.5		
19	--	--	1.0	1.0	1.0	1.0	1.5	1.5	4.0	3.5	13.5	10.5	12.5	11.5	8.5	8.0	9.5	9.0	6.5	6.0	4.5	4.0	4.5	4.5		
20	--	--	1.0	1.0	1.0	1.0	1.5	1.5	4.0	3.5	13.5	10.5	12.5	11.5	8.5	8.0	9.5	9.0	6.5	6.0	4.5	4.0	5.0	4.5		
21	--	--	1.0	1.0	1.0	1.0	1.5	1.0	4.0	3.5	13.5	11.0	13.5	11.5	8.0	8.0	9.5	9.0	6.5	6.0	4.0	4.0	5.0	5.0		
22	--	--	1.0	1.0	1.0	1.0	1.5	1.0	4.0	3.5	13.0	12.5	12.5	11.5	9.0	8.0	10.0	9.5	6.5	6.0	4.5	4.0	5.0	5.0		
23	--	--	1.0	1.0	1.0	1.0	2.0	1.5	4.5	3.5	12.0	11.5	12.0	11.0	9.0	8.5	9.5	9.5	6.5	6.0	4.5	4.0	5.0	4.0		
24	--	--	1.0	1.0	1.0	1.0	2.0	2.0	3.5	3.5	12.0	11.0	12.0	10.5	11.5	10.5	9.0	8.0	9.5	9.5	6.0	5.5	4.5	4.0		
25	--	--	1.0	1.0	1.0	1.0	2.0	2.0	4.0	3.5	12.5	11.0	12.0	11.5	9.5	9.0	9.5	9.0	5.0	4.5	5.0	4.5	4.0	3.0		
26	--	--	1.0	1.0	1.0	1.0	2.0	1.5	4.5	3.5	13.0	11.5	11.0	10.5	10.5	9.5	9.5	9.5	4.5	4.5	5.0	4.5	4.0	3.5		
27	--	--	1.0	1.0	1.0	1.0	2.0	1.5	5.0	4.0	14.5	11.0	11.5	10.5	11.0	10.0	9.5	9.5	5.0	4.5	5.0	4.5	4.0	3.5		
28	--	--	1.0	1.0	1.0	1.0	3.0	2.5	4.0	4.0	15.0	12.5	13.0	10.5	11.0	9.5	9.5	9.5	5.0	4.5	6.0	5.0	4.0	4.0		
29	--	--	--	--	1.0	1.0	3.0	2.5	4.0	4.0	14.0	12.0	11.5	11.5	10.5	10.0	9.5	9.0	6.5	5.0	5.5	4.5	4.0	4.0		
30	--	--	--	--	1.0	1.0	3.0	2.5	4.0	4.0	13.0	12.0	12.0	11.0	10.5	10.0	9.0	9.0	6.5	6.5	5.5	5.5	4.5	4.5		
31	--	--	--	--	1.0	1.0	--	--	4.0	4.0	--	--	12.0	11.5	10.5	10.0	--	--	8.5	6.5	--	--	4.5	4.5		

Table 3.--Continued. From 31 March through 29 July and from 1 September through 8 October 1970, the National Marine Fisheries Service recorded data with a Taylor thermograph.

Date	Water temperature (°C) of Sashin Creek, 1970																							
	January		February		March		April		May		June		July		August		September		October		November		December	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	5.0	5.0	1.0	1.0	2.0	2.0	4.4	2.8	4.4	3.3	7.2	6.1	8.9	8.9	13.5	13.0	11.7	10.6	8.3	7.8	6.0	4.5	1.5	1.0
2	5.0	5.0	1.0	1.0	2.0	0.0	3.3	2.2	5.6	3.3	7.8	6.1	10.0	8.9	13.5	13.0	11.1	10.0	8.3	7.8	5.5	4.5	1.0	1.0
3	5.0	4.5	1.0	1.0	2.0	1.0	2.2	0.0	4.4	2.8	7.2	6.1	9.4	8.9	14.5	13.0	11.1	10.0	8.3	7.8	4.5	4.5	1.0	1.0
4	4.5	4.5	1.0	1.0	2.0	0.0	3.3	1.7	4.4	3.9	6.1	5.6	10.0	8.9	13.5	13.0	11.1	10.0	7.8	7.2	5.0	4.5	1.0	1.0
5	4.5	4.0	2.0	1.0	1.0	0.5	1.7	0.0	4.4	3.3	8.3	5.6	9.4	8.9	13.5	12.5	10.0	9.4	7.2	5.6	4.5	4.0	1.0	1.0
6	4.0	3.0	2.0	2.0	1.0	1.0	2.8	1.1	3.9	3.3	7.2	5.6	8.9	8.3	13.5	13.0	10.6	9.4	6.7	5.0	4.5	4.0	1.0	1.0
7	3.0	3.0	2.0	2.0	2.0	0.0	2.2	0.6	3.9	3.3	7.8	6.7	8.3	7.8	13.5	13.0	10.0	9.4	6.7	6.1	4.5	4.5	1.0	0.5
8	1.1	0.0	2.0	2.0	2.0	1.0	1.7	0.6	3.9	3.3	7.8	6.7	8.3	7.8	13.5	13.0	10.0	9.4	7.2	6.1	4.5	4.0	1.0	0.5
9	1.1	-0.6	2.0	2.0	2.0	2.0	1.1	1.1	5.6	3.3	7.8	6.7	9.4	7.8	13.0	12.0	9.4	8.3	6.5	6.0	4.0	4.0	0.5	0.5
10	-0.6	-0.6	2.0	2.0	--	--	1.7	1.1	6.1	3.3	10.6	6.1	10.0	7.8	13.0	12.5	10.0	7.2	6.5	6.5	4.5	4.0	1.0	0.5
11	-0.6	-1.1	2.0	2.0	2.8	1.7	2.8	0.6	7.8	4.4	10.6	7.8	11.7	8.3	12.5	11.5	10.0	7.2	6.5	6.5	5.0	4.5	1.0	0.5
12	-0.6	-1.1	2.0	2.0	1.7	1.7	3.9	1.1	7.2	5.6	10.0	8.3	10.0	8.9	12.0	11.5	10.0	7.2	7.0	6.5	5.0	5.0	1.5	0.5
13	-1.1	-1.1	3.0	2.0	2.2	1.7	4.4	1.7	6.7	5.0	9.4	8.3	10.0	8.9	12.0	12.0	10.6	7.2	7.0	7.0	5.0	4.5	1.0	1.0
14	-1.1	-1.1	3.0	3.0	2.8	1.7	5.0	1.7	5.6	5.0	12.2	8.3	10.0	8.9	12.0	11.0	10.0	7.8	7.0	7.0	5.0	4.5	1.0	1.0
15	-1.1	-1.1	3.0	3.0	2.8	1.7	5.6	1.7	5.6	4.4	12.2	8.9	10.0	8.9	11.0	11.0	9.4	8.3	7.0	6.5	5.0	4.5	1.0	1.0
16	-1.1	-1.1	3.0	3.0	2.8	1.7	3.9	2.2	6.1	4.4	11.7	8.9	11.1	8.9	11.0	11.0	9.4	8.9	6.5	6.5	4.5	4.5	1.0	1.0
17	-0.6	-1.1	3.0	3.0	2.8	1.7	3.3	2.2	6.1	4.4	12.8	9.4	10.0	8.9	11.5	11.0	8.9	8.9	6.0	6.0	4.5	4.5	1.0	0.5
18	-0.6	-1.1	2.0	2.0	2.8	2.2	5.6	2.2	6.1	5.0	11.7	8.9	10.0	8.3	11.0	11.0	9.4	8.3	6.0	5.0	4.5	4.0	0.5	0.5
19	-0.6	-0.6	2.0	2.0	3.3	1.7	5.6	2.2	6.7	5.6	12.8	10.0	9.4	8.3	11.0	11.0	9.4	8.3	6.0	5.0	4.0	3.0	0.5	0.0
20	-0.6	-0.6	2.0	2.0	2.0	2.0	6.1	2.2	5.6	5.0	12.8	10.0	11.1	8.9	11.0	11.0	10.0	8.9	5.0	5.0	3.0	2.5	0.0	0.0
21	0.6	-0.6	2.0	2.0	2.0	1.5	5.0	3.3	6.1	5.0	13.9	10.6	12.8	8.9	12.0	11.0	8.9	8.9	5.0	5.0	2.5	2.0	0.5	0.0
22	0.6	0.0	2.0	2.0	1.5	0.5	5.0	2.8	5.0	4.4	11.1	10.6	10.6	10.0	11.5	11.5	8.9	7.8	5.0	4.5	2.5	2.5	1.0	0.5
23	0.6	0.0	3.0	2.0	1.5	1.0	3.3	1.7	5.6	4.4	11.1	10.0	10.0	9.4	12.0	11.5	8.3	7.2	5.0	4.5	3.0	2.5	1.0	1.0
24	0.6	0.0	3.0	2.0	1.5	1.5	5.0	2.2	5.6	5.0	10.6	10.0	12.2	9.4	12.0	11.5	7.2	6.7	5.0	4.5	2.5	2.5	1.0	0.5
25	0.6	0.0	2.0	2.0	2.0	1.5	5.0	2.2	5.6	4.4	9.4	8.9	11.1	8.9	12.0	11.0	7.8	7.2	5.0	4.5	2.5	2.0	1.0	1.0
26	0.0	0.0	2.0	2.0	2.0	2.0	6.1	2.8	6.7	4.4	9.4	8.9	14.5	10.0	12.0	11.0	8.9	7.8	4.5	3.0	2.5	2.0	1.0	0.5
27	0.0	0.0	2.0	2.0	2.0	2.0	5.6	2.8	6.1	5.0	10.0	8.3	15.6	10.6	12.0	11.0	8.9	7.8	4.5	3.0	2.0	2.0	1.0	0.5
28	0.0	-0.6	2.0	2.0	2.5	2.0	3.9	2.8	6.7	5.0	12.2	8.9	16.7	11.1	12.0	11.0	8.3	8.3	4.5	4.5	2.0	2.0	1.0	1.0
29	1.0	1.0	--	--	2.5	2.0	4.4	3.3	7.2	5.0	10.6	10.0	13.3	12.8	12.0	12.0	8.9	8.9	4.5	4.5	2.0	2.0	1.5	1.0
30	1.0	1.0	--	--	2.5	2.5	4.4	3.9	6.7	5.0	9.4	8.9	13.0	13.0	12.0	12.0	8.3	8.3	4.5	4.5	1.5	1.5	1.0	0.5
31	1.0	1.0	--	--	5.0	3.3	--	--	7.2	5.6	--	--	13.5	13.0	12.0	12.0	--	--	5.5	4.5	--	--	0.5	0.5

Table 3.--Continued. From 20 December 1971 through 22 March 1972, the National Marine Fisheries Service recorded temperatures with a Taylor thermograph.

