



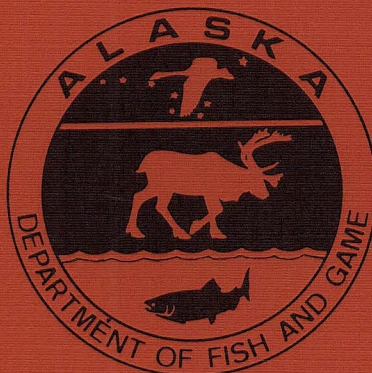
FRED Reports

Historical Water Temperatures and
Summary Statistics for FRED Division
Facilities in Southeast Alaska

by

Sarah A. Bibb

Number 45



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Alaska Department of Fish & Game
Division of Fisheries Rehabilitation,
Enhancement and Development

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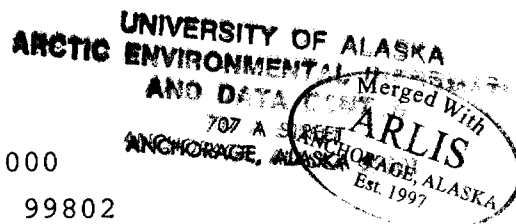
Number 45

Alaska Department of Fish and Game
Division of Fisheries Rehabilitation,
Enhancement and Development

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ABSTRACT

Daily water temperature data from 1979 through 1983 have been compiled for Beaver Falls, Deer Mountain, Hidden Falls, Klawock, and Snettisham Hatcheries. Statistics presented for each facility include average, minimal and maximal daily temperatures during the period as well as an accumulation of the average, minimal and maximal temperature units.

INTRODUCTION

This report contains ambient water temperature data for five of the Fisheries Rehabilitation, Enhancement and Development Division (FRED) hatcheries in S.E. Alaska. In addition to providing a historical record, knowledge of a temperature regime provides information necessary for fiscal and operational planning. Cumulative temperature unit data permit the prediction of when eggs or fish will achieve a particular developmental stage.

Historical water temperatures and summary statistics are presented in two series of tables for Beaver Falls, Deer Mountain, Klawock and Snettisham Hatcheries. Because of their length, all tables will follow the text ending on page 6. The first of the tables in each series contains daily water temperatures, as available, for the years 1979 through 1983. The second table presents the summary statistics that are based on historical data. For each day of the year that data are available, an average water temperature was calculated. The minimal and maximal temperatures are also presented to give an indication of the possible variation of average temperatures. In addition average minimal and maximal daily water temperatures were cumulated. These statistics provide information on

cumulative temperature units from January 1 for Deer Mountain, Klawock and Snettisham Hatcheries. Beaver Falls data are accumulated beginning on September 1. Only historical water temperature data are presented for Hidden Falls Hatchery. A description of the Crystal Lake water system, which does not include water temperature data, is also included.

DISCUSSION

Beaver Falls Hatchery

Located on Revillagigedo Island, Beaver Falls Hatchery is 19.2 km south of Ketchikan on George Inlet. A chum salmon, *Oncorhynchus keta*, incubation and rearing program was initiated there in 1974 and ceased in 1983. Present plans for this facility include sockeye salmon, *O. nerka*, egg incubation beginning in the fall of 1984.

Water is supplied to the Ketchikan Public Utilities (KPU) Beaver Falls Creek powerhouse from Silvis and Lower Silvis Lakes. Lower Silvis Lake has a surface area of 25 ha (62.5 a) at the 241 m (792 ft) elevation and Silvis Lake has a surface area of 95 ha (234 a) at the 335 m (1,100 ft) elevation. These two lakes have a combined drainage area of approximately 15 km² (5.85 mi²) (Power Commission 1947). Water is transported to the hatchery through a pipeline from the penstock at a rate of at least 0.10 cms (3.5 cfs) (Andersen 1979).

Hatchery water temperature data are available for the years 1979 through 1983 (September through May). The water to the hatchery is usually shut-off during months in which eggs or fish are not being cultured. Table 1 provides a summary, by month, of daily water temperatures for the 5-year period. Table 2 presents the summary statistics based on these historical data.

Crystal Lake Hatchery

This facility is located on Crystal Creek, 29 km south of Petersburg on Mitkof Island. Construction of this hatchery, now a chinook salmon, *O. tshawytscha*, coho salmon, *O. kisutch*, chum salmon, and steelhead trout *Salmo gairdneri* incubation and rearing facility, began in 1971. At the 380 m elevation (1,247 ft), Crystal Lake, with a surface area of 83 ha (204 a) and a drainage area of approximately 3.5 km² (1.35 mi²), is the water source for this facility (Power Commission 1947). The hatchery is located approximately 1.6 km from the lake outfall. Water is supplied to the hatchery via the Crystal Lake hydroelectric power plant tailrace at a rate of not less than 0.03 cms (1 cfs).

Because of the complexity of the water system at Crystal Lake Hatchery, the temperature varies considerably among incubation and rearing units. Rather than recording one water temperature for the hatchery, separate temperature readings are taken for each unit. Therefore, an analysis of water temperatures, which includes calculating an average, minimal and maximal daily temperature, was not done for Crystal Lake Hatchery.

Deer Mountain Hatchery

Located within the Ketchikan city limits on Ketchikan Creek, Deer Mountain Hatchery was built in 1954 and has been operated jointly by FRED Division and the City of Ketchikan as a chinook salmon, coho salmon and steelhead trout incubation and rearing facility since 1975. In the foreseeable future, Deer Mountain Hatchery will primarily be a chinook research and production facility.

Ketchikan Creek drains the Ketchikan Lakes, which have a drainage area of approximately 35 km² at the 96 m (315 ft) elevation. Ketchikan Lower Lake has a surface area of 115 ha (285 a) and Ketchikan Upper Lake has a surface area of 117 ha (290 a). The lakes are located 2 km (1.3 mi) upstream from the mouth of the

creek (Power Commission 1947). The hatchery receives water from a pipeline that taps the penstock of the Ketchikan Public Utilities hydroelectric plant powerhouse on Ketchikan Creek.

Table 3 summarizes daily water temperatures at Deer Mountain Hatchery from 1979 through 1983. Table 4 includes average, minimal and maximal daily temperature for this period as well as an accumulation of average, minimal and maximal temperature units.

Hidden Falls Hatchery

This hatchery is located on northeast Baranof Island on Kasnyku Bay. Constructed in 1978, this facility incubates and rears chinook salmon and chum salmon. Both Upper and Lower Hidden Falls Lakes provide water to the hatchery. Hidden Falls lower lake has a surface area of 70 ha (172 a) at the 59 m elevation (192 ft). The combined drainage area of these two lakes is 21 km² (8.2 mi²) (Power Commission 1947). There is a dam at the outfall of the lower lake, and the hatchery is supplied water by both a deep and a shallow intake, which allows some water temperature control through selection and mixing.

Calculation of average, minimal and maximal daily water temperatures and accumulation of these statistics was not done for Hidden Falls Hatchery. Table 5 presents the average weekly water temperatures for the period 1979 through 1983. The hatchery began using a recording thermograph in 1981; prior to that, a daily average water temperature was determined by averaging several thermometer readings throughout the day. Temperatures are recorded for both the deep and shallow intakes.

Klawock Hatchery

Constructed in 1978, Klawock Hatchery is located on the west coast of Prince of Wales Island (91 m from the outfall of Klawock

Lake). Sockeye and pink salmon, *O. gorbuscha*, have been released in the past; however, at present, this facility produces coho salmon, chum salmon, and steelhead trout. Klawock Lake at the 15 m (50 ft) elevation has a surface area of 1,113 ha (2,750 a) and a drainage area of 47 km² (18 mi²) (Power Commission 1947). Hatchery water is gravity-fed from above the lake outfall.

Historical water temperature data from 1979 through 1983, which are presented in Table 6, were used to calculate average, minimal and maximal daily temperatures. Table 7 includes these statistics as well as an accumulation of average, minimal and maximal temperature units.

Snettisham Hatchery

Located 48 km (by air) southeast of Juneau, Snettisham Hatchery is near the Alaska Power Administration hydroelectric plant in Port Snettisham. Construction of this chinook, coho, and chum salmon incubation and rearing facility was completed in 1981. The Snettisham hydroelectric plant drains Long Lake, which has a surface area of 545 ha (1,345 a) at the 246 m (807 ft) elevation. The drainage area of Long Lake is approximately 83 km² (31.9 mi²) (Power Commission 1947). Water for incubation is pumped to the hatchery, and water for rearing is supplied by gravity from the powerplant tailrace. Under normal operating circumstances, the water flow from the tailrace ranges from 5.7 cms to 11.3 cms (200 cfs to 400 cfs) (KCM 1979). Daily water temperature readings are taken by a thermograph located in the headboxes inside the hatchery building. Table 8 contains historical temperature data from 1979 through 1983. Table 9 contains average, minimal and maximal temperatures for each day as well as an accumulation of temperature units for these statistics.

TABLE 1. BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983
SEPTEMBER

DAY	1979	1980	1981	1982	1983
1	.	.	.	.	12.0
2	.	.	.	.	12.0
3	.	.	.	.	12.0
4	.	.	.	.	12.0
5	.	.	.	.	12.0
6	.	.	.	.	11.0
7	.	.	11.0	.	11.0
8	.	.	11.0	.	11.5
9	.	.	11.0	.	11.5
10	.	.	11.0	.	11.5
11	.	.	11.0	.	11.5
12	.	10.0	11.0	.	11.5
13	.	10.0	11.0	.	11.5
14	10.5	10.0	11.0	11.0	11.5
15	10.5	11.0	11.0	11.0	11.0
16	10.5	11.0	11.0	11.0	11.0
17	10.5	11.0	11.0	11.0	11.0
18	10.5	11.0	10.5	11.0	11.0
19	10.0	11.0	11.0	11.0	11.0
20	11.0	11.0	11.0	11.0	11.0
21	10.0	10.0	11.0	11.0	11.0
22	11.0	10.0	11.0	11.0	11.0
23	10.0	10.0	10.5	11.0	11.0
24	10.0	10.0	10.5	11.0	11.0
25	10.0	10.0	10.5	11.0	11.0
26	10.0	10.0	10.5	11.0	11.0
27	10.0	10.0	10.5	11.0	10.5
28	10.0	10.0	10.5	11.0	10.0
29	9.5	9.5	10.0	10.5	10.0
30	9.0	9.5	10.0	10.5	10.5

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

OCTOBER					
DAY	1979	1980	1981	1982	1983
1	9.5	9.5	10.0	10.5	10.0
2	9.5	9.5	10.0	10.5	10.0
3	9.0	9.5	9.5	10.5	10.0
4	9.0	9.0	9.5	10.0	10.0
5	9.0	9.0	9.5	9.5	10.0
6	9.0	9.0	9.0	8.5	10.0
7	9.0	9.0	9.0	8.5	10.0
8	9.0	9.0	9.0	8.5	10.0
9	9.0	9.0	8.5	8.5	10.0
10	9.0	9.0	9.0	8.5	9.5
11	9.0	9.0	8.5	8.5	9.0
12	9.5	9.0	8.5	8.0	9.0
13	9.0	9.0	8.5	8.0	9.0
14	9.0	8.5	8.5	8.5	9.0
15	9.0	8.5	8.5	8.0	9.0
16	9.0	8.5	8.5	8.0	8.5
17	9.0	8.5	8.5	7.5	8.5
18	8.5	8.5	8.5	7.0	8.5
19	8.5	8.5	8.5	7.0	8.5
20	8.5	8.5	8.5	7.0	8.5
21	8.0	8.0	8.5	7.0	8.5
22	8.0	8.0	8.5	7.0	8.5
23	8.0	8.0	8.5	7.0	8.0
24	8.0	8.0	8.0	7.0	8.0
25	8.0	8.0	8.0	6.5	8.0
26	8.0	8.0	8.0	6.5	8.0
27	7.5	8.0	8.0	6.5	8.0
28	7.5	8.0	8.0	6.5	8.0
29	7.5	8.0	8.0	6.5	8.0
30	7.5	8.0	7.5	6.5	8.0
31	7.5	8.0	7.5	6.5	8.0