	Water temperature (°C) of Sashin Creek, 1971																								
	January		February		March		April		May		June		July		August		September		October		November		December		
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1	0.5	0.5	1.0	0.5	1.0	1.0	1.0	0.5	1.5	1.0	2.5	1.5	4.5	3.5	13.0	10.5	10.5	10.0	8.0	7.5	5.0	5.0	3.5	2.5	
2	1.0	0.5	0.5	0.5	1.5	1.0	1.0	0.5	1.0	1.0	2.5	1.5	4.5	4.0	12.5	11.5	10.5	10.0	8.0	7.5	5.0	4.5	3.5	3.5	
3	1.0	1.0	0.5	0.5	1.5	1.0	0.5	0.5	1.5	1.0	3.5	2.0	4.0	4.0	12.5	10.5	10.0	9.0	8.0	7.5	4.5	4.5	3.5	2.0	
4	0.5	0.0	0.5	0.5	1.0	0.5	1.0	0.5	1.5	0.5	3.5	2.0	4.5	4.0	11.5	11.0	9.5	9.0	7.5	7.5	4.5	4.0	2.5	1.5	
5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	1.0	1.5	1.0	3.5	2.0	4.0	4.0	13.0	11.5	9.0	9.0	7.5	7.5	4.0	4.0	2.5	2.5	
6	1.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	3.5	2.0	5.5	4.0	12.5	12.0	9.0	8.0	7.5	7.5	4.0	2.5	3.5	2.5	
7	1.5	1.5	1.0	0.5	0.5	0.5	1.0	0.5	1.0	1.0	3.5	2.0	5.0	4.0	12.0	11.5	8.0	7.5	8.0	7.5	3.5	3.5	2.5	2.0	
8	1.5	1.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	2.5	2.5	6.0	4.0	12.5	11.5	7.5	7.5	8.0	7.5	3.5	2.5	2.5	2.5	
9	1.5	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	2.5	2.5	6.0	4.5	12.5	11.5	7.5	7.5	7.5	7.0	3.5	3.5	2.5	2.5	
10	1.0	0.5	0.5	0.5	1.0	0.5	1.0	1.0	1.0	1.0	2.5	2.5	6.0	4.5	13.0	12.0	7.5	7.0	7.5	7.0	4.0	3.5	2.5	2.0	
11	1.0	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	2.5	2.5	5.0	3.5	13.0	12.0	7.5	7.0	7.5	7.5	3.5	2.5	2.0	2.0	
12	0.5	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.5	1.0	3.5	2.5	4.5	4.0	13.0	12.0	8.0	7.5	7.5	7.5	4.0	3.5	2.0	2.0	
13	0.5	0.5	1.0	0.5	1.0	1.0	1.0	0.5	1.5	1.5	3.5	2.5	5.0	4.0	13.5	12.5	7.5	7.5	7.5	7.0	4.0	4.0	2.0	2.0	
14	0.5	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.5	1.5	4.0	2.5	4.5	4.5	13.5	13.0	7.5	7.5	7.0	6.5	4.0	2.5	2.5	2.0	
15	0.5	0.5	1.5	1.0	1.0	0.5	1.0	1.0	2.0	1.0	4.0	2.5	5.0	4.5	13.5	13.0	7.5	7.5	6.5	6.5	4.0	2.0	--	--	
16	0.5	0.5	1.5	1.5	1.0	0.5	1.0	1.0	2.0	1.5	3.5	2.5	6.0	5.0	13.0	12.5	8.0	7.5	7.0	6.5	4.0	2.5	--	--	
17	0.5	0.5	1.5	1.5	1.0	0.5	1.0	0.5	1.5	1.0	3.5	2.5	7.0	5.5	12.5	11.5	9.0	8.0	7.0	6.5	4.0	4.0	--	--	
18	0.5	0.5	1.5	1.5	1.0	0.5	1.0	0.5	1.5	1.5	3.5	2.5	7.0	6.5	11.5	10.0	8.0	8.0	6.5	6.0	4.0	4.0	--	--	
19	1.0	0.5	1.5	1.5	1.0	1.0	1.0	0.5	2.0	1.0	3.0	2.5	7.5	6.0	10.0	10.0	9.0	8.0	6.5	6.0	4.5	4.0	--	--	
20	1.0	0.5	1.5	1.5	1.0	1.0	1.0	1.5	1.0	2.0	1.0	3.0	2.5	8.0	6.5	10.0	9.5	9.0	8.0	6.0	6.0	4.5	4.0	-0.6	-0.6
21	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	3.5	3.0	8.0	7.0	9.5	9.0	9.5	9.0	6.0	6.0	4.5	4.5	-0.6	-1.1	
22	1.0	1.0	1.5	1.0	1.0	0.5	1.0	1.0	1.5	1.5	3.5	3.5	8.0	7.0	9.5	9.0	9.5	9.0	6.0	6.0	4.5	4.5	-1.1	-1.1	
23	1.5	0.5	1.5	0.5	1.0	0.5	1.0	1.0	1.5	1.0	3.5	3.5	9.0	7.5	9.5	9.0	9.5	9.0	6.5	6.5	6.0	4.5	4.5	-1.1	-1.1
24	0.5	0.5	1.5	1.0	1.0	0.5	1.5	1.0	2.0	1.5	4.0	3.5	9.5	8.0	9.0	9.0	9.5	9.5	6.5	5.5	4.5	4.5	-0.6	-0.6	
25	0.5	0.5	0.5	0.5	1.0	1.0	1.5	1.0	1.5	1.5	4.0	3.5	10.0	8.0	8.0	8.0	9.5	8.0	5.5	5.0	4.5	4.5	-0.6	-1.1	
26	0.5	0.5	1.0	0.5	1.0	1.0	1.5	1.0	1.5	1.5	4.5	3.5	11.0	9.5	8.0	8.0	8.0	7.0	5.0	4.5	4.5	4.0	-0.6	-1.1	
27	0.5	0.5	1.5	1.0	1.0	0.5	1.5	1.0	1.5	1.5	4.5	3.5	11.5	10.0	8.0	8.0	8.0	7.5	4.5	4.5	4.0	4.0	-0.6	-0.6	
28	1.0	0.5	1.0	1.0	1.0	0.5	1.5	1.0	2.0	1.5	4.0	3.5	13.0	11.0	9.0	8.0	7.5	7.0	4.5	3.5	4.0	3.5	-0.6	-0.6	
29	1.0	1.0	--	--	1.0	0.5	1.0	1.0	2.0	1.5	4.0	3.5	13.0	11.5	9.5	9.0	7.0	6.0	5.0	4.5	3.5	2.5	-0.6	-0.6	
30	1.0	0.5	--	--	1.0	0.5	1.0	1.0	2.0	1.5	4.5	3.5	12.5	10.0	10.5	9.5	8.0	7.0	5.0	5.0	3.5	2.0	-0.6	-0.6	
31	1.0	1.0	--	--	1.0	0.5	--	--	2.5	1.5	--	--	13.0	10.0	10.5	10.0	--	--	5.0	5.0	--	--	-0.6	-0.6	

Table 3.--Continued. From 21 October through 23 October 1972, National Marine Fisheries Service recorded temperatures with a Taylor thermograph.

		Water temperature (°C) of Sashin Creek, 1972																									
		January		February		March		April		May		June		July		August		September		October		November		December			
Date		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		
1		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.0	2.0	2.0	2.5	2.5	4.0	2.0	10.5	9.5	10.5	10.0	8.5	8.0	5.5	5.5	4.0	3.5		
2		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.0	2.0	2.0	2.5	2.0	4.5	2.5	10.0	9.5	10.5	10.0	8.0	7.0	5.5	5.5	3.5	3.0		
3		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-1.1	1.5	1.0	2.0	2.0	2.0	5.0	2.5	9.5	8.0	10.5	10.0	7.0	7.0	5.5	5.0	3.0	3.0		
4		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.0	2.5	2.0	2.0	2.0	5.0	3.5	9.0	7.5	11.0	10.5	7.0	7.0	5.0	3.5	3.0	3.0	
5		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.0	2.0	2.0	2.0	1.5	5.0	3.5	8.0	7.5	11.0	11.0	7.5	7.0	4.0	3.5	3.0	2.0	
6		0.0	0.0	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.5	2.0	2.0	2.0	1.5	4.0	3.5	9.0	8.0	11.0	11.0	8.0	7.0	4.0	4.0	4.0	2.5	
7		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.5	2.5	2.0	2.5	2.0	5.0	3.5	9.5	8.0	11.0	10.5	7.0	7.0	4.0	4.0	4.0	2.0	
8		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.5	2.0	3.5	2.5	5.5	4.0	9.5	9.0	10.5	10.0	7.0	6.0	4.0	4.0	3.0	2.0	
9		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.0	2.0	3.5	2.5	4.5	4.5	10.0	9.0	10.5	10.0	6.0	5.5	4.5	4.0	2.0	1.5	
10		0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.5	2.0	2.0	4.0	2.5	4.5	4.0	10.0	9.0	11.5	10.5	5.5	5.5	5.0	4.5	2.0	1.5	
11		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.0	2.0	3.5	3.5	5.5	4.0	10.0	9.0	11.5	11.5	6.0	5.5	5.0	4.5	2.0	1.5	
12		-0.6	-1.1	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.0	2.0	3.5	3.5	6.5	5.0	10.5	9.5	11.5	11.0	6.5	6.0	5.0	5.0	2.5	1.5	
13		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.5	2.0	3.5	3.5	5.0	5.0	10.5	9.5	12.0	11.5	6.0	6.0	5.0	5.0	2.0	1.5	
14		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.5	2.0	3.5	2.5	5.0	4.5	9.5	9.0	12.0	11.0	6.0	6.0	5.0	4.5	2.0	1.0	
15		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	1.5	1.5	2.5	2.0	2.5	2.5	5.0	5.0	10.5	9.5	11.0	10.0	6.0	6.0	4.5	4.5	1.0	0.5	
16		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.0	2.0	3.5	2.5	5.5	5.0	11.0	10.5	10.0	10.0	6.0	5.5	4.5	4.5	1.5	0.5	
17		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	2.0	2.5	2.0	3.5	2.5	7.0	5.5	11.5	11.0	10.0	9.0	5.5	5.5	4.5	4.5	1.5	1.0	
18		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	2.0	2.0	2.0	3.5	2.5	6.5	5.5	12.5	11.5	9.0	8.0	6.0	5.5	4.5	4.5	2.0	1.0	
19		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.0	2.0	3.5	2.5	7.0	6.0	12.5	11.0	8.0	8.0	6.0	5.5	4.5	3.5	2.0	0.5	
20		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	2.0	1.5	2.0	2.0	3.5	2.5	7.5	6.5	12.5	10.5	8.0	7.5	5.5	5.0	4.5	2.0	1.0		
21		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	0.6	0.0	2.0	1.5	2.5	2.0	3.5	2.5	9.0	7.0	12.5	11.5	7.5	7.0	4.4	3.9	5.0	4.5	1.0
22		-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	0.6	0.0	2.0	2.0	2.5	2.0	4.5	2.5	9.0	8.0	12.5	12.0	7.0	7.0	5.6	4.4	5.0	4.5	1.0
23		-0.6	-0.6	--	--	1.0	1.0	2.0	1.5	3.0	2.0	4.5	2.5	10.0	8.0	12.5	11.0	7.0	6.5	6.1	5.0	4.5	4.5	1.0	0.5		
24		-0.6	-0.6	--	--	1.0	1.0	2.0	2.0	2.5	2.0	4.5	3.5	10.0	8.0	11.0	10.5	6.5	6.0	6.5	6.5	4.5	3.0	1.5	1.0		
25		-0.6	-0.6	--	--	1.0	0.5	2.0	2.0	2.0	2.0	4.0	3.5	10.0	8.0	11.0	10.5	6.5	6.0	6.5	6.0	4.5	4.5	1.0	1.0		
26		-0.6	-0.6	--	--	1.0	1.0	2.0	1.5	2.0	2.0	3.5	3.5	10.0	9.5	10.5	10.5	6.0	5.5	6.0	6.0	4.5	4.0	1.5	1.0		
27		-0.6	-0.6	--	--	1.0	1.0	2.0	2.0	2.0	2.0	3.5	3.5	9.5	8.0	10.5	10.5	6.5	6.0	6.0	5.5	4.5	4.0	1.5	1.5		
28		-0.6	-0.6	-0.6	-0.6	1.0	1.0	2.5	2.0	2.5	2.0	3.5	3.5	8.0	8.0	10.5	10.0	7.5	6.5	5.5	5.0	4.5	3.5	1.5	1.0		
29		-0.6	-0.6	-0.6	-1.1	1.5	1.0	2.0	2.5	2.5	2.5	3.5	3.5	8.0	8.0	10.0	9.5	8.0	7.5	5.0	4.0	4.0	3.5	1.5	1.0		
30		-0.6	-0.6	--	--	1.5	1.0	2.5	2.0	2.5	2.5	3.5	3.5	9.0	8.0	10.0	10.0	8.0	8.0	5.5	4.5	4.0	3.5	1.5	1.5		
31		-0.6	-0.6	--	--	1.5	1.0	--	--	2.5	2.5	--	--	10.5	8.0	10.5	9.5	--	--	5.5	5.5	--	--	1.5	0.5		

Table 3.--Continued. From 29 September through 31 December 1973, National Marine Fisheries Service recorded temperatures with a Taylor thermograph.

Date	Water temperature (°C) of Sashin Creek, 1973																									
	January		February		March		April		May		June		July		August		September		October		November		December			
Date	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	0.6	0.6	0.0	0.0	0.6	0.0	1.0	0.5	1.0	0.5	3.0	2.0	7.0	6.5	11.0	10.0	9.5	8.5	7.8	7.2	3.9	3.9	0.0	0.0		
2	0.6	0.0	0.0	-0.6	0.6	0.0	0.5	0.0	1.5	1.0	3.5	2.0	6.5	6.0	11.0	10.0	9.5	9.0	7.8	7.2	3.3	2.8	0.0	0.0		
3	0.0	-0.6	0.6	0.0	0.6	0.0	1.0	0.0	1.5	1.0	2.5	2.0	6.5	5.5	10.5	9.5	9.5	8.5	7.2	7.2	2.8	2.8	0.0	0.0		
4	0.6	0.0	0.6	0.0	0.6	0.0	1.0	1.0	1.5	1.5	2.5	2.0	6.5	6.5	10.0	9.0	9.0	8.5	7.2	6.7	2.8	2.2	0.6	0.0		
5	0.0	-0.6	0.6	0.0	--	--	1.5	1.0	1.5	1.5	2.5	2.0	7.0	6.5	10.0	9.0	9.0	8.5	6.7	6.1	2.2	1.7	0.6	0.0		
6	0.0	0.0	0.0	-0.6	--	--	1.0	1.0	2.0	1.5	3.0	2.5	8.0	6.5	10.5	9.5	9.5	9.0	6.7	6.7	1.7	1.1	0.6	0.6		
7	0.6	0.0	0.0	-0.6	--	--	1.5	1.0	1.5	1.5	3.0	2.5	8.5	7.0	11.0	9.0	9.0	8.5	6.7	6.1	1.1	1.1	0.6	0.6		
8	0.0	-0.6	0.0	0.0	--	--	1.0	1.0	1.5	0.5	3.0	2.5	9.5	8.0	11.0	10.0	10.0	8.5	8.0	7.2	6.1	1.1	0.6	1.1	0.6	
9	-0.6	-0.6	-0.6	-0.6	--	--	1.0	1.0	1.5	1.5	3.0	3.0	10.5	9.0	11.5	10.0	8.5	8.5	7.2	6.7	0.6	0.0	1.1	0.6		
10	-0.6	-0.6	0.0	-0.6	--	--	1.0	1.0	2.0	1.5	3.5	3.0	10.5	9.0	11.0	10.0	8.5	8.5	7.2	7.2	0.6	0.0	1.7	1.1		
11	0.0	-0.6	-0.6	-0.6	--	--	1.5	1.0	2.0	1.5	3.0	3.0	9.5	8.5	11.0	10.0	9.0	8.0	6.7	6.7	0.6	0.0	2.2	1.7		
12	-0.6	-0.6	0.0	-0.6	1.7	0.0	1.5	0.5	2.0	1.5	3.5	3.0	9.0	8.5	10.5	10.0	9.0	8.0	6.1	6.1	0.6	0.0	2.8	2.2		
13	0.0	-0.6	1.1	0.0	0.6	0.0	1.5	0.5	2.0	2.0	3.5	3.0	9.0	8.0	10.0	10.0	9.5	8.0	6.1	5.6	0.0	0.0	2.2	1.7		
14	0.0	-0.6	1.1	1.1	1.1	0.0	1.5	1.5	3.0	2.0	4.5	3.0	9.0	8.0	10.0	9.0	9.5	8.0	5.6	5.6	0.0	0.0	1.1	0.0		
15	0.0	0.0	0.6	0.0	0.6	0.0	1.5	1.0	3.0	2.0	4.0	3.5	9.0	8.0	9.5	8.5	9.5	8.0	5.6	5.6	0.0	0.0	0.0	0.0		
16	0.0	0.0	-0.6	-1.1	0.6	0.0	1.0	0.0	3.0	2.0	5.0	3.0	10.0	8.5	9.5	8.5	9.5	8.0	5.6	4.4	0.0	0.0	0.0	0.0		
17	0.0	0.0	-0.6	-1.1	0.0	-0.6	1.5	1.0	2.0	2.0	5.5	3.5	10.0	9.5	9.0	8.5	9.0	8.0	5.6	5.0	0.0	0.0	1.1	0.6		
18	0.0	-0.6	0.0	-0.6	0.6	-0.6	1.5	1.0	2.0	2.0	4.5	4.0	10.5	9.0	9.5	8.0	9.0	8.0	5.0	5.0	0.6	0.0	1.1	0.6		
19	-0.6	-0.6	1.1	0.6	1.1	0.0	1.5	1.0	3.0	2.0	5.0	4.0	10.5	10.0	10.0	8.5	9.5	8.5	5.0	4.4	1.1	0.6	1.7	0.6		
20	-0.6	-0.6	1.1	0.6	1.1	0.0	1.0	0.5	2.0	2.0	5.5	4.0	11.0	9.5	10.5	9.0	10.0	9.5	7.2	7.2	1.7	1.1	2.2	1.7		
21	-0.6	-0.6	1.1	1.1	1.1	0.0	1.0	0.5	3.0	2.0	5.5	4.5	11.0	10.0	11.0	9.5	10.0	9.0	4.4	4.4	--	--	2.2	1.7		
22	0.0	-0.6	1.1	0.6	0.6	0.6	1.5	1.0	2.0	2.0	5.0	4.5	10.5	10.0	10.5	10.0	9.5	8.5	5.0	5.0	--	--	1.7	1.7		
23	0.6	0.0	1.1	0.6	1.1	0.0	1.5	1.0	2.0	2.0	5.0	4.5	11.0	10.0	10.5	10.0	8.5	7.0	5.0	5.0	--	--	1.1	0.0		
24	0.6	0.6	1.1	0.6	1.7	0.6	1.5	1.0	2.0	1.5	5.5	5.0	11.0	10.0	10.5	10.0	8.5	7.0	5.0	5.0	--	--	1.1	0.0		
25	0.6	0.0	0.6	0.0	1.7	0.0	1.0	1.0	2.5	1.5	5.5	5.0	11.5	10.0	11.0	10.0	8.0	7.5	5.0	4.4	--	--	1.7	1.1		
26	0.6	0.0	0.0	0.0	0.6	0.6	1.0	1.0	3.0	2.0	6.0	5.5	11.5	9.5	11.0	10.0	8.5	7.5	5.0	5.0	0.6	0.0	1.7	1.7		
27	0.6	0.0	0.0	0.0	1.7	0.6	1.5	1.0	2.0	1.5	5.5	5.0	11.5	10.5	11.0	9.5	8.5	8.0	5.0	5.0	0.6	0.0	1.7	1.1		
28	0.6	0.6	0.0	0.0	1.1	0.0	1.0	1.0	2.0	1.5	6.5	5.0	11.5	11.0	10.0	9.0	8.5	8.5	5.0	5.0	0.6	0.0	1.1	0.6		
29	0.6	0.0	--	--	1.1	0.0	1.5	1.0	2.5	2.0	7.0	6.0	11.5	10.5	10.0	9.5	5.6	5.6	5.0	4.4	4.4	0.0	0.0	1.1	1.1	
30	0.6	0.6	--	--	1.1	0.6	1.0	1.0	3.5	2.0	7.0	6.0	11.5	10.5	10.0	9.5	5.6	4.4	4.4	4.4	0.0	0.0	1.1	0.6		
31	0.6	0.0	--	--	1.7	0.6	--	--	3.5	1.5	--	--	11.5	10.5	10.0	9.5	--	--	4.4	4.4	--	--	0.6	0.6		

Table 3.--Continued. From 1 January through 4 October 1974, the National Marine Fisheries Service recorded data with a Taylor thermograph.

Water temperature (°C) of Sashin Creek, 1974

Date	January		February		March		April		May		June		July		August		September		October		November		December	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	0.6	0.0	-0.6	-0.6	-0.6	-0.6	--	--	2.2	1.1	2.8	2.2	6.7	5.6	13.3	10.6	13.9	12.2	7.8	7.2	6.0	6.0	4.0	4.0
2	0.6	0.0	0.0	-0.6	0.0	-0.6	--	--	1.7	1.1	3.3	2.2	8.3	5.6	12.8	11.7	13.3	11.7	7.2	6.7	6.5	6.0	4.0	4.0
3	0.0	-0.6	0.0	0.0	0.0	-0.6	--	--	1.1	1.1	3.3	2.2	8.9	6.1	13.3	11.7	13.3	11.7	6.7	6.1	6.5	6.5	4.0	4.0
4	-0.6	-0.6	0.0	0.0	0.0	-0.6	--	--	1.7	0.6	3.9	2.2	10.0	6.7	13.3	11.7	12.2	11.7	6.1	5.6	6.5	6.5	4.0	4.0
5	0.0	-0.6	0.0	0.0	0.0	-0.6	--	--	1.7	0.6	3.3	2.8	9.4	7.2	13.3	11.7	11.7	11.1	7.0	7.0	6.0	5.0	4.0	3.5
6	0.0	-0.6	0.0	0.0	0.0	-0.6	--	--	1.7	1.1	3.3	2.2	10.0	7.8	12.8	12.2	11.7	10.6	8.0	8.0	5.0	5.0	4.0	4.0
7	0.0	-0.6	0.0	0.0	0.0	-0.6	--	--	2.2	1.1	2.8	1.7	11.1	7.8	12.2	11.7	11.1	11.1	8.0	8.0	5.0	5.0	4.0	4.0
8	0.0	0.0	0.0	-0.6	-0.6	2.8	0.6	1.7	1.7	3.9	2.2	11.1	7.2	12.8	11.7	10.6	10.0	8.0	8.0	5.0	5.0	4.0	4.0	
9	0.0	0.0	0.6	-0.6	-0.6	1.7	0.0	1.7	1.1	3.3	2.2	12.2	8.9	12.8	12.2	10.0	9.4	8.0	8.0	5.0	5.0	4.0	4.0	
10	0.0	0.0	1.1	0.6	-0.6	1.1	0.0	1.7	1.1	3.3	2.8	11.7	9.4	13.3	12.2	10.6	9.4	8.0	8.0	5.0	5.0	4.0	4.0	
11	-0.6	-0.6	0.6	0.6	0.0	-0.6	2.2	0.6	2.2	1.1	3.9	2.8	12.8	10.0	13.3	11.7	10.6	10.0	7.0	6.5	5.0	4.5	4.0	4.0
12	-0.6	-0.6	0.6	0.6	0.0	-0.6	1.7	0.0	2.8	0.6	3.3	2.8	11.1	9.4	13.3	11.7	10.6	10.0	7.0	7.0	4.5	4.5	4.0	4.0
13	-0.6	-0.6	0.6	0.6	--	--	1.1	0.6	3.3	1.1	4.4	2.2	12.8	9.4	13.3	11.7	11.1	10.6	7.0	7.0	4.5	4.5	4.0	4.0
14	0.0	-0.6	0.6	0.6	--	--	1.7	0.0	4.4	3.3	4.4	2.2	11.1	8.9	13.9	11.7	11.7	11.1	7.0	7.0	4.5	4.5	4.0	4.0
15	0.0	0.0	0.6	0.6	--	--	1.7	0.0	4.4	3.9	3.9	2.8	11.7	10.0	13.9	12.2	11.7	10.6	7.0	7.0	4.5	4.5	4.0	4.0
16	0.0	0.0	0.6	0.6	--	--	1.1	0.6	4.4	3.9	3.9	2.8	11.7	10.0	13.9	12.2	11.7	10.6	7.0	7.0	4.5	4.5	4.0	3.5
17	0.0	-0.6	0.6	0.0	--	--	2.2	0.6	4.4	4.4	3.9	2.8	10.6	8.9	13.3	12.2	10.6	9.4	7.0	7.0	4.5	4.5	3.5	2.0
18	-0.6	-0.6	1.1	0.0	0.0	0.0	0.6	0.0	5.0	4.4	5.6	2.8	12.8	8.9	13.3	12.2	10.0	10.0	7.0	7.0	4.5	4.5	3.0	3.0
19	-0.6	-0.6	1.1	0.6	0.0	-0.6	1.7	0.0	5.0	5.0	4.4	2.8	12.8	10.0	13.3	12.2	9.4	8.9	7.0	6.5	4.5	4.0	3.0	3.0
20	-0.6	-0.6	1.1	0.0	0.6	0.0	1.1	0.6	4.4	1.7	6.1	3.3	11.7	9.4	13.3	12.8	10.0	9.4	6.5	6.5	5.0	4.0	3.0	3.0
21	0.0	-0.6	0.6	0.0	1.1	0.0	1.1	0.0	3.3	1.7	5.6	2.8	11.7	10.0	13.3	12.8	10.6	9.4	7.0	6.5	5.0	5.0	3.0	3.0
22	0.0	0.0	0.6	-0.6	2.2	0.0	3.3	0.0	3.3	1.7	5.0	3.3	11.1	10.6	12.8	11.7	10.6	9.4	7.0	7.0	5.0	4.0	3.0	3.0
23	0.0	0.0	0.6	-0.6	1.7	0.0	3.3	0.6	4.4	1.7	5.0	3.9	10.6	9.4	11.7	11.1	10.0	9.4	6.5	6.5	4.5	4.5	3.0	3.0
24	0.0	0.0	--	--	1.7	0.0	3.3	1.1	4.4	1.7	4.4	4.4	10.6	8.9	11.7	10.6	10.6	9.4	6.5	6.5	5.0	4.5	3.0	3.0
25	0.0	0.0	1.1	0.6	1.7	0.0	3.3	1.1	2.8	1.1	5.0	4.4	10.0	9.4	11.1	10.6	10.6	9.4	6.5	6.5	5.0	3.5	3.5	3.0
26	0.0	0.0	1.1	0.6	0.6	0.6	1.7	0.6	4.4	1.7	4.4	3.9	10.6	8.9	11.7	11.1	9.4	8.9	6.5	6.5	4.5	4.0	3.0	3.0
27	0.0	0.0	1.1	0.0	1.1	0.0	1.7	0.6	3.9	1.7	5.6	3.9	12.2	9.4	12.8	11.1	8.9	8.9	6.5	6.5	4.5	4.5	3.0	3.0
28	0.0	0.0	0.0	-0.6	1.7	0.0	2.2	1.1	3.9	1.7	5.6	3.9	12.2	9.4	13.3	11.7	8.9	8.3	6.5	6.5	4.5	4.5	3.0	3.0
29	0.0	-0.6	--	--	1.1	0.0	1.1	1.1	5.6	1.7	7.2	4.4	13.3	10.6	13.9	11.7	8.3	7.8	6.5	5.5	4.5	4.5	3.0	2.0
30	0.0	-0.6	--	--	2.2	0.0	2.2	1.1	5.6	1.7	6.7	5.6	13.9	11.1	14.4	11.7	7.8	7.2	6.0	5.5	4.0	4.0	2.0	1.5
31	-0.6	-0.6	--	--	1.7	0.0	--	--	3.3	1.7	--	--	13.9	11.1	14.4	12.2	--	--	6.0	6.0	--	--	2.0	1.5

Table 4.--Mean daily water temperature (°C) of Little Port Walter Bay, 2 m depth.