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

NOVEMBER					
DAY	1979	1980	1981	1982	1983
1	7.0	8.0	7.5	6.0	6.6
2	7.0	8.0	7.5	6.0	6.6
3	7.0	8.0	7.0	6.0	6.6
4	7.0	8.0	7.0	6.0	6.6
5	7.0	7.5	7.0	6.0	6.0
6	7.0	7.5	7.0	6.0	6.0
7	6.5	7.5	7.0	6.0	6.0
8	6.5	7.5	7.0	5.0	6.0
9	6.5	7.5	7.0	5.0	6.0
10	6.5	7.5	6.5	5.0	6.0
11	6.5	7.5	6.5	5.0	6.0
12	6.5	7.5	6.5	5.0	6.0
13	6.0	7.5	6.5	5.0	6.0
14	6.0	7.5	6.0	5.0	5.5
15	6.0	6.5	6.0	4.5	5.5
16	6.0	6.5	6.0	4.5	5.5
17	6.0	6.5	6.0	4.5	5.5
18	6.0	6.5	6.0	4.5	5.5
19	6.0	6.5	6.0	4.5	5.5
20	6.0	6.0	6.0	4.5	5.0
21	6.0	6.0	6.0	4.5	5.0
22	6.0	6.0	6.0	3.5	5.0
23	6.0	6.0	6.0	3.5	5.0
24	6.0	6.0	5.5	3.5	5.0
25	5.5	6.0	5.0	3.5	5.0
26	5.5	6.0	5.5	3.5	5.0
27	5.5	6.0	5.0	3.5	5.0
28	5.5	5.5	5.5	3.5	4.8
29	5.5	5.5	5.0	3.5	4.8
30	5.0	5.0	5.0	3.5	4.8

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

DECEMBER					
DAY	1979	1980	1981	1982	1983
1	5.5	5.0	5.0	3.5	4.5
2	5.5	5.0	5.0	3.5	4.5
3	5.0	5.0	5.0	3.5	4.5
4	5.0	4.5	5.0	3.5	4.5
5	5.0	4.5	5.0	3.5	3.9
6	5.0	3.5	5.0	3.5	3.9
7	5.0	4.0	5.0	3.5	3.9
8	5.0	3.5	4.5	3.5	3.9
9	4.5	3.5	4.0	3.5	3.9
10	4.5	3.5	4.0	3.5	3.9
11	4.5	3.5	4.0	3.5	3.9
12	4.0	3.5	4.0	3.5	3.8
13	4.5	3.5	3.0	3.5	3.8
14	3.5	3.5	4.0	3.5	3.8
15	3.0	3.5	3.5	3.5	3.8
16	3.0	3.5	3.5	3.5	3.8
17	3.5	3.5	4.0	3.5	3.8
18	3.0	3.0	4.0	3.5	3.8
19	3.5	2.5	4.0	3.5	3.0
20	3.5	2.5	4.0	3.3	3.0
21	3.5	3.0	3.0	3.3	3.0
22	3.0	3.0	4.0	3.3	3.0
23	3.0	3.0	4.0	3.3	3.0
24	3.0	3.0	3.5	3.3	3.0
25	3.5	3.0	3.0	3.3	3.0
26	3.0	3.0	3.0	3.3	3.0
27	3.5	3.0	3.5	3.0	3.0
28	4.0	3.0	3.0	3.0	3.0
29	3.5	3.0	4.0	3.0	3.0
30	3.0	3.0	3.0	3.0	3.0
31	3.0	3.0	3.0	3.0	3.0

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JANUARY					
DAY	1979	1980	1981	1982	1983
1	.	3.0	3.0	3.0	3.0
2	.	3.5	3.0	3.0	3.0
3	.	3.0	3.0	3.0	3.0
4	.	3.0	3.0	3.0	3.0
5	.	2.5	3.0	3.0	3.0
6	.	3.0	3.0	3.0	3.0
7	.	2.5	3.0	3.0	3.0
8	.	3.0	3.0	3.0	3.0
9	.	2.0	3.0	3.0	3.0
10	.	2.0	3.0	3.0	2.0
11	.	2.0	3.0	3.0	2.5
12	.	2.0	3.0	3.0	2.5
13	.	2.0	3.0	2.5	2.5
14	.	2.5	3.0	2.5	2.5
15	.	2.5	3.0	3.0	2.5
16	.	2.5	3.0	3.0	2.5
17	.	2.5	3.0	3.0	2.5
18	.	2.5	3.0	3.0	2.5
19	.	2.5	3.5	3.0	2.5
20	.	2.5	3.5	3.0	2.5
21	.	2.5	3.5	2.5	2.5
22	.	2.5	3.5	2.5	2.5
23	.	2.5	3.5	3.0	2.5
24	.	2.5	3.5	3.0	2.0
25	.	2.5	3.5	3.0	2.0
26	.	2.5	3.5	3.0	2.0
27	.	2.5	3.5	3.0	2.0
28	.	2.5	3.5	3.0	2.0
29	.	2.5	3.5	3.0	2.0
30	.	2.5	3.0	3.0	2.0
31	.	2.5	3.0	3.0	2.5

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

FEBRUARY					
DAY	1979	1980	1981	1982	1983
1	.	2.5	3.0	3.0	2.5
2	.	2.5	3.5	3.0	2.5
3	.	2.0	3.5	3.0	2.5
4	.	2.5	3.5	3.0	2.5
5	.	2.5	3.0	3.0	2.5
6	.	2.5	3.0	3.0	2.5
7	.	3.0	3.0	3.0	2.5
8	.	2.5	3.5	3.0	2.5
9	.	2.5	3.5	3.0	2.5
10	.	2.5	3.0	3.0	2.5
11	.	2.5	3.0	3.0	2.5
12	.	2.5	3.5	3.0	2.5
13	.	2.5	3.5	3.0	2.5
14	.	2.5	3.5	3.0	2.5
15	.	2.5	3.0	3.0	2.5
16	.	2.5	3.5	3.0	2.5
17	.	2.5	3.2	3.0	2.5
18	.	2.5	3.5	3.0	2.5
19	.	3.0	3.5	3.0	2.5
20	.	3.0	3.5	3.0	2.5
21	.	3.0	3.5	3.0	2.5
22	.	3.0	3.0	3.0	2.5
23	.	3.0	3.0	3.0	2.5
24	.	3.0	3.0	3.0	2.5
25	.	3.0	3.0	3.5	2.5
26	.	3.0	3.0	3.0	2.5
27	.	3.0	3.0	3.0	2.5
28	.	3.0	3.0	3.5	2.5

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MARCH					
DAY	1979	1980	1981	1982	1983
1	.	3.0	3.0	3.5	.
2	.	3.0	3.0	3.5	.
3	.	3.0	3.0	3.5	.
4	.	3.0	3.0	3.5	.
5	.	3.0	3.0	3.5	.
6	.	3.0	3.0	3.5	1.5
7	.	3.0	4.5	3.5	1.5
8	.	3.0	6.0	3.5	2.0
9	.	3.0	6.0	3.5	2.0
10	.	3.0	5.5	3.5	2.0
11	.	3.0	5.5	3.5	2.0
12	.	3.0	5.2	3.5	2.0
13	.	3.0	6.2	3.5	2.0
14	.	3.0	5.8	3.5	2.0
15	.	3.0	6.2	3.5	2.5
16	.	3.0	6.1	3.0	2.5
17	.	3.0	6.3	3.0	2.5
18	.	3.0	6.8	3.5	2.5
19	.	3.0	6.6	3.5	2.5
20	.	3.0	7.3	3.0	2.5
21	.	3.0	6.5	3.0	2.5
22	.	3.0	6.6	3.0	2.5
23	.	3.0	6.8	3.0	2.5
24	.	2.5	6.9	3.0	2.5
25	.	2.5	7.0	3.0	2.5
26	.	3.0	7.3	3.0	3.0
27	.	3.0	7.0	3.0	3.0
28	.	3.0	7.0	3.0	3.0
29	.	3.0	7.0	3.0	3.0
30	.	3.0	7.0	3.0	3.0
31	.	3.0	6.7	3.0	3.0

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

APRIL					
DAY	1979	1980	1981	1982	1983
1	.	3	7.3	3.0	3.0
2	.	3	7.4	3.0	3.0
3	.	3	7.5	3.0	3.0
4	.	3	6.8	3.5	3.0
5	.	3	6.2	3.0	3.0
6	.	3	6.2	3.0	3.0
7	.	3	6.8	3.0	3.0
8	.	3	6.8	3.0	3.0
9	.	3	6.8	3.5	3.0
10	.	3	6.8	3.5	3.0
11	.	3	6.8	3.5	3.0
12	.	3	6.8	3.5	3.0
13	.	3	6.8	3.0	3.0
14	.	3	6.8	3.5	3.0
15	.	3	6.8	3.5	3.0
16	.	3	6.5	3.5	3.5
17	.	3	6.5	3.5	3.5
18	.	3	6.5	3.5	3.0
19	.	3	6.5	3.5	3.0
20	.	3	6.5	3.5	3.5
21	.	3	7.0	3.0	3.5
22	.	3	7.0	3.0	3.5
23	.	3	7.5	3.0	3.5
24	.	3	7.2	3.0	4.0
25	.	3	7.5	3.0	3.5
26	.	3	8.1	3.0	4.0
27	.	3	7.6	3.5	4.0
28	.	3	7.7	3.0	4.0
29	.	3	7.6	3.0	4.5
30	.	3	8.4	3.0	5.0

TABLE 1 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MAY					
DAY	1979	1980	1981	1982	1983
1	.	3.0	4.0	3.0	5.0
2	.	3.0	4.0	3.0	5.0
3	.	3.0	4.5	3.0	5.0
4	.	3.0	5.0	3.0	5.0
5	.	3.0	5.5	3.0	4.5
6	.	3.0	6.0	3.0	4.5
7	.	3.0	6.0	2.5	4.5
8	.	3.0	6.0	2.5	5.0
9	.	3.0	6.0	3.0	5.0
10	.	3.5	5.5	3.0	5.5
11	.	4.0	6.0	2.5	5.5
12	.	4.0	7.0	2.5	6.0
13	.	4.0	6.5	3.0	7.0
14	.	4.0	6.5	3.0	6.5
15	.	4.0	7.0	3.0	6.5
16	.	4.0	7.0	3.0	6.5
17	.	4.0	7.0	3.0	7.0
18	.	4.5	7.0	3.0	7.0
19	.	4.5	8.0	3.0	7.0
20	.	4.5	8.0	3.0	7.0
21	.	4.5	8.0	3.0	7.0
22	.	4.5	8.0	2.5	7.0
23	.	5.0	8.0	2.5	7.0
24	.	5.0	8.0	2.5	7.0
25	.	6.1	8.0	2.5	7.0
26	.	6.0	8.0	3.0	7.0
27	.	6.0	8.0	3.0	7.0
28	.	6.0	8.5	3.0	7.5
29	.	6.0	9.0	3.0	8.5
30	.	6.5	9.0	3.5	8.5
31	.	7.0	9.0	3.5	8.5

TABLE 1 (CONT.). BEAVER FALLS-HATCHERY TEMPERATURE DATA,
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JUNE					
DAY	1979	1980	1981	1982	1983
1	.	7.0	9.0	4.0	8.5
2	.	6.5	9.0	3.5	8.5
3	.	7.5	8.0	4.0	8.5
4	.	7.0	8.0	4.0	8.5
5	.	7.0	8.5	4.0	8.5
6	.	9.0	8.5	5.0	8.5
7	.	10.0	8.5	5.0	9.5
8	.	10.0	9.0	5.0	10.0
9	.	9.0	9.0	5.0	8.5

TABLE 2. BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

SEPTEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	12.0	12.0	12.0	12.0	12.0	12.0
2	12.0	24.0	12.0	24.0	12.0	24.0
3	12.0	36.0	12.0	36.0	12.0	36.0
4	12.0	48.0	12.0	48.0	12.0	48.0
5	12.0	60.0	12.0	60.0	12.0	60.0
6	11.0	71.0	11.0	71.0	11.0	71.0
7	11.0	82.0	11.0	82.0	11.0	82.0
8	11.3	93.3	11.0	93.0	11.5	93.5
9	11.3	104.5	11.0	104.0	11.5	105.0
10	11.3	115.8	11.0	115.0	11.5	116.5
11	11.3	127.0	11.0	126.0	11.5	128.0
12	10.8	137.8	10.0	136.0	11.5	139.5
13	10.8	148.7	10.0	146.0	11.5	151.0
14	10.8	159.5	10.0	156.0	11.5	162.5
15	10.9	170.4	10.5	166.5	11.0	173.5
16	10.9	181.3	10.5	177.0	11.0	184.5
17	10.9	192.2	10.5	187.5	11.0	195.5
18	10.8	203.0	10.5	198.0	11.0	206.5
19	10.8	213.8	10.0	208.0	11.0	217.5
20	11.0	224.8	11.0	219.0	11.0	228.5
21	10.6	235.4	10.0	229.0	11.0	239.5
22	10.8	246.2	10.0	239.0	11.0	250.5
23	10.5	256.7	10.0	249.0	11.0	261.5
24	10.5	267.2	10.0	259.0	11.0	272.5
25	10.5	277.7	10.0	269.0	11.0	283.5
26	10.5	288.2	10.0	279.0	11.0	294.5
27	10.4	298.6	10.0	289.0	11.0	305.5
28	10.3	308.9	10.0	299.0	11.0	316.5
29	9.9	318.8	9.5	308.5	10.5	327.0
30	9.9	328.7	9.0	317.5	10.5	337.5