Date	Water temperature (°C), Little Port Walter Bay, 1969											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	--	--	--	--	--	--	9.5	--	8.6	--	--	--
2	--	--	--	--	--	--	9.7	--	8.8	--	--	--
3	--	--	--	--	--	--	10.0	--	8.8	--	--	--
4	--	--	--	--	--	--	10.2	--	8.8	--	--	--
5	--	--	--	--	--	--	9.8	--	8.8	--	--	--
6	--	--	--	--	--	--	9.8	--	8.8	--	--	--
7	--	--	--	--	--	--	9.7	--	8.7	--	--	--
8	--	--	--	--	3.8	--	9.5	--	8.7	--	--	--
9	--	--	--	--	4.2	9.8	9.1	--	8.7	--	--	--
10	--	--	--	--	3.8	8.9	9.0	--	8.7	--	--	--
11	--	--	--	--	3.2	10.1	8.9	--	8.6	--	--	--
12	--	--	--	--	4.8	10.3	8.9	--	8.4	--	--	--
13	--	--	--	--	5.0	11.0	8.8	--	8.5	--	--	--
14	--	--	--	--	4.8	10.8	9.1	--	8.4	--	--	--
15	--	--	--	--	6.0	10.8	9.5	--	8.3	--	--	--
16	--	--	--	--	6.2	11.0	10.5	--	8.2	--	--	--
17	--	--	--	--	6.0	11.5	11.0	--	8.3	--	--	--
18	--	--	--	--	6.5	11.5	10.5	--	8.3	--	--	--
19	--	--	--	--	6.1	11.3	10.8	--	8.5	--	--	--
20	--	--	--	--	5.7	11.2	11.0	--	8.4	--	--	--
21	--	--	--	--	6.2	11.1	10.6	--	8.2	--	--	--
22	--	--	--	--	5.5	11.0	10.5	8.5	--	--	--	--
23	--	--	--	--	6.3	10.7	11.0	8.6	--	--	--	--
24	--	--	--	--	5.0	10.8	10.4	8.7	--	--	--	--
25	--	--	--	--	5.1	10.7	9.8	8.7	--	--	--	--
26	--	--	--	--	6.0	11.2	11.0	8.7	--	--	--	--
27	--	--	--	--	7.1	11.6	--	8.8	--	--	--	--
28	--	--	--	--	--	11.6	--	8.6	--	--	--	--
29	--	--	--	--	--	11.5	--	8.5	--	--	--	--
30	--	--	--	--	--	10.0	--	8.3	--	--	--	--
31	--	--	--	--	--	--	--	8.4	--	--	--	--

Table 4.--Continued.

Date	Water temperature (°C), Little Port Walter Bay, 1972											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	--	--	--	--	--	--	7.0	9.5	8.0	7.0	5.5	5.5
2	--	--	--	--	--	--	7.0	9.0	8.0	7.5	5.5	5.0
3	--	--	--	--	--	--	9.0	9.0	8.5	6.5	4.5	5.5
4	--	--	--	--	--	--	9.0	9.0	9.5	6.5	4.5	5.5
5	--	--	--	--	--	--	9.0	8.5	9.0	6.5	4.5	5.0
6	--	--	--	--	--	--	9.0	8.5	8.5	6.5	4.5	5.5
7	--	--	--	--	--	--	9.0	8.5	8.5	7.0	5.0	5.5
8	--	--	--	--	--	--	9.0	8.0	8.5	6.5	5.5	5.5
9	--	--	--	--	--	--	8.5	8.0	8.0	6.5	5.5	5.5
10	--	--	--	--	--	--	8.5	8.0	8.5	6.5	4.5	5.5
11	--	--	--	--	--	--	8.5	8.0	8.5	6.5	4.5	5.5
12	--	--	--	--	--	--	8.5	8.5	8.5	6.5	4.5	5.5
13	--	--	--	--	--	--	8.0	8.5	8.5	6.0	5.0	5.5
14	--	--	--	--	--	--	8.0	9.0	8.0	6.5	5.0	5.0
15	--	--	--	--	--	--	8.0	8.5	8.0	6.5	5.5	4.5
16	--	--	--	--	--	--	7.5	8.5	7.5	6.5	5.0	4.0
17	--	--	--	--	--	6.5	8.0	8.5	8.0	6.5	5.5	4.5
18	--	--	--	--	--	7.0	8.5	9.0	8.0	6.5	5.5	4.5
19	--	--	--	--	--	7.5	8.5	9.0	8.0	6.0	5.5	4.5
20	--	--	--	--	--	7.5	9.5	8.5	8.0	5.5	5.5	5.0
21	--	--	--	--	--	7.5	10.0	10.0	7.5	6.0	5.0	4.5
22	--	--	--	--	--	7.5	11.0	10.0	7.5	6.0	5.5	4.0
23	--	--	--	--	--	8.0	--	9.0	7.5	6.0	6.5	4.0
24	--	--	--	--	--	8.5	12.0	8.5	7.5	6.0	6.5	4.0
25	--	--	--	--	--	9.5	11.0	8.5	8.0	6.5	6.5	4.5
26	--	--	--	--	--	9.5	10.0	8.0	7.5	6.0	6.5	4.5
27	--	--	--	--	--	9.0	9.0	8.0	7.0	6.0	6.0	4.5
28	--	--	--	--	--	8.5	8.0	8.5	6.5	6.0	6.5	4.5
29	--	--	--	--	--	7.5	8.0	8.0	6.5	6.0	7.0	4.5
30	--	--	--	--	--	7.0	8.5	8.0	7.0	6.0	6.5	4.5
31	--	--	--	--	--	--	9.0	8.0	--	5.5	--	5.0

Table 4.--Continued.

Water temperature (°C), Little Port Walter Bay, 1973

Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.0	--	3.5	5.0	6.0 ¹	6.5	9.0	9.0	8.0 ¹	7.0	6.5	3.5
2	4.0	--	3.5	4.5	6.0 ¹	6.5	7.0	9.0	8.0	7.0	6.5	3.5
3	4.5	--	3.5	5.0	6.5 ¹	6.5	7.0	8.5	8.0 ¹	7.0	6.5	3.5
4	4.0	--	4.0	5.0	6.0 ¹	6.5	7.0	8.0	8.0 ¹	7.0	5.5	3.5
5	4.5	--	4.0	5.5	6.5 ¹	7.0	7.0	8.0	8.0 ¹	7.0	4.0 ¹	3.5
6	4.5	--	4.0	5.5	6.0 ¹	7.0	7.0	8.5	8.5 ¹	7.0	4.5 ¹	4.0
7	4.5	--	4.0	5.5	6.0 ¹	7.5	7.0	8.5	8.0 ¹	6.5	5.0 ¹	4.0
8	4.5	--	4.0	5.0	6.0 ¹	7.5	8.0	8.5	8.0 ¹	6.5	5.0 ¹	4.0
9	4.5	--	4.0	5.0	6.5 ¹	7.5	9.0	8.0	7.5	6.5	4.5 ¹	4.0
10	4.5	--	4.5	5.5	6.0 ¹	--	9.0	9.5 ¹	7.0	7.0	4.5 ¹	4.5
11	4.5	--	4.0	6.0	6.5 ¹	7.0	8.5	9.5 ¹	7.0	7.0	4.5	4.5
12	4.0	--	4.0	6.0	6.0 ¹	8.0	8.5	9.5 ¹	7.0	6.5	4.5 ¹	4.5
13	4.5	--	5.0	6.0	6.5 ¹	8.5	8.5	8.0	7.0	6.5	4.5 ¹	4.5
14	4.0	--	5.0	6.0	7.0 ¹	9.0	8.5	8.0	7.0	6.5	4.5 ¹	4.5
15	3.5	--	5.0	6.0	7.5 ¹	9.0	9.0	8.0	8.0	6.5	3.5	4.5
16	3.5	--	5.0	5.5	6.5 ¹	9.0	9.0	10.5 ¹	8.5	6.5	4.5 ¹	5.0
17	3.5	--	4.0	6.0	6.5 ¹	9.5	9.0	10.0 ¹	8.0	6.5	4.5 ¹	5.0
18	--	--	4.5	6.0	6.5 ¹	9.0	9.0	11.0 ¹	7.5	6.0	4.5 ¹	5.0
19	--	--	4.5	6.0	4.5 ¹	9.5	9.0	11.5 ¹	8.0	6.0	4.0 ¹	5.0
20	--	--	4.5	5.5	6.0 ¹	10.0	8.5	10.0 ¹	8.0	6.0	4.5 ¹	5.0
21	--	3.5	5.0	5.5	6.5 ¹	9.0	8.5	10.0 ¹	8.0	6.0	4.0	5.0
22	--	3.5	4.5	6.0	6.5	9.0	8.5	9.5 ¹	8.0	6.0	4.5 ¹	5.0
23	--	3.0	5.0	6.0	7.0	9.0	9.0	10.0 ¹	8.0	6.5	4.5 ¹	5.0
24	--	2.0	5.0	6.0	6.5	8.5	9.0	9.0 ¹	8.0	6.5	5.0 ¹	5.0
25	--	1.5	5.0	6.0	6.5	9.0	9.5	9.0 ¹	8.0	6.5	5.0 ¹	5.0
26	--	2.0	5.0	5.5	6.5	9.0	9.5	9.0 ¹	7.5	6.0	4.0	5.0
27	--	3.0	5.5	6.0	6.5	9.0	10.0	8.5 ¹	7.0	6.5	4.0	5.0
28	--	3.0	5.0	5.5	6.5	9.5	9.5	8.5 ¹	7.0	6.5	4.0	4.5
29	--	--	5.0	6.0	6.5	9.5	11.0	8.5 ¹	7.0	7.0	4.0	4.5
30	--	--	5.0	6.0	6.5	9.5	11.0	8.5	7.0	7.0 ¹	3.5	4.5
31	--	--	5.0	--	6.5	--	9.0	8.0	--	7.0 ¹	--	4.5

¹ Handheld thermometer - surface temperature.

Table 4.--Continued.

Water temperature (°C), Little Port Walter Bay, 1974

Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.5	3.0	--	--	3.5	5.5	6.0	8.5	7.5	5.5	5.5	5.0
2	4.5	3.0	--	--	3.5	5.5	6.0	8.0	7.5	5.5	5.5	5.0
3	4.5	3.0	--	--	3.5	6.0	6.5	8.0	8.0	5.5	5.5	5.0
4	5.0	3.0	--	--	3.0	5.5	6.5	8.0	8.0	5.5	5.5	5.0
5	5.0	3.5	--	--	3.0	5.5	7.0	8.0	7.0	5.5	5.5	4.5
6	5.0	3.0	--	--	3.0	5.5	7.0	8.0	7.0	5.5	5.5	4.5
7	5.0	3.0	--	--	3.5	5.5	7.0	8.0	7.0	5.5	5.5	5.0
8	5.0	3.5	--	--	3.5	5.5	7.0	7.0	7.0	5.5	5.5	4.5
9	5.0	3.0	--	--	3.5	5.5	7.0	7.0	7.0	5.5	5.5	4.5
10	3.5	3.5	--	--	3.0	5.5	8.0	7.0	7.0	5.0	5.5	5.0
11	3.5	3.5	--	--	3.0	5.5	8.0	7.0	7.0	4.5	6.0	5.0
12	3.5	3.5	--	--	--	5.5	8.0	7.0	--	5.0	6.0	4.5
13	3.5	3.5	--	--	--	6.0	8.0	7.0	--	5.5	6.0	4.5
14	3.5	3.5	--	--	--	6.0	8.0	7.5	--	5.5	6.0	5.0
15	3.5	3.5	--	--	--	6.0	8.5	7.5	--	6.0	5.5	5.0
16	3.5	--	--	--	--	6.0	8.5	7.5	--	6.0	5.5	5.0
17	3.0	--	--	--	--	6.0	8.5	7.5	--	5.5	5.5	4.5
18	3.0	--	--	--	--	5.5	8.5	7.5	6.5	5.0	5.5	4.5
19	3.0	--	--	--	--	5.5	8.0	7.5	6.5	5.5	5.5	4.5
20	3.0	--	--	--	--	5.5	7.5	7.0	8.5	6.0	5.5	4.5
21	3.0	--	--	--	--	6.0	7.0	7.0	6.5	6.0	5.5	5.0
22	3.0	--	--	3.5	--	5.5	7.0	6.5	6.5	6.0	5.0	5.0
23	3.0	--	--	3.5	--	6.0	7.0	6.0	6.5	6.0	5.0	4.5
24	3.0	--	--	3.5	5.0	6.5	7.0	5.5	6.5	5.5	4.5	4.5
25	3.0	--	--	3.5	5.0	6.0	6.5	5.5	6.5	5.0	4.5	5.0
26	3.0	--	--	3.5	5.5	6.0	6.5	6.5	6.5	5.5	5.0	4.5
27	3.0	--	--	3.5	5.5	5.5	7.0	7.0	6.0	5.5	5.0	4.5
28	3.0	--	--	4.0	5.5	5.5	7.0	7.0	6.0	5.5	4.5	4.5
29	3.0	--	--	4.0	5.5	5.5	7.5	7.5	6.0	6.0	4.5	4.5
30	3.0	--	--	4.0	5.5	6.0	8.0	7.5	5.5	6.0	5.0	4.0
31	3.0	--	--	--	5.5	--	8.5	7.5	--	5.5	--	4.5

Table 4.--Continued.

Water temperature (°C), Little Port Walter Bay, 1975

Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.0	--	--	--	--	--	--	9.0	9.0	8.5	7.5	6.5
2	4.0	--	--	--	--	--	--	9.0	9.0	8.5	7.5	6.5
3	3.5	--	--	--	--	--	--	9.0	9.0	8.5	7.5	5.5
4	4.0	--	--	--	--	--	--	9.5	9.0	8.5	7.5	5.0
5	4.0	--	--	--	--	--	--	9.5	9.0	8.5	7.5	5.5
6	3.5	--	--	--	--	--	--	9.5	9.0	8.5	7.5	5.5
7	3.5	--	--	--	--	--	--	9.0	9.0	8.5	7.5	5.5
8	2.0	--	--	--	--	--	--	9.0	9.0	8.5	7.5	5.5
9	2.0	--	--	--	--	--	--	9.0	8.5	8.5	7.5	5.5
10	2.0	--	--	--	--	--	10.5	8.5	8.5	8.0	7.5	5.5
11	1.5	--	--	--	--	--	10.0	8.5	8.5	8.0	7.0	5.5
12	1.5	--	--	--	--	--	9.5	8.5	8.5	8.0	7.0	5.5
13	2.0	--	--	--	--	--	9.0	8.5	8.5	8.0	7.0	5.5
14	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
15	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
16	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
17	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
18	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
19	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
20	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
21	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
22	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
23	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
24	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
25	2.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	5.5
26	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	6.0
27	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	6.0
28	3.0	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	6.0
29	3.5	--	--	--	--	--	9.0	9.0	8.5	8.0	7.0	6.5
30	3.0	--	--	--	--	--	9.0	9.0	8.5	7.5	7.0	6.5
31	2.0	--	--	--	--	--	9.0	9.0	--	7.5	--	6.5

Table 4.--Continued.

Date	Water temperature (°C), Little Port Walter Bay, 1976											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	6.5	5.5	3.5	5.0	6.5	7.0	8.5	10.0	9.5	9.5	7.5	8.0
2	6.0	5.5	3.5	5.0	6.5	7.0	8.5	10.0	9.5	9.5	6.5	8.0
3	6.0	5.5	4.5	5.0	6.5	7.5	8.5	10.5	9.5	9.5	7.0	7.5
4	6.0	5.5	4.5	5.0	6.5	7.5	8.5	10.5	9.5	9.0	7.5	7.5
5	6.0	5.5	4.5	5.5	6.5	7.5	8.5	10.5	9.5	9.0	7.5	7.5
6	6.0	5.5	4.5	5.5	6.5	7.5	8.5	10.5	9.5	9.0	7.5	7.5
7	5.5	5.5	4.5	5.5	6.5	7.5	8.5	10.5	9.5	9.0	7.5	7.5
8	5.5	5.5	4.5	5.5	6.0	7.5	8.5	10.5	9.5	8.5	7.5	7.5
9	5.5	5.5	4.5	5.5	6.0	8.0	8.5	10.0	9.5	8.5	7.5	7.5
10	5.5	5.5	5.0	5.5	6.5	8.0	9.0	10.0	9.5	8.5	8.0	7.0
11	6.0	5.5	4.5	5.5	6.5	8.0	9.5	9.5	9.5	8.5	8.0	6.5
12	5.5	5.5	4.5	5.5	6.0	8.0	9.0	9.0	9.0	8.5	8.5	6.5
13	5.5	5.5	4.5	5.5	6.0	7.5	9.0	9.0	9.0	8.5	8.5	6.5
14	5.5	5.5	5.0	5.5	6.0	7.5	9.0	8.5	9.0	8.5	8.5	6.5
15	5.5	5.5	5.0	5.5	6.0	7.5	9.0	8.5	8.5	8.5	8.5	6.5
16	5.5	5.5	5.0	5.5	6.5	7.5	9.0	9.0	8.5	8.5	8.5	6.5
17	5.5	5.0	5.0	5.5	6.5	7.5	8.5	9.0	8.5	8.5	8.0	6.5
18	5.5	5.0	5.0	5.5	6.5	7.5	8.5	9.5	8.5	8.5	8.0	6.5
19	5.5	5.0	5.0	5.5	6.5	7.5	8.5	9.5	8.5	8.5	8.0	6.5
20	5.5	5.0	5.0	5.5	6.5	8.0	8.5	9.5	8.5	8.5	8.0	6.5
21	5.5	5.0	5.0	5.5	6.5	8.5	8.5	9.5	8.5	8.5	8.0	6.5
22	5.5	5.0	4.5	5.5	6.5	8.5	8.5	9.5	8.5	8.0	8.0	6.5
23	5.5	5.0	4.5	5.5	6.5	8.5	9.0	9.5	9.0	8.0	8.0	6.5
24	5.5	5.0	4.5	5.5	6.5	8.5	9.0	9.5	9.0	7.5	8.0	6.5
25	5.5	5.0	5.0	6.0	6.5	8.5	9.0	9.5	9.0	7.5	8.0	6.5
26	5.5	5.0	5.0	6.0	6.5	8.5	9.0	9.5	9.0	7.5	8.0	6.5
27	5.5	4.5	5.0	6.0	6.5	8.5	9.5	9.5	9.0	7.5	8.0	6.5
28	5.5	4.5	5.0	6.0	6.5	8.5	9.5	9.5	9.0	7.5	8.0	6.5
29	5.5	4.5	5.0	6.0	6.5	8.5	9.5	9.5	9.5	7.5	8.0	6.5
30	5.5	--	5.0	6.5	7.0	8.5	9.5	9.5	9.5	7.5	8.0	6.5
31	5.5	--	5.0	--	7.0	--	10.0	9.5	--	7.5	--	6.5

Table 4.--Continued.

Date	Water temperature (°C), Little Port Walter Bay, 1977											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	6.5	6.5	6.0	6.0	6.5	8.4	8.8	10.0	9.5	8.0	8.0	5.5
2	6.5	6.5	6.0	5.5	6.5	8.5	8.8	10.0	9.0	8.0	8.0	5.5
3	6.5	6.5	6.0	5.5	6.5	8.5	8.9	10.0	9.0	8.0	8.0	4.5
4	6.5	6.5	6.0	5.5	6.5	8.5	8.9	10.0	9.0	8.0	7.5	4.5
5	6.5	6.5	6.0	6.0	6.5	8.4	8.9	10.0	9.0	7.5	7.5	3.5
6	6.5	6.5	6.0	6.0	6.5	8.3	8.9	10.5	9.0	7.5	7.0	3.0
7	6.0	6.5	6.0	5.5	7.0	8.2	9.4	10.0	9.0	7.5	7.0	2.5
8	6.0	6.5	6.0	6.0	7.0	8.2	9.6	10.0	9.0	7.5	7.5	2.0
9	6.0	7.0	6.0	6.0	7.5	8.2	9.7	10.0	9.0	7.5	7.5	3.0
10	6.0	7.0	6.0	6.0	7.5	8.4	10.2	10.0	9.0	7.5	7.0	3.0
11	6.0	7.0	6.0	6.0	7.2	8.3	10.3	11.0	8.5	7.5	7.0	3.0
12	6.0	6.5	6.0	6.0	7.0	8.5	10.0	11.0	8.5	7.5	7.0	4.0
13	6.0	6.5	6.0	6.0	7.3	9.8	10.0	11.5	8.5	7.5	7.0	4.0
14	6.0	6.5	6.0	6.0	7.2	9.9	10.0	12.0	8.5	7.5	7.0	4.5
15	6.0	6.5	6.0	6.0	7.5	10.0	10.0	12.0	8.5	7.5	7.0	4.5
16	6.0	6.5	6.0	6.0	7.8	10.0	10.0	12.0	8.5	7.5	7.0	5.0
17	6.0	6.5	6.0	6.0	8.0	9.7	10.0	12.0	8.5	8.0	7.0	5.0
18	6.0	6.5	6.0	6.0	8.3	9.4	10.0	11.5	8.5	8.0	7.0	5.0
19	6.0	6.5	6.0	6.0	8.3	9.3	10.0	11.5	8.5	7.5	6.5	5.0
20	6.0	6.5	6.0	6.0	8.2	9.2	9.5	12.0	8.5	8.0	6.0	5.0
21	6.0	6.5	6.0	6.0	8.2	9.2	9.5	12.0	8.5	8.0	6.0	5.0
22	6.0	6.0	6.0	6.0	8.1	9.2	9.5	11.0	8.5	7.5	5.5	5.0
23	6.5	6.0	6.0	6.0	8.0	9.1	9.5	11.0	8.0	8.0	5.0	5.0
24	6.5	6.0	6.0	6.0	7.9	8.8	9.5	10.5	8.0	8.0	5.0	5.0
25	6.5	6.0	6.0	6.5	7.8	8.7	9.5	10.0	8.0	8.0	4.5	5.0
26	6.5	6.0	6.0	6.5	7.8	8.7	10.0	10.0	8.0	8.0	5.0	5.0
27	6.5	6.0	6.0	6.5	8.0	8.8	10.0	10.0	8.0	7.5	5.0	5.0
28	7.0	6.0	5.5	6.5	8.1	8.8	10.5	10.0	8.0	8.0	5.0	5.0
29	7.0	--	6.0	7.0	8.1	8.8	10.5	10.0	8.0	8.0	5.0	5.0
30	6.5	--	6.0	7.0	8.2	8.9	10.5	9.5	8.0	8.0	5.5	5.0
31	6.5	--	6.0	--	8.4	--	10.0	9.5	--	8.0	--	5.0

Table 4.--Continued.