TABLE 2 (CONT.) BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

OCTOBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	9.9	338.6	9.5	327.0	10.5	348.0
2	9.9	348.5	9.5	336.5	10.5	358.5
3	9.7	358.2	9.0	345.5	10.5	369.0
4	9.5	367.7	9.0	354.5	10.0	379.0
5	9.4	377.1	9.0	363.5	10.0	389.0
6	9.1	386.2	8.5	372.0	10.0	399.0
7	9.1	395.3	8.5	380.5	10.0	409.0
8	9.1	404.4	8.5	389.0	10.0	419.0
9	9.0	413.4	8.5	397.5	10.0	429.0
10	9.0	422.4	8.5	406.0	9.5	438.5
11	8.8	431.2	8.5	414.5	9.0	447.5
12	8.8	440.0	8.0	422.5	9.5	457.0
13	8.7	448.7	8.0	430.5	9.0	466.0
14	8.7	457.4	8.5	439.0	9.0	475.0
15	8.6	466.0	8.0	447.0	9.0	484.0
16	8.5	474.5	8.0	455.0	9.0	493.0
17	8.4	482.9	7.5	462.5	9.0	502.0
18	8.2	491.1	7.0	469.5	8.5	510.5
19	8.2	499.3	7.0	476.5	8.5	519.0
20	8.2	507.5	7.0	483.5	8.5	527.5
21	8.0	515.5	7.0	490.5	8.5	536.0
22	8.0	523.5	7.0	497.5	8.5	544.5
23	7.9	531.4	7.0	504.5	8.5	553.0
24	7.8	539.2	7.0	511.5	8.0	561.0
25	7.7	546.9	6.5	518.0	8.0	569.0
26	7.7	554.6	6.5	524.5	8.0	577.0
27	7.6	562.2	6.5	531.0	8.0	585.0
28	7.6	569.8	6.5	537.5	8.0	593.0
29	7.6	577.4	6.5	544.0	8.0	601.0
30	7.5	584.9	6.5	550.5	8.0	609.0
31	7.5	592.4	6.5	557.0	8.0	617.0

TABLE 2 (CONT.) BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

NOVEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	7.0	599.4	6.0	563.0	8.0	625.0
2	7.0	606.4	6.0	569.0	8.0	633.0
3	6.9	613.3	6.0	575.0	8.0	641.0
4	6.9	620.2	6.0	581.0	8.0	649.0
5	6.7	626.9	6.0	587.0	7.5	656.5
6	6.7	633.6	6.0	593.0	7.5	664.0
7	6.6	640.2	6.0	599.0	7.5	671.5
8	6.4	646.6	5.0	604.0	7.5	679.0
9	6.4	653.0	5.0	609.0	7.5	686.5
10	6.3	659.3	5.0	614.0	7.5	694.0
11	6.3	665.6	5.0	619.0	7.5	701.5
12	6.3	671.9	5.0	624.0	7.5	709.0
13	6.2	678.1	5.0	629.0	7.5	716.5
14	6.0	684.1	5.0	634.0	7.5	724.0
15	5.7	689.8	4.5	638.5	6.5	730.5
16	5.7	695.5	4.5	643.0	6.5	737.0
17	5.7	701.2	4.5	647.5	6.5	743.5
18	5.7	706.9	4.5	652.0	6.5	750.0
19	5.7	712.6	4.5	656.5	6.5	756.5
20	5.5	718.1	4.5	661.0	6.0	762.5
21	5.5	723.6	4.5	665.5	6.0	768.5
22	5.3	728.9	3.5	669.0	6.0	774.5
23	5.3	734.2	3.5	672.5	6.0	780.5
24	5.2	739.4	3.5	676.0	6.0	786.5
25	5.0	744.4	3.5	679.5	6.0	792.5
26	5.1	749.5	3.5	683.0	6.0	798.5
27	5.0	754.5	3.5	686.5	6.0	804.5
28	5.0	759.5	3.5	690.0	5.5	810.0
29	4.9	764.4	3.5	693.5	5.5	815.5
30	4.7	769.0	3.5	697.0	5.0	820.5

TABLE 2 (CONT.). EAEVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

DECEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.7	773.7	3.5	700.5	5.5	826.0
2	4.7	778.4	3.5	704.0	5.5	831.5
3	4.6	783.0	3.5	707.5	5.0	836.5
4	4.5	787.5	3.5	711.0	5.0	841.5
5	4.4	791.9	3.5	714.5	5.0	846.5
6	4.2	796.1	3.5	718.0	5.0	851.5
7	4.3	800.4	3.5	721.5	5.0	856.5
8	4.1	804.4	3.5	725.0	5.0	861.5
9	3.9	808.3	3.5	728.5	4.5	866.0
10	3.9	812.2	3.5	732.0	4.5	870.5
11	3.9	816.1	3.5	735.5	4.5	875.0
12	3.8	819.8	3.5	739.0	4.0	879.0
13	3.7	823.5	3.0	742.0	4.5	883.5
14	3.7	827.2	3.5	745.5	4.0	887.5
15	3.5	830.6	3.0	748.5	3.8	891.3
16	3.5	834.1	3.0	751.5	3.8	895.1
17	3.7	837.7	3.5	755.0	4.0	899.1
18	3.5	841.2	3.0	758.0	4.0	903.1
19	3.3	844.5	2.5	760.5	4.0	907.1
20	3.3	847.8	2.5	763.0	4.0	911.1
21	3.2	850.9	3.0	766.0	3.5	914.6
22	3.3	854.2	3.0	769.0	4.0	918.6
23	3.3	857.4	3.0	772.0	4.0	922.6
24	3.2	860.6	3.0	775.0	3.5	926.1
25	3.2	863.8	3.0	778.0	3.5	929.6
26	3.1	866.8	3.0	781.0	3.3	932.9
27	3.2	870.0	3.0	784.0	3.5	936.4
28	3.2	873.2	3.0	787.0	4.0	940.4
29	3.3	876.5	3.0	790.0	4.0	944.4
30	3.0	879.5	3.0	793.0	3.0	947.4
31	3.0	882.5	3.0	796.0	3.0	950.4

TABLE 2 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JANUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.0	885.5	3.0	799.0	3.0	953.4
2	3.1	888.7	3.0	802.0	3.5	956.9
3	3.0	891.7	3.0	805.0	3.0	959.9
4	3.0	894.7	3.0	808.0	3.0	962.9
5	2.9	897.5	2.5	810.5	3.0	965.9
6	3.0	900.5	3.0	813.5	3.0	968.9
7	2.9	903.4	2.5	816.0	3.0	971.9
8	3.0	906.4	3.0	819.0	3.0	974.9
9	2.8	909.2	2.0	821.0	3.0	977.9
10	2.5	911.7	2.0	823.0	3.0	980.9
11	2.6	914.3	2.0	825.0	3.0	983.9
12	2.6	916.9	2.0	827.0	3.0	986.9
13	2.5	919.4	2.0	829.0	3.0	989.9
14	2.6	922.0	2.5	831.5	3.0	992.9
15	2.8	924.8	2.5	834.0	3.0	995.9
16	2.8	927.5	2.5	836.5	3.0	998.9
17	2.8	930.3	2.5	839.0	3.0	1001.9
18	2.8	933.0	2.5	841.5	3.0	1004.9
19	2.9	935.9	2.5	844.0	3.5	1008.4
20	2.9	938.8	2.5	846.5	3.5	1011.9
21	2.8	941.5	2.5	849.0	3.5	1015.4
22	2.8	944.3	2.5	851.5	3.5	1018.9
23	2.9	947.2	2.5	854.0	3.5	1022.4
24	2.8	949.9	2.0	856.0	3.5	1025.9
25	2.8	952.7	2.0	858.0	3.5	1029.4
26	2.8	955.4	2.0	860.0	3.5	1032.9
27	2.8	958.2	2.0	862.0	3.5	1036.4
28	2.8	960.9	2.0	864.0	3.5	1039.9
29	2.8	963.7	2.0	866.0	3.5	1043.4
30	2.6	966.3	2.0	868.0	3.0	1046.4
31	2.8	969.0	2.5	870.5	3.0	1049.4

TABLE 2 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

FEBRUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	2.8	971.8	2.5	873.0	3.0	1052.4
2	2.9	974.7	2.5	875.5	3.5	1055.9
3	2.8	977.4	2.0	877.5	3.5	1059.4
4	2.9	980.3	2.5	880.0	3.5	1062.9
5	2.8	983.0	2.5	882.5	3.0	1065.9
6	2.8	985.8	2.5	885.0	3.0	1068.9
7	2.9	988.7	2.5	887.5	3.0	1071.9
8	2.9	991.5	2.5	890.0	3.5	1075.4
9	2.9	994.4	2.5	892.5	3.5	1078.9
10	2.8	997.2	2.5	895.0	3.0	1081.9
11	2.8	999.9	2.5	897.5	3.0	1084.9
12	2.9	1002.8	2.5	900.0	3.5	1088.4
13	2.9	1005.7	2.5	902.5	3.5	1091.9
14	2.9	1008.5	2.5	905.0	3.5	1095.4
15	2.8	1011.3	2.5	907.5	3.0	1098.4
16	2.9	1014.2	2.5	910.0	3.5	1101.9
17	2.8	1017.0	2.5	912.5	3.2	1105.1
18	2.9	1019.8	2.5	915.0	3.5	1108.6
19	3.0	1022.8	2.5	917.5	3.5	1112.1
20	3.0	1025.8	2.5	920.0	3.5	1115.6
21	3.0	1028.8	2.5	922.5	3.5	1119.1
22	2.9	1031.7	2.5	925.0	3.0	1122.1
23	2.9	1034.6	2.5	927.5	3.0	1125.1
24	2.9	1037.5	2.5	930.0	3.0	1128.1
25	3.0	1040.5	2.5	932.5	3.5	1131.6
26	2.9	1043.3	2.5	935.0	3.0	1134.6
27	2.9	1046.2	2.5	937.5	3.0	1137.6
28	3.0	1049.2	2.5	940.0	3.5	1141.1

TABLE 2 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MARCH

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.2	1052.4	3.0	943.0	3.5	1144.6
2	3.2	1055.5	3.0	946.0	3.5	1148.1
3	3.2	1058.7	3.0	949.0	3.5	1151.6
4	3.2	1061.9	3.0	952.0	3.5	1155.1
5	3.2	1065.0	3.0	955.0	3.5	1158.6
6	2.8	1067.8	1.5	956.5	3.5	1162.1
7	3.1	1070.9	1.5	958.0	4.5	1166.6
8	3.6	1074.5	2.0	960.0	6.0	1172.6
9	3.6	1078.2	2.0	962.0	6.0	1178.6
10	3.5	1081.7	2.0	964.0	5.5	1184.1
11	3.5	1085.2	2.0	966.0	5.5	1189.6
12	3.4	1088.6	2.0	968.0	5.2	1194.8
13	3.7	1092.3	2.0	970.0	6.2	1201.0
14	3.6	1095.8	2.0	972.0	5.8	1206.8
15	3.8	1099.6	2.5	974.5	6.2	1213.0
16	3.6	1103.3	2.5	977.0	6.1	1219.1
17	3.7	1107.0	2.5	979.5	6.3	1225.4
18	3.9	1110.9	2.5	982.0	6.8	1232.2
19	3.9	1114.8	2.5	984.5	6.6	1238.8
20	3.9	1118.8	2.5	987.0	7.3	1246.1
21	3.8	1122.5	2.5	989.5	6.5	1252.6
22	3.8	1126.3	2.5	992.0	6.6	1259.2
23	3.8	1130.1	2.5	994.5	6.8	1266.0
24	3.7	1133.9	2.5	997.0	6.9	1272.9
25	3.8	1137.6	2.5	999.5	7.0	1279.9
26	4.1	1141.7	3.0	1002.5	7.3	1287.2
27	4.0	1145.7	3.0	1005.5	7.0	1294.2
28	4.0	1149.7	3.0	1008.5	7.0	1301.2
29	4.0	1153.7	3.0	1011.5	7.0	1308.2
30	4.0	1157.7	3.0	1014.5	7.0	1315.2
31	3.9	1161.6	3.0	1017.5	6.7	1321.9