Water temperature (°C), Little Port Walter Bay, 1978

Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	5.0	5.0	5.0	5.0	6.0	7.0	8.0	9.5	8.8	8.4	7.7	--
2	5.0	5.0	4.5	5.0	6.0	7.0	8.0	9.6	8.8	8.4	7.8	--
3	4.0	5.0	4.0	5.0	6.0	7.5	7.8	9.6	8.9	8.3	7.8	--
4	4.0	4.5	4.0	5.5	6.5	8.0	7.5	9.5	8.9	8.2	7.8	--
5	3.5	5.0	4.0	5.5	6.5	8.0	7.6	9.3	9.1	8.3	7.5	--
6	3.5	5.0	4.0	5.5	6.5	8.0	7.8	8.9	9.1	8.4	7.5	--
7	3.5	5.0	4.5	5.5	6.5	8.0	7.9	8.5	9.3	8.3	7.5	--
8	4.0	5.0	4.5	5.5	6.5	7.9	8.0	8.8	9.4	8.2	7.6	--
9	4.0	5.5	4.5	5.5	7.0	7.9	8.1	8.8	9.5	8.2	7.4	--
10	4.0	5.0	4.5	5.0	7.0	8.2	8.5	8.0	9.5	8.2	7.5	--
11	4.5	5.0	4.5	5.0	7.0	8.7	9.2	8.0	9.5	8.2	6.9	--
12	4.5	5.5	5.0	5.0	7.0	9.1	9.7	7.9	9.3	8.2	6.2	--
13	4.5	5.0	5.0	5.5	7.5	9.5	9.3	8.2	9.1	8.2	6.2	--
14	4.5	5.0	5.0	5.5	7.5	9.8	9.3	8.3	8.9	8.3	6.0	--
15	4.0	5.0	5.0	5.5	7.5	9.9	9.2	8.5	8.7	8.2	4.7	--
16	4.0	5.0	5.0	6.0	7.0	9.9	9.0	8.6	8.5	8.2	4.6	--
17	4.0	5.0	5.0	6.0	7.0	9.6	9.0	8.6	8.5	8.2	3.5	--
18	4.0	5.5	5.0	6.0	7.0	9.3	9.2	8.3	8.7	8.3	3.9	--
19	4.5	5.5	5.0	6.0	7.0	9.1	9.0	8.2	8.8	8.3	5.0	--
20	4.5	5.0	5.0	6.0	7.0	8.6	9.0	8.0	8.7	8.3	5.0	--
21	5.0	5.5	5.0	6.0	7.5	8.5	9.2	7.9	8.5	8.4	5.0	--
22	5.0	5.0	5.0	6.0	7.5	8.5	9.1	7.8	8.0	8.4	5.1	--
23	5.0	5.0	4.5	6.0	7.5	8.5	8.8	7.9	8.0	7.6	--	--
24	5.0	5.0	5.0	6.0	7.5	8.5	8.7	8.5	8.0	8.1	--	--
25	5.0	5.0	5.0	6.0	7.0	8.2	8.5	8.5	8.0	8.2	--	--
26	5.0	5.0	5.0	6.0	7.0	8.0	8.2	8.3	8.2	8.5	--	--
27	5.0	5.0	5.0	6.0	7.0	7.9	8.5	8.5	8.4	8.8	--	--
28	5.0	5.0	5.0	6.0	7.0	7.9	8.1	8.8	8.5	8.8	--	--
29	5.0	--	5.0	6.0	7.0	8.1	8.4	9.0	8.5	8.6	--	--
30	5.0	--	5.0	6.0	7.0	8.0	9.0	9.0	8.5	7.9	--	--
31	5.0	--	5.0	--	7.0	--	9.1	8.9	--	8.0	--	--

Table 4.--Continued.

Water temperature (°C), Little Port Walter Bay, 1979												
Date	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	--	6.2	--	6.5	7.7	7.9	10.3	10.0	11.8	10.0	8.0	7.0
2	--	6.1	--	6.5	7.6	8.0	10.4	10.0	11.8	10.0	8.0	7.0
3	--	6.1	--	6.5	7.6	8.0	10.4	10.0	11.7	10.0	8.0	7.0
4	--	6.1	--	6.5	7.5	8.0	10.5	10.1	11.5	10.0	8.0	7.0
5	--	5.9	--	6.5	7.4	8.0	10.5	10.2	11.4	10.0	7.5	7.0
6	--	5.7	--	6.5	7.3	8.0	10.7	10.5	11.2	10.0	7.5	7.0
7	--	4.1	--	6.5	7.3	8.0	10.8	10.5	10.9	10.0	7.5	7.0
8	--	4.2	--	6.5	7.5	8.0	10.8	10.5	10.8	10.0	7.0	6.5
9	--	2.4	--	6.5	7.5	8.0	10.8	10.6	10.6	10.0	7.0	6.0
10	--	2.1	--	6.4	7.6	8.0	10.8	10.6	10.4	10.0	7.0	5.5
11	--	1.8	--	6.7	7.7	8.2	10.9	10.7	10.2	10.0	6.5	5.0
12	--	1.8	--	6.8	7.7	8.4	10.6	10.8	10.0	10.0	6.5	5.0
13	--	2.2	--	6.7	7.8	8.5	10.5	10.8	10.0	10.5	6.0	4.5
14	--	2.3	--	6.8	7.9	8.5	10.5	10.7	10.0	10.5	6.0	4.0
15	--	2.7	--	6.9	7.9	8.5	10.3	10.7	10.0	10.5	6.0	4.0
16	--	2.8	--	6.9	7.9	8.5	10.2	10.5	10.0	10.5	6.0	4.0
17	--	2.8	--	6.9	7.9	8.7	10.3	10.4	10.0	10.5	6.0	4.5
18	--	3.0	--	7.0	7.9	8.8	10.2	10.3	10.0	10.5	6.0	4.5
19	--	3.1	--	7.0	7.9	8.9	10.0	10.4	10.0	10.0	6.5	4.5
20	--	3.6	--	7.1	7.9	9.0	9.8	10.9	10.0	10.0	6.5	4.5
21	--	--	--	7.2	8.0	9.0	9.8	11.2	10.0	10.0	6.5	4.5
22	--	--	--	7.5	8.0	9.0	10.0	12.6	10.0	10.0	6.0	4.5
23	6.6	--	7.0	7.5	8.1	10.2	10.0	12.0	10.0	9.5	6.5	4.5
24	6.5	--	7.0	8.0	8.0	10.2	10.0	12.1	10.0	9.5	6.5	4.5
25	6.5	--	6.6	7.9	8.0	10.2	10.0	12.0	10.0	9.5	6.5	4.5
26	6.5	--	6.5	7.8	7.9	10.1	10.0	12.0	10.0	8.5	6.5	4.5
27	6.5	--	6.5	7.7	7.9	10.2	10.0	12.0	10.0	8.0	6.5	4.5
28	6.5	--	6.5	7.6	7.9	10.3	10.0	12.0	10.0	8.0	7.0	4.5
29	6.5	--	6.5	7.7	7.9	10.3	10.0	12.0	10.0	8.0	7.0	4.5
30	6.3	--	6.5	7.7	7.9	10.3	10.0	12.0	10.0	8.0	7.0	4.5
31	6.2	--	6.5	--	7.9	--	10.0	11.8	--	8.0	--	4.5

Table 4.--Continued.

Date	Water temperature (°C), Little Port Walter Bay, 1980											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.5	3.5	5.0	5.0	5.5	7.0	9.0	9.0	9.1	8.2	--	--
2	4.0	3.5	5.0	5.0	5.5	6.5	8.5	9.0	9.0	7.6	--	--
3	4.0	4.0	4.5	5.0	5.5	7.0	9.0	9.0	9.0	7.6	--	--
4	4.0	4.5	4.5	5.0	5.5	7.5	10.0	9.0	8.8	7.6	--	--
5	4.0	4.5	4.5	5.0	5.5	8.5	11.0	9.0	8.5	7.6	--	--
6	2.0	4.5	4.5	5.0	5.5	8.0	11.0	9.0	8.3	7.6	--	--
7	1.5	4.5	4.5	5.0	5.5	9.0	11.0	9.0	8.2	7.8	--	--
8	1.5	4.5	4.5	5.0	5.5	9.0	10.5	9.9	8.2	7.8	--	--
9	0.0	4.5	4.5	5.0	5.5	9.0	10.0	9.9	8.1	7.8	--	--
10	0.5	4.5	4.5	5.0	6.0	9.0	10.0	9.9	8.1	7.8	--	--
11	1.5	4.5	5.0	5.0	6.0	10.0	10.0	9.9	8.1	7.8	--	--
12	2.0	4.5	5.0	3.8	6.0	10.0	10.0	9.9	8.1	7.8	--	--
13	2.5	4.5	4.5	3.8	6.0	9.0	10.0	9.9	8.2	7.8	--	--
14	3.0	4.5	4.5	3.9	6.0	8.0	10.0	9.9	8.2	7.8	--	--
15	3.0	4.5	4.5	4.0	6.0	8.0	9.5	9.9	8.2	7.8	--	--
16	3.0	4.5	4.5	4.0	6.0	8.0	9.5	9.7	8.3	7.8	--	--
17	3.0	4.5	4.5	4.0	6.0	8.0	9.5	9.5	8.4	7.8	--	--
18	3.0	4.5	4.5	4.0	6.0	8.0	9.5	9.4	8.5	7.8	--	--
19	3.0	4.5	4.5	4.0	6.0	9.0	9.5	9.2	8.6	7.9	--	--
20	3.0	4.5	4.5	4.0	6.0	9.0	9.5	9.2	8.6	7.9	--	--
21	3.5	4.5	4.5	4.0	6.0	9.0	9.5	9.3	8.6	7.9	--	--
22	3.5	4.5	4.5	4.0	6.0	8.0	9.5	9.4	8.7	7.9	--	--
23	3.5	4.5	4.5	4.3	6.0	7.5	9.5	9.4	8.8	7.9	--	--
24	4.0	4.5	4.5	4.4	6.5	8.0	9.5	9.6	8.8	7.9	--	--
25	3.5	4.5	4.5	4.5	7.0	9.0	9.5	9.7	8.7	7.9	--	--
26	3.5	4.5	4.5	4.8	7.0	9.0	9.5	9.7	8.5	7.9	--	--
27	3.5	4.5	4.5	5.0	7.5	9.0	9.5	9.7	8.5	7.9	--	--
28	3.5	4.5	4.5	5.0	8.0	9.0	9.5	9.7	8.4	7.9	--	--
29	3.5	4.5	4.5	5.0	8.0	9.5	9.5	9.4	8.3	7.9	--	--
30	3.5	--	5.0	5.0	8.0	9.5	9.5	9.2	8.3	7.9	--	--
31	3.5	--	5.0	--	8.0	--	9.0	9.1	--	8.0	--	--

Table 5.--Dates when fish were counted at weir on Sashin Creek, 1964-80. The weir was not used to count juveniles after 3 August 1968.

Year	Dates of operation when adults were counted	Dates of operation when juveniles were counted
1964	29 Aug - 21 Sept	15 Mar - 28 Aug
1965	10 Aug - 2 Oct	--
1966	18 Aug - 20 Sept	--
1967	27 July - 18 Sept	10 Mar - 7 Aug
1968	8 Aug - 25 Sept	29 Mar - 3 Aug
1969	8 Aug - 21 Sept	--
1970	5 Aug - 27 Sept	--
1971	1 Aug - 8 Nov	--
1972	8 Aug - 23 Oct	--
1973	1 Aug - 6 Oct	--
1974	1 Aug - 24 Oct	--
1975	30 July - 29 Oct	--
1976	28 July - 25 Sept	--
1977	11 July - 26 Sept	--
1978	11 Aug - 24 Oct	--
1979	28 June - 24 Oct	--
1980	1 July - 12 Oct	--

Table 6.--Number of adult pink salmon (escapement) entering Sashin Creek weir during spawning migrations, 1965-80.

Date	Escapement, 1965			
	August		September	
	Males	Females	Males	Females
1	--	--	65	278
2	--	--	6	16
3	--	--	33	46
4	--	--	3	14
5	--	--	15	41
6	--	--	36	80
7	--	--	36	83
8	--	--	10	35
9	--	--	12	39
10	1	1	15	24
11	(4)	(5)	0	12
12	(6)	(5)	8	18
13	76	13	0	26
14	85	35	58	87
15	343	144	0	6
16	205	86	43	87
17	285	168	9	24
18	88	45	5	8
19	440	252	3	5
20	60	39	37	80
21	1,040	796	2	1
22	361	250	0	1
23	753	647	2	3
24	218	169	1	4
25	282	280	--	--
26	1,084	890	--	--
27	989	859	5	2
28	299	310	1	0
29	572	872	--	--
30	108	223	--	--
31	--	--	--	--
Total Count		14,813		
Estimated Count		14,833		

Table 6.--Continued.

Escapement, 1966				
Date	August		September	
	Males	Females	Males	Females
1	--	--	258	442
2	--	--	53	93
3	--	--	21	50
4	--	--	209	305
5	--	--	56	95
6	--	--	11	10
7	--	--	0	1
8	--	--	9	5
9	--	--	5	7
10	--	--	4	8
11	--	--	1	2
12	--	--	7	4
13	--	--	10	15
14	--	--	1	1
15	--	--	3	4
16	--	--	17	14
17	--	--	3	0
18	--	--	3	2
19	--	--	12	12
20	--	--	--	--
21	--	--	--	--
22	--	--	--	--
23	41	27	--	--
24	24	16	--	--
25	38	21	--	--
26	348	194	--	--
27	239	185	--	--
28	151	123	--	--
29	181	192	--	--
30	362	315	--	--
31	669	882	--	--
Total Count		5,761		
Estimated Count		5,761		

Table 6.--Continued.

Date	Escapement, 1967					
	August			September		
	Males	Females		Males	Females	
1	--	--		809	1,302	
2	--	--		22	37	
3	--	--		351	458	
4	--	--		84	87	
5	--	--		10	50	
6	--	--		13	4	
7	--	--		31	30	
8	2	1		151	185	
9	177	122		23	21	
10	1,303	1,056		57	75	
11	1,997	1,358		31	35	
12	915	904		—	—	
13	193	152		17	23	
14	425	471		4	4	
15	214	192		17	16	
16	662	745		8	4	
17	76	55		6	3	
18	466	418		—	—	
19	3,602	3,363		—	—	
20	1,521	1,708		—	—	
21	1,474	1,692		—	—	
22	955	1,090		—	—	
23	486	723		—	—	
24	31	58		—	—	
25	335	422		—	—	
26	530	892		—	—	
27	138	144		—	—	
28	58	71		—	—	
29	5	10		—	—	
30	181	280		—	—	
31	1,048	1,378		—	—	
Total Count				38,067		
Estimated Count				38,067		

YR MARCH 1968 DATED F. PARTRIDGE

Table 6.--Continued.

Escapement, 1968				
Date	August		September	
	Males	Females	Males	Females
1	--	--	830	666
2	--	--	667	648
3	--	--	624	759
4	--	--	348	416
5	--	--	72	115
6	--	--	135	204
7	--	--	<u>74</u>	158
8	1	0	158	289
9	--	--	48	86
10	--	--	12	19
11	--	--	48	146
12	--	--	18	77
13	--	--	8	24
14	--	--	<u>7</u>	23
15	--	--	2	7
16	--	--	5	37
17	<u>2</u>	0	1	6
18	36	24	0	1
19	522	260	0	2
20	406	165	1	1
21	197	141	3	4
22	207	131	0	1
23	244	130	1	0
24	298	169	1	0
25	306	173	--	--
26	240	100	--	--
27	315	164	--	--
28	308	202	--	--
29	502	415	--	--
30	52	56	--	--
31	153	132	--	--
Total Count	12,803			
Estimated Count	13,103			

Table 6.--Continued.

Escapement, 1969				
Date	August		September	
	Males	Females	Males	Females
1	--	--	288	402
2	--	--	16	23
3	1	0	95	192
4	--	--	75	168
5	--	--	<u>81</u>	188
6	--	--	15	35
7	--	--	6	11
8	--	--	18	36
<u>9</u>	38	17	100	300
10	43	15	9	24
11	925	542	41	127
12	3,368	1,911	<u>39</u>	74
13	2,039	1,366	2	41
14	3,710	2,870	5	102
<u>15</u>	2,667	2,478	1	3
16	488	441	15	42
17	160	169	2	18
18	654	709	17	15
19	464	434	<u>3</u>	6
20	498	509	2	0
21	64	60	0	1
<u>22</u>	86	79	--	--
23	233	217	--	--
24	387	351	--	--
25	412	481	--	--
26	323	372	--	--
27	374	490	--	--
28	237	326	--	--
<u>29</u>	913	1,355	--	--
30	183	228	--	--
31	36	70	--	--
Total Count		36,431		
Estimated Count		36,629		

Table 6.--Continued.

Date	Escapement, 1970			
	August		September	
	Males	Females	Males	Females
1	--	--	430	746
2	--	--	130	302
3	--	--	223	429
4	--	--	62	182
5	--	--	27	81
6	--	--	34	92
7	--	--	16	34
8	121	79	7	29
9	0	1	11	31
10	--	--	4	13
11	--	--	0	7
12	1	0	3	5
13	3	1	4	4
14	7	5	4	4
15	13	5	--	--
16	--	--	6	20
17	20	8	2	1
18	31	27	--	--
19	47	32	--	--
20	30	7	1	0
21	68	25	2	0
22	159	55	--	--
23	115	55	--	--
24	116	46	--	--
25	264	110	--	--
26	183	91	--	--
27	322	169	--	--
28	279	208	--	--
29	868	785	--	--
30	592	770	--	--
31	310	552	--	--
Total Count		9,526		
Estimated Count		9,526		

Table 6.--Continued.

Escapement, 1971							
Date	August		September		October		
	Males	Females	Males	Females	Males	Females	
1	--	--	2,010	1,778	11	11	
2	--	--	1,080	1,071	--	--	
3	--	--	373	310	6	12	
4	--	--	936	867	14	14	
5	--	--	104	226	--	--	
6	--	--	978	1,247	2	0	
7	1	0	404	695	0	1	
8	1	2	854	1,083	--	--	
9	24	13	864	1,230	1	0	
10	1	1	89	0	--	--	
11	46	22	--	--	--	--	
12	336	161	178	201	--	--	
13	427	182	120	197	--	--	
14	1,271	378	1,003	1,575	1	0	
15	1,358	515	236	394	--	--	
16	2,821	1,400	193	437	--	--	
17	2,008	921	548	1,304	--	--	
18	264	136	373	849	--	--	
19	1,363	854	382	766	--	--	
20	1,245	625	202	506	--	--	
21	243	144	159	512	1	1	
22	2,340	1,493	2	4	--	--	
23	2,347	1,461	17	70	--	--	
24	3,213	2,249	63	198	--	--	
25	2,743	1,905	18	71	--	--	
26	1,665	1,223	--	--	--	--	
27	1,879	1,345	28	37	--	--	
28	693	448	22	37	--	--	
29	7	16	--	--	--	--	
30	--	--	2	9	--	--	
31	194	151	--	--	--	--	
Total Count		69,122					
Estimated Count		72,122					

Table 6.--Continued.

Date	Escapement, 1972			
	August		September	
	Males	Females	Males	Females
1	--	--	254	321
2	--	--	129	187
3	--	--	212	361
4	--	--	165	339
5	--	--	179	428
6	--	--	424	865
7	--	--	106	252
8	13	7	35	151
9	1	0	2	4
10	1	0	37	140
11	--	--	26	87
12	2	2	26	81
13	0	2	0	10
14	3	1	5	10
15	5	1	1	2
16	53	23	--	--
17	75	29	1	0
18	116	36	--	--
19	146	40	--	--
20	92	43	--	--
21	135	55	--	--
22	152	49	1	0
23	0	1	1	0
24	618	329	--	--
25	228	160	--	--
26	565	463	0	2
27	877	663	--	--
28	273	230	2	0
29	706	630	--	--
30	371	345	--	--
31	465	533	--	--
Total Count		13,385		
Estimated Count		13,385		

Table 6.--Continued.

Date	Escapement, 1973			
	August		September	
	Males	Females	Males	Females
1	8	4	0	1
2	1	0	2	2
3	32	12	2	3
4	28	10	1	0
5	9	4	3	1
6	316	172	1	1
7	228	101	--	--
<u>8</u>	318	216	--	--
9	150	146	--	--
10	83	84	--	--
11	16	26	--	--
12	280	315	--	--
13	62	75	--	--
14	19	34	--	--
<u>15</u>	21	38	--	--
16	--	--	--	--
17	2	2	--	--
18	20	13	--	--
19	11	12	--	--
20	--	--	--	--
<u>21</u>	53	59	--	--
22	6	8	--	--
23	79	133	--	--
24	102	130	--	--
25	11	21	--	--
26	3	3	--	--
27	--	--	--	--
28	13	35	--	--
<u>29</u>	13	16	--	--
30	5	27	--	--
31	0	4	--	--
Total Count		3,606		
Estimated Count		3,606		

Table 6.--Continued.

Date	Escapement, 1974			
	August		September	
	Males	Females	Males	Females
1	--	--	94	88
2	--	--	160	126
3	--	--	184	155
4	--	--	<u>169</u>	105
5	--	--	284	279
6	--	--	304	330
7	--	--	293	383
8	--	--	183	278
9	--	--	321	440
10	--	--	82	118
11	--	--	<u>63</u>	94
12	--	--	<u>52</u>	102
13	--	--	39	107
14	--	--	37	69
15	--	--	4	9
16	--	--	27	28
17	--	--	12	19
18	--	--	<u>8</u>	7
19	--	--	3	4
20	--	--	1	4
<u>21</u>	--	--	0	1
22	33	8	--	--
23	115	47	--	--
24	146	68	0	1
25	96	44	2	0
26	260	132	0	3
27	92	35	--	--
<u>28</u>	147	110	--	--
29	93	51	--	--
30	240	132	--	--
31	119	108	--	--
Total Count		7,148		
Estimated Count		7,148		

Table 6.--Continued.

Date	Escapement, 1975					
	July		August		September	
	Males	Females	Males	Females	Males	Females
1	--	--	--	--	132	209
2	--	--	--	--	225	290
3	--	--	--	--	137	197
4	--	--	--	--	97	176
5	--	--	0	1	70	175
6	--	--	3	1	21	35
7	--	--	2	1	23	61
8	--	--	1	1	11	32
9	--	--	8	0	3	6
10	--	--	4	2	--	--
11	--	--	8	1	4	10
12	--	--	14	5	2	4
13	--	--	34	7	--	--
14	--	--	29	16	--	--
15	--	--	27	9	1	0
16	--	--	27	18	--	--
17	--	--	62	26	--	--
18	--	--	84	24	--	--
19	--	--	71	30	--	--
20	--	--	157	53	--	--
21	--	--	126	37	--	--
22	--	--	51	20	--	--
23	--	--	40	25	--	--
24	--	--	122	40	0	1
25	--	--	96	41	--	--
26	--	--	157	58	--	--
27	--	--	137	91	--	--
28	--	--	303	187	--	--
29	--	--	293	199	--	--
30	--	--	172	194	--	--
31	3	1	117	146	--	--
Total Count			5,304			
Estimated Count			5,304			

Table 6.--Continued.

Escapement, 1976				
Date	August		September	
	Males	Females	Males	Females
1	--	--	124	99
2	--	--	221	212
3	--	--	140	144
4	--	--	82	85
5	--	--	92	90
6	--	--	74	81
7	--	--	28	37
8	--	--	206	289
9	--	--	43	116
10	--	--	22	35
11	--	--	12	12
12	1	1	4	9
13	--	--	7	17
14	--	--	14	17
15	0	1	7	4
16	--	--	1	1
17	--	--	--	--
18	0	1	--	--
19	--	--	5	3
20	--	--	4	1
21	11	3	1	0
22	0	2	1	2
23	6	3	--	--
24	2	4	--	--
25	23	6	--	--
26	210	100	--	--
27	89	57	--	--
28	184	131	--	--
29	150	139	--	--
30	76	73	--	--
31	110	103	--	--
Total Count		3,828		
Estimated Count		3,828		

Table 6.--Continued.

Date	Escapement, 1977			
	August		September	
	Males	Females	Males	Females
1	--	--	198	230
2	--	--	156	266
3	--	--	68	110
4	--	--	88	165
5	--	--	1,243	1,328
6	--	--	474	505
7	--	--	183	205
8	21	12	908	895
9	91	46	109	143
10	558	261	90	74
11	373	243	29	30
12	280	204	6	3
13	130	80	7	7
14	76	71	5	4
15	117	111	3	2
16	158	158	1	1
17	109	121	--	--
18	67	65	--	--
19	58	44	--	--
20	25	35	1	0
21	172	171	0	1
22	95	121	0	1
23	411	446	3	0
24	377	382	--	--
25	224	234	--	--
26	349	416	--	--
27	1,761	1,439	--	--
28	3,227	2,952	--	--
29	1,426	1,409	--	--
30	377	549	--	--
31	364	567	--	--
Total Count		28,525		
Estimated Count		30,025		

Table 6.--Continued.

Date	Escapement, 1978			
	August		September	
	Males	Females	Males	Females
1	--	--	2,491	2,613
2	--	--	1,904	2,661
3	--	--	912	1,418
4	--	--	409	718
5	--	--	315	474
6	--	--	308	509
7	--	--	168	231
8	--	--	269	605
9	--	--	112	274
10	--	--	124	293
11	0	1	176	395
12	1	0	817	1,330
13	1	2	919	1,465
14	0	2	151	276
15	--	--	67	136
16	2	3	34	119
17	37	19	26	78
18	81	23	17	18
19	204	55	2	0
20	300	83	0	3
21	725	254	5	4
22	840	350	16	6
23	607	269	7	6
24	421	246	1	1
25	570	278	1	1
26	631	333	--	--
27	437	309	1	1
28	307	239	0	1
29	3,916	2,561	1	0
30	2,526	1,762	--	--
31	1,760	1,695	--	--
Total Count		44,739		
Estimated Count		44,739		

Table 6.--Continued.