TABLE 2 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

APRIL

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.1	1165.7	3.0	1020.5	7.3	1329.2
2	4.1	1169.8	3.0	1023.5	7.4	1336.6
3	4.1	1173.9	3.0	1026.5	7.5	1344.1
4	4.1	1178.0	3.0	1029.5	6.8	1350.9
5	3.8	1181.8	3.0	1032.5	6.2	1357.1
6	3.8	1185.6	3.0	1035.5	6.2	1363.3
7	3.9	1189.5	3.0	1038.5	6.8	1370.1
8	3.9	1193.5	3.0	1041.5	6.8	1376.9
9	4.1	1197.6	3.0	1044.5	6.8	1383.7
10	4.1	1201.6	3.0	1047.5	6.8	1390.5
11	4.1	1205.7	3.0	1050.5	6.8	1397.3
12	4.1	1209.8	3.0	1053.5	6.8	1404.1
13	3.9	1213.7	3.0	1056.5	6.8	1410.9
14	4.1	1217.8	3.0	1059.5	6.8	1417.7
15	4.1	1221.9	3.0	1062.5	6.8	1424.5
16	4.1	1226.0	3.0	1065.5	6.5	1431.0
17	4.1	1230.1	3.0	1068.5	6.5	1437.5
18	4.0	1234.1	3.0	1071.5	6.5	1444.0
19	4.0	1238.1	3.0	1074.5	6.5	1450.5
20	4.1	1242.3	3.0	1077.5	6.5	1457.0
21	4.1	1246.4	3.0	1080.5	7.0	1464.0
22	4.1	1250.5	3.0	1083.5	7.0	1471.0
23	4.3	1254.8	3.0	1086.5	7.5	1478.5
24	4.3	1259.1	3.0	1089.5	7.2	1485.7
25	4.3	1263.3	3.0	1092.5	7.5	1493.2
26	4.5	1267.8	3.0	1095.5	8.1	1501.3
27	4.5	1272.4	3.0	1098.5	7.6	1508.9
28	4.4	1276.8	3.0	1101.5	7.7	1516.6
29	4.5	1281.3	3.0	1104.5	7.6	1524.2
30	4.8	1286.2	3.0	1107.5	8.4	1532.6

TABLE 2 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MAY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.8	1289.9	3.0	1110.5	5.0	1537.6
2	3.8	1293.7	3.0	1113.5	5.0	1542.6
3	3.9	1297.5	3.0	1116.5	5.0	1547.6
4	4.0	1301.5	3.0	1119.5	5.0	1552.6
5	4.0	1305.5	3.0	1122.5	5.5	1558.1
6	4.1	1309.7	3.0	1125.5	6.0	1564.1
7	4.0	1313.7	2.5	1128.0	6.0	1570.1
8	4.1	1317.8	2.5	1130.5	6.0	1576.1
9	4.3	1322.0	3.0	1133.5	6.0	1582.1
10	4.4	1326.4	3.0	1136.5	5.5	1587.6
11	4.5	1330.9	2.5	1139.0	6.0	1593.6
12	4.9	1335.8	2.5	1141.5	7.0	1600.6
13	5.1	1340.9	3.0	1144.5	7.0	1607.6
14	5.0	1345.9	3.0	1147.5	6.5	1614.1
15	5.1	1351.0	3.0	1150.5	7.0	1621.1
16	5.1	1356.2	3.0	1153.5	7.0	1628.1
17	5.3	1361.4	3.0	1156.5	7.0	1635.1
18	5.4	1366.8	3.0	1159.5	7.0	1642.1
19	5.6	1372.4	3.0	1162.5	8.0	1650.1
20	5.6	1378.0	3.0	1165.5	8.0	1658.1
21	5.6	1383.7	3.0	1168.5	8.0	1666.1
22	5.5	1389.2	2.5	1171.0	8.0	1674.1
23	5.6	1394.8	2.5	1173.5	8.0	1682.1
24	5.6	1400.4	2.5	1176.0	8.0	1690.1
25	5.9	1406.3	2.5	1178.5	8.0	1698.1
26	6.0	1412.3	3.0	1181.5	8.0	1706.1
27	6.0	1418.3	3.0	1184.5	8.0	1714.1
28	6.3	1424.6	3.0	1187.5	8.5	1722.6
29	6.6	1431.2	3.0	1190.5	9.0	1731.6
30	6.9	1438.1	3.5	1194.0	9.0	1740.6
31	7.0	1445.1	3.5	1197.5	9.0	1749.6

TABLE 2 (CONT.). BEAVER FALLS HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JUNE						
DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	7.1	1452.2	4.0	1201.5	9.0	1758.6
2	6.9	1459.1	3.5	1205.0	9.0	1767.6
3	7.0	1466.1	4.0	1209.0	8.5	1776.1
4	6.9	1472.9	4.0	1213.0	8.5	1784.6
5	7.0	1479.9	4.0	1217.0	8.5	1793.1
6	7.8	1487.7	5.0	1222.0	9.0	1802.1
7	8.3	1495.9	5.0	1227.0	10.0	1812.1
8	8.5	1504.4	5.0	1232.0	10.0	1822.1
9	7.9	1512.3	5.0	1237.0	9.0	1831.1

TABLE 3. DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JANUARY					
DAY	1979	1980	1981	1982	1983
1	.	4.5	4.0	3.0	3.5
2	.	4.5	4.0	3.0	3.5
3	.	4.5	4.0	3.0	3.0
4	.	4.5	4.0	2.5	3.0
5	.	3.5	4.0	2.0	3.0
6	.	3.5	4.0	2.0	3.0
7	.	3.5	4.0	2.5	3.0
8	.	3.5	4.0	3.0	2.0
9	.	3.5	4.5	2.0	2.5
10	.	3.0	4.5	2.0	2.5
11	.	2.0	4.5	2.0	2.5
12	.	2.5	4.5	2.0	2.5
13	.	3.0	4.5	2.0	3.0
14	.	3.5	4.5	2.5	3.0
15	.	3.5	4.5	2.0	3.5
16	.	3.5	5.0	2.0	3.5
17	.	3.0	5.0	2.0	3.5
18	.	2.0	5.0	1.5	3.5
19	.	2.5	5.0	2.0	4.0
20	.	3.0	5.0	1.5	3.5
21	.	3.0	5.0	0.5	3.5
22	.	3.0	5.0	0.5	3.5
23	.	3.0	5.0	0.5	3.5
24	.	2.5	4.5	1.0	4.0
25	.	2.0	4.5	1.0	4.0
26	.	2.0	5.0	1.0	4.0
27	.	2.0	4.5	1.0	4.0
28	.	2.0	4.5	1.0	4.0
29	.	2.0	4.0	2.0	4.0
30	.	2.0	4.0	2.0	4.0
31	.	2.0	4.0	2.0	4.0

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

FEBRUARY					
DAY	1979	1980	1981	1982	1983
1	.	2.0	4.5	2.0	4.0
2	.	2.0	4.5	1.5	4.0
3	.	2.0	4.5	1.5	4.0
4	.	2.5	4.0	2.0	4.0
5	.	2.5	4.0	1.5	4.0
6	.	2.5	4.0	1.5	4.0
7	.	3.0	4.0	1.5	4.0
8	.	3.0	4.0	1.5	4.0
9	.	3.0	4.0	1.5	4.0
10	.	3.0	4.0	1.0	4.0
11	.	3.0	4.0	2.0	4.0
12	.	3.0	4.0	1.0	3.5
13	.	2.0	4.0	1.0	3.5
14	.	2.0	4.0	1.0	3.5
15	.	2.0	4.5	1.0	3.5
16	.	2.0	5.0	1.0	3.5
17	.	2.0	4.0	1.0	4.0
18	.	2.5	4.0	1.0	4.0
19	.	2.5	4.0	1.0	4.0
20	.	2.0	4.0	0.5	4.0
21	.	2.5	4.0	0.5	4.0
22	.	2.5	4.0	0.5	4.0
23	.	2.5	4.0	0.5	4.0
24	.	2.5	4.0	0.5	4.0
25	.	2.5	4.0	0.5	4.0
26	.	2.5	4.0	0.5	4.0
27	.	2.5	4.0	0.5	4.0
28	.	2.5	4.0	0.5	4.0

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MARCH					
DAY	1979	1980	1981	1982	1983
1	.	2.5	4.5	0.5	4.0
2	.	2.5	4.5	0.5	4.0
3	.	2.5	4.0	0.5	4.0
4	.	2.5	4.0	0.5	4.0
5	.	2.5	4.0	0.5	4.0
6	.	2.5	4.0	0.5	4.0
7	.	2.5	4.0	1.0	4.0
8	.	2.5	4.0	0.5	4.0
9	.	2.5	3.5	0.5	4.0
10	.	2.5	3.5	0.5	4.0
11	.	2.5	4.0	1.0	4.0
12	.	2.5	4.0	1.0	4.0
13	.	2.5	4.5	1.0	4.0
14	.	2.5	4.5	1.0	4.0
15	.	2.5	4.5	1.0	4.0
16	.	2.5	4.0	1.5	4.0
17	.	2.5	4.0	1.5	4.0
18	.	2.5	4.0	1.5	4.0
19	.	3.0	4.5	2.0	4.5
20	.	2.5	5.0	2.0	4.5
21	.	3.0	5.0	2.0	5.0
22	.	3.0	5.0	2.0	5.0
23	.	3.0	4.5	2.0	5.0
24	.	3.0	4.5	2.0	5.0
25	.	3.0	4.5	2.0	5.0
26	.	3.0	5.0	2.0	4.5
27	.	3.0	4.5	2.0	4.5
28	.	3.0	4.5	2.0	4.5
29	.	3.0	4.5	2.0	5.0
30	.	3.0	4.5	2.0	4.5
31	.	3.0	4.5	2.0	4.5

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

APRIL					
DAY	1979	1980	1981	1982	1983
1	.	3.0	5.0	2.0	5.0
2	.	3.0	5.0	2.0	5.0
3	.	3.0	5.0	2.0	5.0
4	.	3.0	5.0	2.0	5.0
5	.	3.0	4.5	2.0	4.5
6	.	3.0	5.0	2.0	4.5
7	.	3.0	5.0	2.0	5.0
8	.	3.5	5.0	3.0	5.0
9	.	3.5	5.0	2.5	5.0
10	.	3.5	5.0	2.5	5.5
11	.	3.5	5.0	2.5	5.5
12	.	3.5	4.5	3.0	5.0
13	.	3.5	5.0	3.0	5.0
14	.	3.5	5.0	3.0	5.5
15	.	3.0	4.0	3.0	6.0
16	.	3.0	4.0	2.5	5.0
17	.	3.5	4.5	2.5	5.0
18	.	3.5	4.5	2.5	5.5
19	.	3.5	4.5	3.0	5.5
20	.	3.5	4.5	3.5	5.5
21	.	3.5	4.5	3.0	5.5
22	.	3.0	5.0	3.0	6.0
23	.	3.0	5.0	2.5	6.0
24	.	3.5	5.0	3.5	7.0
25	.	3.5	5.0	2.5	6.5
26	.	3.5	5.0	3.0	7.5
27	.	3.5	5.0	3.0	7.5
28	.	3.5	5.5	2.5	8.0
29	.	3.5	5.5	2.5	8.0
30	.	3.5	5.5	2.5	8.0

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MAY					
DAY	1979	1980	1981	1982	1983
1	.	4.0	5.5	4.0	8.0
2	.	4.0	6.0	3.0	7.5
3	.	4.0	5.5	3.5	6.0
4	.	4.0	6.5	3.5	6.0
5	.	4.5	7.0	3.5	6.0
6	.	4.5	7.0	3.5	6.0
7	.	4.5	7.5	3.0	6.5
8	.	4.0	7.5	3.5	6.5
9	.	4.0	7.0	3.5	7.5
10	.	4.5	6.0	4.0	9.0
11	.	5.0	7.5	2.5	9.0
12	.	5.0	7.5	2.5	9.5
13	.	5.0	7.0	2.5	9.0
14	.	5.5	7.0	2.5	9.0
15	.	6.0	8.5	4.0	8.5
16	.	6.0	8.0	4.0	8.5
17	.	6.0	8.0	4.0	7.0
18	.	5.5	8.5	3.5	7.5
19	.	5.0	8.5	3.0	6.5
20	.	5.0	9.0	4.0	6.5
21	.	5.5	9.5	3.5	7.0
22	.	5.5	9.5	2.5	7.0
23	.	7.5	8.5	3.5	7.5
24	.	7.5	9.0	3.0	8.0
25	.	7.5	9.0	3.0	7.5
26	.	8.0	9.0	4.0	7.5
27	.	7.0	10.0	5.0	7.5
28	.	7.5	10.0	5.0	7.5
29	.	8.5	11.0	5.0	8.0
30	.	9.0	10.0	5.0	8.0
31	.	8.5	10.0	5.5	8.0

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JUNE					
DAY	1979	1980	1981	1982	1983
1	.	9.0	10.5	6.0	9.0
2	.	10.0	9.0	5.0	10.0
3	.	9.5	8.5	6.0	10.0
4	.	9.5	8.0	6.0	9.5
5	.	9.5	8.0	8.0	10.0
6	.	9.0	9.0	8.0	11.0
7	.	9.5	9.0	8.0	11.0
8	.	9.5	10.0	8.0	11.0
9	.	10.0	10.5	9.0	9.0
10	.	9.5	11.5	9.0	8.5
11	.	10.0	11.5	8.0	9.0
12	.	10.5	11.5	8.0	11.0
13	.	10.0	11.5	8.0	11.0
14	.	10.5	11.5	8.0	11.0
15	.	10.5	10.5	8.0	9.0
16	.	10.0	11.0	9.0	8.0
17	.	10.5	11.5	8.5	8.0
18	.	11.5	12.0	8.0	10.0
19	.	12.0	12.0	8.0	10.0
20	.	11.0	10.0	8.0	10.5
21	.	11.5	10.0	8.5	11.5
22	.	11.0	11.0	10.0	12.0
23	.	10.0	12.0	10.0	12.5
24	.	10.0	12.5	11.0	12.0
25	.	11.0	12.5	10.0	12.5
26	.	13.0	12.5	10.0	12.0
27	.	12.0	13.0	10.0	12.5
28	.	11.5	13.5	9.5	12.5
29	.	12.0	10.0	9.5	12.0
30	.	12.0	12.0	10.0	12.0

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JULY					
DAY	1979	1980	1981	1982	1983
1	.	12.5	12.0	12.0	.
2	.	11.0	9.0	12.5	.
3	.	11.0	10.0	12.5	.
4	.	12.0	11.5	11.5	.
5	.	12.0	11.5	12.0	.
6	.	13.0	12.0	12.5	.
8	.	13.0	12.0	13.0	.
9	.	12.0	12.5	12.0	.
10	.	12.5	13.0	10.5	.
11	.	12.5	14.0	11.0	.
12	.	14.0	14.0	10.0	.
13	.	13.5	14.0	10.0	.
14	.	12.0	15.0	11.5	.
15	.	13.0	15.0	12.0	.
16	.	13.0	15.5	12.0	.
17	.	14.0	16.0	12.0	.
18	.	14.0	18.0	10.0	.
19	.	14.0	18.5	11.0	.
20	.	11.5	18.0	12.0	.
21	.	11.5	18.0	12.5	.
22	.	11.0	17.0	12.5	.
23	.	11.0	17.5	14.0	.
24	.	12.0	17.0	14.0	.
25	.	11.0	16.5	14.0	.
26	.	12.0	16.0	13.5	.
27	.	12.5	16.5	15.0	.
28	.	12.5	16.0	15.0	.
29	.	12.5	16.5	13.5	.
30	.	11.5	17.0	13.5	.
31	.	10.0	17.0	13.5	.

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

AUGUST					
DAY	1979	1980	1981	1982	1983
1	.	12.0	16.5	15.0	.
2	.	13.0	16.5	14.0	.
3	.	11.0	13.5	14.0	.
4	9.0	11.5	12.5	13.5	.
5	9.5	11.5	12.0	13.0	.
6	10.0	11.0	11.5	12.5	.
7	10.0	12.0	12.0	14.0	.
8	10.0	13.0	14.0	13.5	.
9	10.0	14.0	14.5	13.0	.
10	10.0	14.0	15.0	14.0	.
11	9.5	15.0	16.0	14.0	.
12	10.0	15.0	16.0	13.0	.
13	10.0	15.0	16.0	12.0	.
14	12.0	15.0	17.0	13.0	.
15	10.0	14.5	17.0	13.0	.
16	10.0	12.0	17.0	13.0	.
17	10.0	11.5	17.0	13.5	.
18	10.0	13.0	17.0	14.0	.
19	10.5	14.0	17.0	14.0	.
20	11.0	14.0	16.0	14.0	.
21	10.0	14.0	13.0	14.0	.
22	11.0	15.0	13.0	14.0	.
23	10.0	14.5	12.5	14.5	.
24	10.0	14.0	14.0	15.5	.
25	12.0	14.0	13.5	15.0	.
26	11.0	12.0	13.5	15.0	.
27	11.5	14.5	13.5	11.0	.
28	10.5	14.0	13.5	15.0	.
29	10.0	12.0	13.5	14.5	.
30	10.0	12.0	14.0	14.5	.
31	10.0	12.0	14.0	14.0	.

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

SEPTEMBER					
DAY	1979	1980	1981	1982	1983
1	9.5	13.5	13.5	11.5	12.0
2	10.0	13.5	13.5	11.5	12.0
3	10.0	12.0	14.0	13.0	11.6
4	10.0	11.0	14.5	13.5	11.6
5	10.0	10.0	13.5	11.5	11.6
6	10.0	11.0	12.5	11.0	11.6
7	10.0	12.0	12.5	11.5	11.6
8	10.0	12.0	12.5	12.0	11.6
9	10.0	10.5	12.0	12.0	11.6
10	10.0	12.0	12.0	12.0	11.4
11	10.0	12.0	12.0	11.0	11.4
12	10.0	12.0	12.0	11.5	11.4
13	10.0	12.0	12.0	11.5	11.4
14	10.0	13.0	11.0	12.0	11.4
15	9.5	13.5	11.5	12.0	11.4
16	10.0	13.5	11.0	12.0	11.4
17	10.0	13.5	11.0	12.5	11.0
18	10.0	13.5	11.0	13.0	11.0
19	10.0	11.0	11.0	12.5	11.0
20	10.0	11.0	11.0	12.5	11.0
21	10.0	12.0	11.0	12.5	11.0
22	10.0	11.0	11.0	12.5	11.0
23	10.0	11.0	11.0	13.0	11.0
24	10.0	12.0	11.0	13.0	11.0
25	10.0	11.5	11.0	13.0	11.0
26	11.5	12.0	11.0	13.0	11.0
27	10.5	12.0	11.0	13.0	11.0
29	11.0	10.0	11.0	12.0	11.0
30	11.0	10.0	11.0	9.0	11.0

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

OCTOBER					
DAY	1979	1980	1981	1982	1983
1	11.0	10.5	10.0	10.0	11.5
2	11.0	9.5	10.0	10.5	11.5
3	11.0	9.0	10.0	9.0	11.0
4	10.0	10.0	10.0	9.0	10.5
5	10.0	10.0	10.0	8.5	11.0
6	10.0	10.0	10.0	7.5	10.5
7	10.5	9.5	10.0	8.5	10.5
8	10.0	9.5	9.0	8.0	10.0
9	10.0	9.5	9.0	7.5	10.0
10	10.0	9.5	9.0	8.0	10.0
11	11.0	10.0	9.0	8.0	11.0
12	10.5	9.5	9.0	8.0	11.0
13	10.0	9.0	9.0	8.5	10.0
14	10.5	9.0	9.0	8.0	10.0
15	10.5	9.0	9.0	8.0	10.0
16	10.5	9.0	9.0	8.0	10.0
17	10.5	9.5	9.0	8.0	9.5
18	10.5	9.0	9.0	8.0	9.0
19	10.0	8.5	9.0	8.0	8.5
20	10.0	9.0	9.0	8.0	8.5
21	10.0	8.5	9.0	7.0	8.5
22	10.0	9.0	9.0	7.0	8.0
23	9.5	9.0	9.0	7.0	8.0
24	9.5	9.0	9.0	7.0	8.0
25	9.5	9.0	9.0	7.0	7.0
26	9.0	9.0	9.0	6.5	7.0
27	8.0	8.5	9.0	6.5	7.0
28	8.5	8.0	8.5	6.5	7.0
29	8.5	8.0	9.0	6.5	7.0
30	8.0	8.0	8.5	6.0	7.5
31	8.0	8.0	9.0	6.0	7.5

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

NOVEMBER					
DAY	1979	1980	1981	1982	1983
1	8.0	8.0	9.0	6.0	7.5
2	8.0	7.5	6.5	6.0	7.5
3	7.5	8.0	7.0	6.0	6.5
4	7.5	8.0	6.0	5.5	6.0
5	7.5	8.0	6.0	5.5	6.5
6	7.5	8.0	6.5	5.5	7.0
7	7.5	8.0	6.0	6.0	7.0
8	7.5	8.0	6.0	6.0	7.0
9	7.5	7.5	6.5	5.5	7.0
10	7.5	7.5	6.5	5.5	6.5
11	7.5	7.5	6.0	5.0	7.0
12	7.5	7.5	5.5	5.5	7.0
13	7.5	7.0	5.5	5.5	7.0
14	6.5	7.0	5.5	5.5	7.0
15	6.5	7.0	5.5	5.5	7.0
16	5.5	6.5	5.5	5.5	6.5
17	5.5	7.0	6.0	5.5	7.0
18	5.5	6.5	5.5	5.0	6.5
19	5.5	6.5	5.5	5.0	6.5
20	5.5	6.0	5.0	5.0	6.5
21	5.5	6.0	5.0	4.5	6.5
22	5.5	6.0	5.5	4.5	6.5
23	5.5	6.0	5.0	4.5	6.0
24	5.5	6.5	5.0	4.5	6.0
25	5.5	6.0	5.0	4.0	6.0
26	5.5	6.0	5.0	4.0	6.0
27	5.0	6.0	5.0	4.0	6.0
28	5.5	5.5	5.0	4.0	6.0
29	5.5	5.5	4.0	4.0	5.5
30	5.5	5.5	5.0	4.0	5.5

TABLE 3 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

DECEMBER					
DAY	1979	1980	1981	1982	1983
1	5.5	5.0	4.5	4.0	5.5
2	5.5	5.0	4.5	4.0	5.5
3	5.5	5.0	4.5	4.0	5.5
4	5.5	5.0	5.0	4.0	6.0
5	5.5	5.0	4.0	4.0	5.5
6	5.5	5.0	4.5	4.0	6.0
7	5.5	5.5	4.5	4.0	5.5
8	5.0	4.5	4.5	4.0	5.0
9	5.0	3.5	4.0	3.5	5.5
10	5.0	4.5	4.0	3.5	5.5
11	5.0	4.5	4.0	3.5	5.0
12	5.0	4.5	4.0	3.5	5.5
13	4.5	5.0	4.0	4.0	5.5
15	4.0	4.0	4.0	4.0	5.5
16	4.0	4.5	4.0	3.5	5.0
17	4.0	4.5	4.0	3.5	4.5
18	3.5	4.5	4.0	3.5	4.5
19	3.5	4.0	4.0	3.5	4.5
20	3.5	4.0	4.0	3.5	4.5
21	4.0	4.0	4.0	3.5	.
22	4.0	4.0	4.0	3.5	.
23	4.5	4.0	4.0	3.5	.
24	4.5	4.0	4.0	3.5	.
25	4.0	4.0	4.0	4.0	.
26	4.0	4.0	4.0	4.0	.
27	4.5	3.5	4.0	3.5	.
28	4.5	4.0	4.0	3.5	.
29	4.0	4.0	3.5	3.5	.
30	4.0	3.5	3.5	3.5	.
31	4.5	3.5	3.5	3.5	.