Date	Escapement, 1979							
	July		August		September		Males	Females
	Males	Females	Males	Females	Males	Females		
1	--	--	36	3	1,742	2,876		
2	--	--	198	42	9,837	11,725		
3	--	--	200	64	11,062	11,626		
4	--	--	252	72	3,364	3,634		
5	--	--	664	155	200	254		
6	--	--	812	238	1,549	1,974		
7	--	--	955	278	23	53		
8	--	--	901	334	264	526		
9	--	--	1,301	539	326	749		
10	--	--	1,303	564	255	508		
11	--	--	1,118	541	1,347	1,502		
12	--	--	1,220	638	2,682	2,746		
13	--	--	1,044	651	1,452	1,744		
14	--	--	757	478	1,055	1,104		
15	--	--	894	743	465	533		
16	--	--	1,127	846	301	375		
17	1	0	2,379	1,805	70	103		
18	--	--	1,908	1,648	32	35		
19	1	0	1,254	1,140	--	--		
20	1	0	654	853	3	2		
21	1	0	322	511	13	6		
22	--	--	175	285	13	10		
23	--	--	470	693	1	2		
24	--	--	99	183	--	--		
25	--	--	17	62	--	--		
26	--	--	--	--	0	1		
27	--	--	--	--	2	0		
28	--	--	--	--	4	1		
29	1	0	--	--	0	1		
30	--	--	--	--	--	--		
31	5	2	740	2,112	--	--		
Total Count			114,442					
Estimated Count			114,442					

Table 6.--Continued.

Escapement, 1980							
Date	August		September		October		
	Males	Females	Males	Females	Males	Females	
1	2	0	1,787	1,938	0	1	
2	--	--	1,305	1,369	--	--	
3	--	--	894	1,134	--	--	
4	1	0	507	562	--	--	
5	--	--	400	522	--	--	
6	--	--	256	300	--	--	
7	--	--	208	552	--	--	
8	--	--	272	444	--	--	
9	--	--	179	401	--	--	
10	--	--	428	1,059	--	--	
11	--	--	231	715	--	--	
12	--	--	288	885	--	--	
13	2	1	367	939	--	--	
14	147	37	164	422	--	--	
15	76	31	190	500	--	--	
16	236	76	107	215	--	--	
17	501	145	40	78	--	--	
18	864	257	180	394	--	--	
19	1,057	333	93	325	--	--	
20	919	354	9	45	--	--	
21	1,650	694	33	83	--	--	
22	1,237	592	8	18	--	--	
23	688	283	--	--	--	--	
24	422	251	--	--	--	--	
25	2,914	1,671	--	--	--	--	
26	1,427	801	15	3	--	--	
27	1,219	706	--	--	--	--	
28	1,316	878	1	0	--	--	
29	3,540	2,930	--	--	--	--	
30	1,560	1,200	--	1	--	--	
31	1,757	1,212	0	--	--	--	
Total Count			54,854				
Estimated Count			54,854				

Table 7.--Midpoint of total escapement of pink salmon counted at Sashin Creek weir.

Year	Date 50% enter weir	Number of fish in creek by date 50% enter weir	Total escapement counted through weir
1965	25 Aug	7,182	14,813
1966	31 Aug	4,008	5,761
1967	20 Aug	22,098	38,067
1968	1 Sept	7,547	12,803
1969	15 Aug	21,990	36,431
1970	30 Aug	5,718	9,526
1971	26 Aug	37,402	69,122
1972	29 Aug	6,825	13,385
1973	10 Aug	1,922	3,606
1974	5 Sept	3,720	7,148
1975	29 Aug	2,753	5,304
1976	2 Sept	2,142	3,828
1977	28 Aug	16,291	28,525
1978	1 Sept	26,954	44,739
1979	2 Sept	62,470	114,442
1980	29 Aug	28,258	54,854

Table 8.--Length, weight, fecundity, and potential egg deposition (PED) of female pink salmon at Sashin Creek, 1962-80.

Year	Sample size	Mid-eye fork length (mm)		Weight (kg)		Fecundity (eggs/female)		Number females entering creek	PED
		\bar{x}	s	\bar{x}	s	\bar{x}	s		
1962	--	--	--	--	--	--	--	4	8,000 ¹
1963	20	--	--	--	--	1,908 ²	--	8,721	16,640,000
1964	25	--	--	--	--	1,709 ³	--	1,305	2,230,000
1965	--	--	--	--	--	1,782 ¹	--	7,109	12,668,000
1966	17	505	27.84	--	--	2,067	319.60	3,008	6,255,000
1967	35	527	23.61	--	--	2,260	404.13	19,604	44,384,000
1968	26	475	17.90	--	--	1,510	261.85	5,925	8,947,935
1969	25	494	17.26	--	--	1,909	238.83	13,826	26,391,069
1970	15	491	21.03	--	--	1,792	264.99	4,963	8,894,192
1971	30	493	20.22	--	--	1,835	201.34	16,168	29,666,663
1972	18	494	19.94	--	--	1,968	499.74	6,402	12,597,713
1973	6	489	24.94	--	--	1,994	261.58	1,516	3,022,904
1974	10	501	12.33	--	--	2,009	255.55	3,431	6,893,908
1975	15	483	19.51	--	--	1,653	245.52	1,720	2,843,332
1976	9	510	17.72	2.01	0.21	2,041	180.38	1,713	3,496,609
1977	20	508	22.08	1.96	0.30	1,978	189.04	13,721	27,137,394
1978	36	483	21.76	1.62	0.24	1,773	316.52	20,890	37,029,614
1979	30	498	22.87	1.80	0.30	1,992	274.60	56,400	112,331,880
1980	20	500	19.87	1.87	0.21	1,847	303.47	23,339	43,107,133

¹ From McNeil (1968).

² From Olson and McNeil (1967).

³ From McNeil et al. (1969).

Table 9. Freshwater survival of pink salmon in Sashin Creek: (1) from potential egg deposition (PED) to actual egg deposition (AED), (2) from PED to hatching, and (3) from PED to migration of fry, 1962-79. CI = confidence interval.

Brood year	Number females entering creek	Potential egg deposition (No.)	Actual egg deposition			Survival from PED to AED (%)	Survival from PED to hatching (%)			Survival from PED to fry (%)
			No.	90% CI(±)	No.		No.	90% CI(±)	No.	
1962	4	8,000	--	--	--	--	--	--	¹ 100	--
1963	8,721	16,640,000	--	--	--	--	--	--	13,256,300	--
1964	1,305	2,230,000	1,226,500	--	55.00	--	--	--	1310,000	--
1965	7,109	12,668,000	² 12,744,215	1,828,400	--	6,933,915	1,487,117	54.74	2,235,000	565,478
1966	3,008	6,255,000	2,445,050	861,060	39.32	--	--	--	744,000	318,576
1967	19,604	44,384,000	19,868,910	1,521,733	44.85	14,141,721	1,554,521	31.92	¹ 3,007,200	¹ --
1968	5,925	8,947,935	3,897,481	731,275	43.56	2,337,775	542,802	26.13	1,048,044	300,288
1969	13,826	26,391,069	12,069,097	1,434,545	45.73	--	--	--	3,605,637	612,712
1970	4,963	8,894,192	3,389,536	753,153	38.11	--	--	--	870,701	276,687
1971	16,168	29,666,663	15,970,024	1,379,587	53.83	8,834,295	941,326	29.80	1,773,609	426,149
1972	6,402	12,597,713	6,490,458	1,099,676	51.50	--	--	--	628,537	295,668
1973	1,516	3,022,904	507,959	141,566	16.80	--	--	--	6,779	6,778
1974	3,431	6,893,908	1,485,398	568,900	21.55	--	--	--	712,893	222,492
1975	1,720	2,843,280	--	--	--	--	--	--	224,441	162,894
1976	1,713	3,496,610	--	--	--	--	--	--	122,566	83,351
1977	13,721	27,137,394	--	--	--	--	--	--	1,790,733	416,929
1978	20,890	37,029,614	--	--	--	--	--	--	1,710,958	418,220
1979	56,400	112,331,880	22,666,222	1,900,272	20.18	--	--	--	891,952	353,088

¹ Fry weir counts. Numbers of all other fry figures were estimated by hydraulic sampling.

² The density of eggs at the end of spawning was probably overestimated, as explained in McNeil (1968).

Table 10.--Marine survival, survival from emigrating fry to returning adult, of unmarked pink salmon from Sashin Creek, 1962-80.

Brood year	Number of unmarked fry produced			Year of return	Number adults returned	Survival from fry to adult (%)
	Creek	Hatchery	Total			
1962	100	0	100	1964	--	--
1963	3,256,300	0	3,256,300	1965	14,833	0.46
1964	310,000	0	310,000	1966	5,761	1.86
1965	2,235,000	0	2,235,000	1967	38,067	1.70
1966	744,000	0	744,000	1968	13,103	1.77
1967	3,007,200	0	3,007,200	1969	36,629 ¹	1.22
1968	1,007,544 ²	0	1,007,544	1970	9,415	0.93
1969	3,605,637	0	3,605,637	1971	72,122 ¹	2.00
1970	870,701	0	870,701	1972	13,385	1.54
1971	1,773,609	313,251	2,068,862	1973	3,606	0.17
1972	628,537	542,983	1,171,520	1974	7,148	0.61
1973	6,779	0	6,779	1975	1,566 ³	23.10
1974	712,893	63,309	776,202	1976	3,828	0.49
1975	224,441	681,764	906,205	1977	28,156 ¹	3.11
1976	122,566	92,098	214,664	1978	36,762 ⁴	17.13
1977	1,790,733	0	1,790,733	1979	114,442 ¹	6.39
1978	1,710,958	353,264	2,064,222	1980	54,584	2.64

¹ Some fish spawned intertidally in 1969, 1971, 1977, and 1979; and estimates of the numbers of these fish are in counts of returning adults for 1969, 1971, and 1977. No estimates were included in the 1979 adult return.

Water levels in the creek were very low in 1979, and many of the returning fish were forced to stay in the intertidal region below the weir. Because there was substantial digging of false redds as well as actual spawning, estimates of intertidal spawning were unreliable. However, between 1,000 and 10,000 fish are thought to have spawned intertidally.

² An estimated 1,048,044 fry were produced in the creek but only 1,007,044 were released after counting. Approximately 40,500 fry were held and fed at the research station and released later.

³ The number of unmarked adults was based on the proportion of returning adults without adipose fin clips that did not have oxytetracycline bone marks. This proportion was estimated to be 30.1%.

⁴ The number of unmarked adults was adjusted to exclude unmarked fish that had been held and fed at the hatchery.

Table 11.--Marine survival of marked pink salmon that were held and fed at the research station at Sashin Creek, 1968-76. Fish were marked by fin clipping and, in some cases, by feeding the fish one or two treatments of oxytetracycline (OTC).

Brood year	Date of release	Mark type	Size at release		Number of fry released	Percent of fry marked	Number of adults returned	Survival from fry to adult (%)
			Weight (g)	Length (mm)				
1968	4 Aug 69	Single OTC & anal	5.46	80.33	17,456	100.0	105	0.60
	21 Sep 69	Double OTC & dorsal	23.65	139.76	1,000	100.0	6	0.60
1973	3 Jul 74	Single OTC	1.65	58.7	151,285	98.9	3,631	2.40
	6 Sep 74	Adipose clip	19.7	132.1	9,905	99.4	107	1.08
1975	17 Apr 76	Left ventral	0.23	32.0	15,000	100.0	429 ¹	2.9
	18 May 76	Right ventral	0.27	34.7	14,862	100.0	625	4.2
	17 Jun 76	Right ventral, adipose clip	0.55	39.9	10,034	100.0	482	4.8
	17 Jul 76	Left ventral, adipose clip	1.95	58.6	7,608	100.0	304	4.0
	16 Apr 76	Anal clip	0.70	--	2,396	100.0	29	1.2
1976	5 Jun 77	Adipose clip	1.19	56.9	55,046	35.4	7,977	14.49

¹ The number of intertidal spawners was estimated in 1977. A proportion of this estimate was assigned to each mark group based on numbers of a given mark recovered at the weir to the total number of pink salmon counted at the weir.