TABLE 4. DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JANUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.8	3.8	3.0	3.0	4.5	4.5
2	3.8	7.5	3.0	6.0	4.5	9.0
3	3.6	11.1	3.0	9.0	4.5	13.5
4	3.5	14.6	2.5	11.5	4.5	18.0
5	3.1	17.8	2.0	13.5	4.0	22.0
6	3.1	20.9	2.0	15.5	4.0	26.0
7	3.3	24.1	2.5	18.0	4.0	30.0
8	3.1	27.3	2.0	20.0	4.0	34.0
9	3.1	30.4	2.0	22.0	4.5	38.5
10	3.0	33.4	2.0	24.0	4.5	43.0
11	2.8	36.1	2.0	26.0	4.5	47.5
12	2.9	39.0	2.0	28.0	4.5	52.0
13	3.1	42.1	2.0	30.0	4.5	56.5
14	3.4	45.5	2.5	32.5	4.5	61.0
15	3.4	48.9	2.0	34.5	4.5	65.5
16	3.5	52.4	2.0	36.5	5.0	70.5
17	3.4	55.8	2.0	38.5	5.0	75.5
18	3.0	58.8	1.5	40.0	5.0	80.5
19	3.4	62.1	2.0	42.0	5.0	85.5
20	3.3	65.4	1.5	43.5	5.0	90.5
21	3.0	68.4	0.5	44.0	5.0	95.5
22	3.0	71.4	0.5	44.5	5.0	100.5
23	3.0	74.4	0.5	45.0	5.0	105.5
24	3.0	77.4	1.0	46.0	4.5	110.0
25	2.9	80.3	1.0	47.0	4.5	114.5
26	3.0	83.3	1.0	48.0	5.0	119.5
27	2.9	86.1	1.0	49.0	4.5	124.0
28	2.9	89.0	1.0	50.0	4.5	128.5
29	3.0	92.0	2.0	52.0	4.0	132.5
30	3.0	95.0	2.0	54.0	4.0	136.5
31	3.0	98.0	2.0	56.0	4.0	140.5

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

FEBRUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.1	101.1	2.0	58.0	4.5	145.0
2	3.0	104.1	1.5	59.5	4.5	149.5
3	3.0	107.1	1.5	61.0	4.5	154.0
4	3.1	110.3	2.0	63.0	4.0	158.0
5	3.0	113.3	1.5	64.5	4.0	162.0
6	3.0	116.3	1.5	66.0	4.0	166.0
7	3.1	119.4	1.5	67.5	4.0	170.0
8	3.1	122.5	1.5	69.0	4.0	174.0
9	3.1	125.6	1.5	70.5	4.0	178.0
10	3.0	128.6	1.0	71.5	4.0	182.0
11	3.3	131.9	2.0	73.5	4.0	186.0
12	2.9	134.8	1.0	74.5	4.0	190.0
13	2.6	137.4	1.0	75.5	4.0	194.0
14	2.6	140.0	1.0	76.5	4.0	198.0
15	2.8	142.8	1.0	77.5	4.5	202.5
16	2.9	145.6	1.0	78.5	5.0	207.5
17	2.8	148.4	1.0	79.5	4.0	211.5
18	2.9	151.3	1.0	80.5	4.0	215.5
19	2.9	154.1	1.0	81.5	4.0	219.5
20	2.6	156.8	0.5	82.0	4.0	223.5
21	2.8	159.5	0.5	82.5	4.0	227.5
22	2.8	162.3	0.5	83.0	4.0	231.5
23	2.8	165.0	0.5	83.5	4.0	235.5
24	2.8	167.8	0.5	84.0	4.0	239.5
25	2.8	170.5	0.5	84.5	4.0	243.5
26	2.8	173.3	0.5	85.0	4.0	247.5
27	2.8	176.0	0.5	85.5	4.0	251.5
28	2.8	178.8	0.5	86.0	4.0	255.5

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MARCH

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	2.9	181.6	0.5	86.5	4.5	260.0
2	2.9	184.5	0.5	87.0	4.5	264.5
3	2.8	187.3	0.5	87.5	4.0	268.5
4	2.8	190.0	0.5	88.0	4.0	272.5
5	2.8	192.8	0.5	88.5	4.0	276.5
6	2.8	195.5	0.5	89.0	4.0	280.5
7	2.9	198.4	1.0	90.0	4.0	284.5
8	2.8	201.1	0.5	90.5	4.0	288.5
9	2.6	203.8	0.5	91.0	4.0	292.5
10	2.6	206.4	0.5	91.5	4.0	296.5
11	2.9	209.3	1.0	92.5	4.0	300.5
12	2.9	212.1	1.0	93.5	4.0	304.5
13	3.0	215.1	1.0	94.5	4.5	309.0
14	3.0	218.1	1.0	95.5	4.5	313.5
15	3.0	221.1	1.0	96.5	4.5	318.0
16	3.0	224.1	1.5	98.0	4.0	322.0
17	3.0	227.1	1.5	99.5	4.0	326.0
18	3.0	230.1	1.5	101.0	4.0	330.0
19	3.5	233.6	2.0	103.0	4.5	334.5
20	3.5	237.1	2.0	105.0	5.0	339.5
21	3.8	240.9	2.0	107.0	5.0	344.5
22	3.8	244.6	2.0	109.0	5.0	349.5
23	3.6	248.3	2.0	111.0	5.0	354.5
24	3.6	251.9	2.0	113.0	5.0	359.5
25	3.6	255.5	2.0	115.0	5.0	364.5
26	3.6	259.1	2.0	117.0	5.0	369.5
27	3.5	262.6	2.0	119.0	4.5	374.0
28	3.5	266.1	2.0	121.0	4.5	378.5
29	3.6	269.8	2.0	123.0	5.0	383.5
30	3.5	273.3	2.0	125.0	4.5	388.0
31	3.5	276.8	2.0	127.0	4.5	392.5

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

APRIL

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.8	280.5	2.0	129.0	5.0	397.5
2	3.8	284.3	2.0	131.0	5.0	402.5
3	3.8	288.0	2.0	133.0	5.0	407.5
4	3.8	291.8	2.0	135.0	5.0	412.5
5	3.5	295.3	2.0	137.0	4.5	417.0
6	3.6	298.9	2.0	139.0	5.0	422.0
7	3.8	302.6	2.0	141.0	5.0	427.0
8	4.1	306.8	3.0	144.0	5.0	432.0
9	4.0	310.8	2.5	146.5	5.0	437.0
10	4.1	314.9	2.5	149.0	5.5	442.5
11	4.1	319.0	2.5	151.5	5.5	448.0
12	4.0	323.0	3.0	154.5	5.0	453.0
13	4.1	327.1	3.0	157.5	5.0	458.0
14	4.3	331.4	3.0	160.5	5.5	463.5
15	4.0	335.4	3.0	163.5	6.0	469.5
16	3.6	339.0	2.5	166.0	5.0	474.5
17	3.9	342.9	2.5	168.5	5.0	479.5
18	4.0	346.9	2.5	171.0	5.5	485.0
19	4.1	351.0	3.0	174.0	5.5	490.5
20	4.3	355.3	3.5	177.5	5.5	496.0
21	4.1	359.4	3.0	180.5	5.5	501.5
22	4.3	363.6	3.0	183.5	6.0	507.5
23	4.1	367.8	2.5	186.0	6.0	513.5
24	4.8	372.5	3.5	189.5	7.0	520.5
25	4.4	376.9	2.5	192.0	6.5	527.0
26	4.8	381.6	3.0	195.0	7.5	534.5
27	4.8	386.4	3.0	198.0	7.5	542.0
28	4.9	391.3	2.5	200.5	8.0	550.0
29	4.9	396.1	2.5	203.0	8.0	558.0
30	4.9	401.0	2.5	205.5	8.0	566.0

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MAY						
DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.4	406.4	4.0	209.5	8.0	574.0
2	5.1	411.5	3.0	212.5	7.5	581.5
3	4.8	416.3	3.5	216.0	6.0	587.5
4	5.0	421.3	3.5	219.5	6.5	594.0
5	5.3	426.5	3.5	223.0	7.0	601.0
6	5.3	431.8	3.5	226.5	7.0	608.0
7	5.4	437.1	3.0	229.5	7.5	615.5
8	5.4	442.5	3.5	233.0	7.5	623.0
9	5.5	448.0	3.5	236.5	7.5	630.5
10	5.9	453.9	4.0	240.5	9.0	639.5
11	6.0	459.9	2.5	243.0	9.0	648.5
12	6.1	466.0	2.5	245.5	9.5	658.0
13	5.9	471.9	2.5	248.0	9.0	667.0
14	6.0	477.9	2.5	250.5	9.0	676.0
15	6.8	484.6	4.0	254.5	8.5	684.5
16	6.6	491.3	4.0	258.5	8.5	693.0
17	6.3	497.5	4.0	262.5	8.0	701.0
18	6.3	503.8	3.5	266.0	8.5	709.5
19	5.8	509.5	3.0	269.0	8.5	718.0
20	6.1	515.6	4.0	273.0	9.0	727.0
21	6.4	522.0	3.5	276.5	9.5	736.5
22	6.1	528.1	2.5	279.0	9.5	746.0
23	6.8	534.9	3.5	282.5	8.5	754.5
24	6.9	541.8	3.0	285.5	9.0	763.5
25	6.8	548.5	3.0	288.5	9.0	772.5
26	7.1	555.6	4.0	292.5	9.0	781.5
27	7.4	563.0	5.0	297.5	10.0	791.5
28	7.5	570.5	5.0	302.5	10.0	801.5
29	8.1	578.6	5.0	307.5	11.0	812.5
30	8.0	586.6	5.0	312.5	10.0	822.5
31	8.0	594.6	5.5	318.0	10.0	832.5

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JUNE

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	8.6	603.3	6.0	324.0	10.5	843.0
2	8.5	611.8	5.0	329.0	10.0	853.0
3	8.5	620.3	6.0	335.0	10.0	863.0
4	8.3	628.5	6.0	341.0	9.5	872.5
5	8.9	637.4	8.0	349.0	10.0	882.5
6	9.3	646.6	8.0	357.0	11.0	893.5
7	9.4	656.0	8.0	365.0	11.0	904.5
8	9.6	665.6	8.0	373.0	11.0	915.5
9	9.6	675.3	9.0	382.0	10.5	926.0
10	9.6	684.9	8.5	390.5	11.5	937.5
11	9.6	694.5	8.0	398.5	11.5	949.0
12	10.3	704.8	8.0	406.5	11.5	960.5
13	10.1	714.9	8.0	414.5	11.5	972.0
14	10.3	725.1	8.0	422.5	11.5	983.5
15	9.5	734.6	8.0	430.5	10.5	994.0
16	9.5	744.1	8.0	438.5	11.0	1005.0
17	9.6	753.8	8.0	446.5	11.5	1016.5
18	10.4	764.1	8.0	454.5	12.0	1028.5
19	10.5	774.6	8.0	462.5	12.0	1040.5
20	9.9	784.5	8.0	470.5	11.0	1051.5
21	10.4	794.9	8.5	479.0	11.5	1063.0
22	11.0	805.9	10.0	489.0	12.0	1075.0
23	11.1	817.0	10.0	499.0	12.5	1087.5
24	11.4	828.4	10.0	509.0	12.5	1100.0
25	11.5	839.9	10.0	519.0	12.5	1112.5
26	11.9	851.8	10.0	529.0	13.0	1125.5
27	11.9	863.6	10.0	539.0	13.0	1138.5
28	11.8	875.4	9.5	548.5	13.5	1152.0
29	10.9	886.3	9.5	558.0	12.0	1164.0
30	11.5	897.8	10.0	568.0	12.0	1176.0

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JULY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	12.2	909.9	12.0	580.0	12.5	1188.5
2	10.8	920.7	9.0	589.0	12.5	1201.0
3	11.2	931.9	10.0	599.0	12.5	1213.5
4	11.7	943.6	11.5	610.5	12.0	1225.5
5	11.8	955.4	11.5	622.0	12.0	1237.5
6	12.5	967.9	12.0	634.0	13.0	1250.5
8	12.7	980.6	12.0	646.0	13.0	1263.5
9	12.2	992.7	12.0	658.0	12.5	1276.0
10	12.0	1004.7	10.5	668.5	13.0	1289.0
11	12.5	1017.2	11.0	679.5	14.0	1303.0
12	12.7	1029.9	10.0	689.5	14.0	1317.0
13	12.5	1042.4	10.0	699.5	14.0	1331.0
14	12.8	1055.2	11.5	711.0	15.0	1346.0
15	13.3	1068.6	12.0	723.0	15.0	1361.0
16	13.5	1082.1	12.0	735.0	15.5	1376.5
17	14.0	1096.1	12.0	747.0	16.0	1392.5
18	14.0	1110.1	10.0	757.0	18.0	1410.5
19	14.5	1124.6	11.0	768.0	18.5	1429.0
20	13.8	1138.4	11.5	779.5	18.0	1447.0
21	14.0	1152.4	11.5	791.0	18.0	1465.0
22	13.5	1165.9	11.0	802.0	17.0	1482.0
23	14.2	1180.1	11.0	813.0	17.5	1499.5
24	14.3	1194.4	12.0	825.0	17.0	1516.5
25	13.8	1208.2	11.0	836.0	16.5	1533.0
26	13.8	1222.1	12.0	848.0	16.0	1549.0
27	14.7	1236.7	12.5	860.5	16.5	1565.5
28	14.5	1251.2	12.5	873.0	16.0	1581.5
29	14.2	1265.4	12.5	885.5	16.5	1598.0
30	14.0	1279.4	11.5	897.0	17.0	1615.0
31	13.5	1292.9	10.0	907.0	17.0	1632.0

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

AUGUST

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	14.5	1307.4	12.0	919.0	16.5	1648.5
2	14.5	1321.9	13.0	932.0	16.5	1665.0
3	12.8	1334.7	11.0	943.0	14.0	1679.0
4	11.6	1346.4	9.0	952.0	13.5	1692.5
5	11.5	1357.9	9.5	961.5	13.0	1705.5
6	11.3	1369.1	10.0	971.5	12.5	1718.0
7	12.0	1381.1	10.0	981.5	14.0	1732.0
8	12.6	1393.7	10.0	991.5	14.0	1746.0
9	12.9	1406.6	10.0	1001.5	14.5	1760.5
10	13.3	1419.9	10.0	1011.5	15.0	1775.5
11	13.6	1433.5	9.5	1021.0	16.0	1791.5
12	13.5	1447.0	10.0	1031.0	16.0	1807.5
13	13.3	1460.2	10.0	1041.0	16.0	1823.5
14	14.3	1474.5	12.0	1053.0	17.0	1840.5
15	13.6	1488.1	10.0	1063.0	17.0	1857.5
16	13.0	1501.1	10.0	1073.0	17.0	1874.5
17	13.0	1514.1	10.0	1083.0	17.0	1891.5
18	13.5	1527.6	10.0	1093.0	17.0	1908.5
19	13.9	1541.5	10.5	1103.5	17.0	1925.5
20	13.8	1555.2	11.0	1114.5	16.0	1941.5
21	12.8	1568.0	10.0	1124.5	14.0	1955.5
22	13.3	1581.2	11.0	1135.5	15.0	1970.5
23	12.9	1594.1	10.0	1145.5	14.5	1985.0
24	13.4	1607.5	10.0	1155.5	15.5	2000.5
25	13.6	1621.1	12.0	1167.5	15.0	2015.5
26	12.9	1634.0	11.0	1178.5	15.0	2030.5
27	12.6	1646.6	11.0	1189.5	14.5	2045.0
28	13.3	1659.9	10.5	1200.0	15.0	2060.0
29	12.5	1672.4	10.0	1210.0	14.5	2074.5
30	12.6	1685.0	10.0	1220.0	14.5	2089.0
31	12.5	1697.5	10.0	1230.0	14.0	2103.0

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

SEPTEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	12.0	1709.5	9.5	1239.5	13.5	2116.5
2	12.1	1721.6	10.0	1249.5	13.5	2130.0
3	12.1	1733.7	10.0	1259.5	14.0	2144.0
4	12.1	1745.8	10.0	1269.5	14.5	2158.5
5	11.3	1757.2	10.0	1279.5	13.5	2172.0
6	11.2	1768.4	10.0	1289.5	12.5	2184.5
7	11.5	1779.9	10.0	1299.5	12.5	2197.0
8	11.6	1791.5	10.0	1309.5	12.5	2209.5
9	11.2	1802.7	10.0	1319.5	12.0	2221.5
10	11.5	1814.2	10.0	1329.5	12.0	2233.5
11	11.3	1825.5	10.0	1339.5	12.0	2245.5
12	11.4	1836.9	10.0	1349.5	12.0	2257.5
13	11.4	1848.3	10.0	1359.5	12.0	2269.5
14	11.5	1859.7	10.0	1369.5	13.0	2282.5
15	11.6	1871.3	9.5	1379.0	13.5	2296.0
16	11.6	1882.9	10.0	1389.0	13.5	2309.5
17	11.6	1894.5	10.0	1399.0	13.5	2323.0
18	11.7	1906.2	10.0	1409.0	13.5	2336.5
19	11.1	1917.3	10.0	1419.0	12.5	2349.0
20	11.1	1928.4	10.0	1429.0	12.5	2361.5
21	11.3	1939.7	10.0	1439.0	12.5	2374.0
22	11.1	1950.8	10.0	1449.0	12.5	2386.5
23	11.2	1962.0	10.0	1459.0	13.0	2399.5
24	11.4	1973.4	10.0	1469.0	13.0	2412.5
25	11.3	1984.7	10.0	1479.0	13.0	2425.5
26	11.7	1996.4	11.0	1490.0	13.0	2438.5
27	11.5	2007.9	10.5	1500.5	13.0	2451.5
29	11.0	2018.9	10.0	1510.5	12.0	2463.5
30	10.4	2029.3	9.0	1519.5	11.0	2474.5

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

OCTOBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	10.6	2039.9	10.0	1529.5	11.5	2486.0
2	10.5	2050.4	9.5	1539.0	11.5	2497.5
3	10.0	2060.4	9.0	1548.0	11.0	2508.5
4	9.9	2070.3	9.0	1557.0	10.5	2519.0
5	9.9	2080.2	8.5	1565.5	11.0	2530.0
6	9.6	2089.8	7.5	1573.0	10.5	2540.5
7	9.8	2099.6	8.5	1581.5	10.5	2551.0
8	9.3	2108.9	8.0	1589.5	10.0	2561.0
9	9.2	2118.1	7.5	1597.0	10.0	2571.0
10	9.3	2127.4	8.0	1605.0	10.0	2581.0
11	9.8	2137.2	8.0	1613.0	11.0	2592.0
12	9.6	2146.8	8.0	1621.0	11.0	2603.0
13	9.3	2156.1	8.5	1629.5	10.0	2613.0
14	9.3	2165.4	8.0	1637.5	10.5	2623.5
15	9.3	2174.7	8.0	1645.5	10.5	2634.0
16	9.3	2184.0	8.0	1653.5	10.5	2644.5
17	9.3	2193.3	8.0	1661.5	10.5	2655.0
18	9.1	2202.4	8.0	1669.5	10.5	2665.5
19	8.8	2211.2	8.0	1677.5	10.0	2675.5
20	8.9	2220.1	8.0	1685.5	10.0	2685.5
21	8.6	2228.7	7.0	1692.5	10.0	2695.5
22	8.6	2237.3	7.0	1699.5	10.0	2705.5
23	8.5	2245.8	7.0	1706.5	9.5	2715.0
24	8.5	2254.3	7.0	1713.5	9.5	2724.5
25	8.3	2262.6	7.0	1720.5	9.5	2734.0
26	8.1	2270.7	6.5	1727.0	9.0	2743.0
27	7.8	2278.5	6.5	1733.5	9.0	2752.0
28	7.7	2286.2	6.5	1740.0	8.5	2760.5
29	7.8	2294.0	6.5	1746.5	9.0	2769.5
30	7.6	2301.6	6.0	1752.5	8.5	2778.0
31	7.7	2309.3	6.0	1758.5	9.0	2787.0

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

NOVEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	7.7	2317.0	6.0	1764.5	9.0	2796.0
2	7.1	2324.1	6.0	1770.5	8.0	2804.0
3	7.0	2331.1	6.0	1776.5	8.0	2812.0
4	6.6	2337.7	5.5	1782.0	8.0	2820.0
5	6.7	2344.4	5.5	1787.5	8.0	2828.0
6	6.9	2351.3	5.5	1793.0	8.0	2836.0
7	6.9	2358.2	6.0	1799.0	8.0	2844.0
8	6.9	2365.1	6.0	1805.0	8.0	2852.0
9	6.8	2371.9	5.5	1810.5	7.5	2859.5
10	6.7	2378.6	5.5	1816.0	7.5	2867.0
11	6.6	2385.2	5.0	1821.0	7.5	2874.5
12	6.6	2391.8	5.5	1826.5	7.5	2882.0
13	6.5	2398.3	5.5	1832.0	7.5	2889.5
14	6.3	2404.6	5.5	1837.5	7.0	2896.5
15	6.3	2410.9	5.5	1843.0	7.0	2903.5
16	5.9	2416.8	5.5	1848.5	6.5	2910.0
17	6.2	2423.0	5.5	1854.0	7.0	2917.0
18	5.8	2428.8	5.0	1859.0	6.5	2923.5
19	5.8	2434.6	5.0	1864.0	6.5	2930.0
20	5.6	2440.2	5.0	1869.0	6.5	2936.5
21	5.5	2445.7	4.5	1873.5	6.5	2943.0
22	5.6	2451.3	4.5	1878.0	6.5	2949.5
23	5.4	2456.7	4.5	1882.5	6.0	2955.5
24	5.5	2462.2	4.5	1887.0	6.5	2962.0
25	5.3	2467.5	4.0	1891.0	6.0	2968.0
26	5.3	2472.8	4.0	1895.0	6.0	2974.0
27	5.2	2478.0	4.0	1899.0	6.0	2980.0
28	5.2	2483.2	4.0	1903.0	6.0	2986.0
29	4.9	2488.1	4.0	1907.0	5.5	2991.5
30	5.1	2493.2	4.0	1911.0	5.5	2997.0

TABLE 4 (CONT.). DEER MOUNTAIN HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

DECEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.9	2498.1	4.0	1915.0	5.5	3002.5
2	4.9	2503.0	4.0	1919.0	5.5	3008.0
3	4.9	2507.9	4.0	1923.0	5.5	3013.5
4	5.1	2513.0	4.0	1927.0	6.0	3019.5
5	4.8	2517.8	4.0	1931.0	5.5	3025.0
6	5.0	2522.8	4.0	1935.0	6.0	3031.0
7	5.0	2527.8	4.0	1939.0	5.5	3036.5
8	4.6	2532.4	4.0	1943.0	5.0	3041.5
9	4.3	2536.7	3.5	1946.5	5.5	3047.0
10	4.5	2541.2	3.5	1950.0	5.5	3052.5
11	4.4	2545.6	3.5	1953.5	5.0	3057.5
12	4.5	2550.1	3.5	1957.0	5.5	3063.0
13	4.6	2554.7	4.0	1961.0	5.5	3068.5
15	4.3	2559.0	4.0	1965.0	5.5	3074.0
16	4.2	2563.2	3.5	1968.5	5.0	3079.0
17	4.1	2567.3	3.5	1972.0	4.5	3083.5
18	4.0	2571.3	3.5	1975.5	4.5	3088.0
19	3.9	2575.2	3.5	1979.0	4.5	3092.5
20	3.9	2579.1	3.5	1982.5	4.5	3097.0
21	3.9	2583.0	3.5	1986.0	4.0	3101.0
22	3.9	2586.8	3.5	1989.5	4.0	3105.0
23	4.0	2590.8	3.5	1993.0	4.5	3109.5
24	4.0	2594.8	3.5	1996.5	4.5	3114.0
25	4.0	2598.8	4.0	2000.5	4.0	3118.0
26	4.0	2602.8	4.0	2004.5	4.0	3122.0
27	3.9	2606.7	3.5	2008.0	4.5	3126.5
28	4.0	2610.7	3.5	2011.5	4.5	3131.0
29	3.8	2614.5	3.5	2015.0	4.0	3135.0
30	3.6	2618.1	3.5	2018.5	4.0	3139.0
31	3.8	2621.8	3.5	2022.0	4.5	3143.5

Table 5. AVERAGE DAILY TEMPERATURE (°C) BY WEEK OF WATER SUPPLYING HIDDEN FALLS HATCHERY, DRAWN FROM TWO DEPTHS OF HIDDEN FALLS LAKE, 1979.

DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE	DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE
3/10	1.7	2.5	9/15	NS	5.2
3/17	1.7	3.0	9/22	NS	5.7
3/24	1.7	2.9	9/29	NS	5.2
3/31	1.8	3.3	10/6	NS	6.6
4/2	1.8	3.1	10/13	NS	6.7
4/14	2.1	2.8	10/20	NS	6.9
4/21	NS ^{a/}	NS	10/27	NS	6.1
4/28	2.4	3.1	11/3	NS	6.0
5/5	3.0	3.5	11/10	NS	5.7
5/19	NS	4.5	11/17	5.3	5.3
7/28	8.4	5.2	11/24	4.8	4.6
8/4	9.4	5.2	12/1	4.8	4.7
8/11	8.5	5.1	12/8	4.3	4.3
8/18	11.4	5.0	12/15	3.5	3.6
8/25	11.8	4.9	12/22	3.0	3.3
9/1	12.5	5.2	12/29	2.9	3.1
9/8	10.0	5.2			

^{a/} No Sample

Table 5. AVERAGE DAILY TEMPERATURE (°C) BY WEEK OF WATER SUPPLYING HIDDEN FALLS HATCHERY, DRAWN FROM TWO DEPTHS OF HIDDEN FALLS LAKE, 1980.

DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE	DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE
1/5	2.9	3.0	7/12	NS	NS
1/12	2.8	3.1	7/19	NS	NS
1/19	2.8	3.2	7/26	NS	6.0
1/26	2.8	3.1	8/2	NS	5.9
2/2	2.8	3.1	8/9	NS	6.1
2/9	2.3	3.1	8/16	NS	5.9
2/16	2.2	3.1	8/23	NS	6.1
2/23	2.2	3.1	8/30	NS	6.0
3/1	2.1	3.1	9/6	NS	6.8
3/8	2.2	3.1	9/13	NS	6.4
3/15	2.2	3.1	9/20	NS	6.3
3/22	2.2	3.1	9/27	NS	5.6
3/29	2.1	3.1	10/4	NS	7.3
4/5	2.5	3.2	10/11	NS	8.1
4/12	2.5	3.2	10/18	NS	7.8
4/19	2.5	3.2	10/25	NS	7.5
4/26	2.6	3.2	11/1	NS	7.2
5/3	3.0	3.2	11/8	NS	6.8
5/10	3.8	3.7	11/15	NS	6.5
5/17	5.5	4.3	11/22	NS	5.7
5/24	5.4	4.7	11/29	5.2	NS
5/31	6.7	5.2	12/6	4.2	NS
6/7	8.2	6.0	12/13	3.4	NS
6/14	NS ^{a/}	NS	12/20	3.3	NS
6/21	NS	NS	12/27	3.3	NS
6/28	NS	NS			
7/5	NS	NS			

^{a/} No Sample.

Table 5. AVERAGE DAILY TEMPERATURE (°C) BY WEEK OF WATER SUPPLYING HIDDEN FALLS HATCHERY, DRAWN FROM TWO DEPTHS OF HIDDEN FALLS LAKE, 1981.

DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE	DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE
1/3	3.4	NS	7/4	NS	NS
1/10	3.3	NS	7/11	NS	NS
1/17	3.7	4.1	7/18	NS	NS
1/24	3.8	3.9	7/25	14.2	5.7
1/31	3.5	3.7	8/1	14.0	5.1
2/7	3.2	3.7	8/8	13.7	5.2
2/14	3.1	3.6	8/15	14.0	5.2
2/21	3.3	3.6	8/22	14.0	5.1
2/28	3.3	3.6	8/29	13.5	5.3
3/7	3.4	3.6	9/5	13.5	5.4
3/14	3.5	3.7	9/12	12.5	5.7
3/21	3.4	3.7	9/19	11.2	6.7
3/28	3.7	3.7	9/26	10.1	5.7
4/4	3.9	3.8	10/3	9.3	6.5
4/11	3.8	3.8	10/10	8.8	7.4
4/18	3.7	3.8	10/17	9.2	7.9
4/25	4.2	4.1	10/24	8.6	7.8
5/2	4.9	4.6	10/31	8.4	7.2
5/9	6.3	4.6	11/7	6.3	6.0
5/16	6.9	5.1	11/4	5.6	5.4
5/23	8.0	5.0	11/21	5.2	5.2
5/30	NS ^{a/}	NS	11/28	4.9	4.9
6/6	NS	NS	12/5	4.6	4.6
6/13	NS	NS	12/12	4.1	4.2
6/20	NS	NS	12/19	3.7	3.8
6/27	NS	NS	12/26	3.4	3.7

^{a/} No Sample

Table 5. AVERAGE DAILY TEMPERATURE (°C) BY WEEK OF WATER SUPPLYING HIDDEN FALLS HATCHERY, DRAWN FROM TWO DEPTHS OF HIDDEN FALLS LAKE, 1982.

DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE	DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE
1/2	3.4	3.6	7/3	8.9	4.9
1/9	3.4	3.6	7/10	9.3	5.0
1/16	3.4	3.7	7/17	9.5	4.8
1/23	3.3	3.7	7/24	9.6	5.0
1/30	3.4	3.8	7/31	11.9	5.1
2/6	3.4	3.8	8/7	12.9	5.2
2/13	3.4	3.8	8/14	13.3	5.6
2/20	3.3	3.8	8/21	13.4	5.1
2/27	3.3	3.8	8/28	14.1	5.2
3/6	3.2	3.9	9/4	13.7	5.6
3/13	3.1	3.8	9/11	12.6	6.1
3/20	3.0	3.9	9/18	11.8	5.8
3/27	3.0	3.9	9/25	11.7	6.3
4/3	2.7	3.9	10/2	11.2	5.7
4/10	2.8	3.9	10/9	9.9	5.4
4/17	2.8	4.0	10/16	8.6	7.3
4/24	2.7	4.0	10/23	7.7	7.6
5/1	2.4	3.9	10/30	6.8	6.4
5/8	2.1	3.9	11/6	5.8	5.7
5/15	2.2	4.0	11/13	5.3	5.4
5/22	2.5	4.1	11/20	4.5	4.6
5/29	NS ^{a/}	4.1	11/27	3.6	3.9
6/5	NS	4.3	12/4	3.5	3.8
6/12	NS	4.5	12/11	3.5	3.8
6/19	7.2	4.5	12/18	3.6	3.8
6/26	8.2	4.8	12/25	3.4	3.6

^{a/} No Sample

Table 5. AVERAGE DAILY TEMPERATURE (°C) BY WEEK OF WATER SUPPLYING HIDDEN FALLS HATCHERY, DRAWN FROM TWO DEPTHS OF HIDDEN FALLS LAKE, 1983.

DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE	DATE WK. ENDING	SHALLOW INTAKE	DEEP INTAKE
1/1	3.4	3.6	7/9	11.6	5.5
1/8	3.3	3.6	7/16	12.5	5.7
1/15	3.1	3.6	7/23	13.3	5.3
1/22	2.9	3.6	7/30	13.8	5.1
1/29	2.9	3.6	8/6	13.0	5.7
2/5	2.5	3.6	8/13	13.2	5.8
2/12	2.5	3.6	8/20	13.2	5.8
2/19	2.4	3.6	8/27	12.7	5.9
2/26	2.3	3.6	9/3	12.0	5.4
3/5	2.4	3.6	9/10	11.7	5.6
3/12	2.3	3.6	9/17	11.6	6.1
3/19	2.2	3.6	9/24	10.9	5.5
3/26	2.2	3.6	10/1	10.2	5.8
4/2	2.3	3.7	10/8	9.6	5.7
4/9	2.7	3.7	10/15	8.9	6.2
4/16	3.1	3.7	10/22	8.2	7.6
4/23	3.7	3.8	10/29	7.0	6.3
4/30	5.0	4.4	11/5	6.1	5.9
5/7	6.1	4.7	11/12	5.4	5.4
5/14	6.2	4.8	11/19	5.1	5.1
5/21	7.5	5.2	11/26	4.5	4.5
5/28	7.7	5.5	12/3	4.2	4.2
6/4	8.1	NS ^{a/}	12/10	3.3	3.8
6/11	8.8	NS	12/17	3.4	3.9
6/18	9.4	5.5	12/24	3.3	3.9
6/25	9.6	5.3	12/31	3.2	3.8
7/2	10.6	5.7			

^{a/} No Sample.

TABLE 6. KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JANUARY					
DAY	1979	1980	1981	1982	1983
1	.	3.0	3.0	2.5	3.0
2	.	2.5	3.0	2.5	3.0
3	.	3.0	3.0	2.5	3.0
4	.	2.5	3.0	2.5	3.0
5	.	2.5	3.5	2.5	3.0
6	.	2.0	3.5	2.5	3.0
7	.	2.0	3.5	2.5	3.0
8	.	1.0	3.5	2.5	3.0
9	.	1.0	3.5	2.5	3.0
10	.	1.0	4.0	2.5	2.5
11	.	1.0	4.0	2.5	2.5
12	.	1.0	4.0	2.5	2.5
13	.	1.0	4.0	2.5	2.5
14	.	1.0	4.0	2.5	2.5
15	.	1.5	4.5	2.5	2.5
16	.	1.5	4.5	2.0	2.5
17	.	1.5	4.5	2.0	2.5
18	.	1.5	4.5	2.0	3.0
19	.	1.5	5.0	2.0	3.0
20	.	1.0	5.0	2.0	2.5
21	.	1.0	5.0	2.0	2.5
22	.	1.5	5.0	2.0	2.5
23	.	1.5	5.0	2.0	2.5
24	.	1.5	5.0	2.0	3.0
25	.	1.5	5.0	2.0	3.0
26	.	1.5	5.0	2.0	3.0
27	.	1.0	5.0	2.0	2.5
28	.	1.0	4.5	2.0	2.5
29	.	1.0	4.5	2.0	2.5
30	.	1.0	4.5	2.0	2.5
31	.	1.0	4.0	2.0	3.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

FEBRUARY					
DAY	1979	1980	1981	1982	1983
1	.	2.0	4.5	2.0	3.0
2	.	2.0	4.5	2.0	3.0
3	.	2.0	4.5	2.0	3.0
4	.	2.0	4.5	2.0	3.0
5	.	2.0	4.0	2.0	3.0
6	.	2.0	4.0	2.0	3.0
7	.	2.0	4.0	2.0	3.0
8	.	2.0	4.0	2.0	3.0
9	.	2.0	4.0	2.0	3.0
10	.	2.0	4.0	2.0	3.0
11	.	2.0	4.0	2.0	3.0
12	.	2.0	4.0	2.0	3.0
13	.	2.0	4.0	2.5	3.0
14	.	2.0	4.0	2.5	3.0
15	.	2.0	4.0	2.5	3.5
16	.	2.0	4.0	2.5	3.0
17	.	2.0	4.5	2.5	3.5
18	.	2.0	4.0	3.0	3.5
19	.	2.0	4.5	3.0	3.5
20	.	2.0	4.0	3.0	3.5
21	.	2.0	4.0	3.0	4.0
22	.	2.0	4.0	3.0	3.5
23	.	2.0	4.0	2.5	4.0
24	.	2.0	4.0	2.5	4.0
25	.	2.0	4.0	2.5	4.0
26	.	2.0	4.0	2.5	4.0
27	.	2.0	4.0	2.5	4.0
28	.	2.0	4.0	2.5	4.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MARCH					
DAY	1979	1980	1981	1982	1983
1	.	2.0	4.0	2.5	4.0
2	.	2.0	4.5	2.5	4.0
3	.	3.0	4.5	2.5	3.5
4	.	3.0	4.0	2.5	3.5
5	.	3.0	4.0	2.5	3.5
6	.	3.0	4.0	2.5	3.0
7	.	3.0	4.0	2.5	3.0
8	.	3.0	4.0	2.5	4.0
9	.	3.0	4.5	2.5	4.0
10	.	3.0	4.5	2.5	4.0
11	.	3.0	4.0	2.5	4.0
12	.	3.0	4.5	2.5	4.0
13	.	3.0	4.5	2.5	4.0
14	.	3.0	4.5	3.0	4.5
15	.	3.0	4.5	3.0	4.5
16	.	3.0	5.0	3.0	4.5
17	.	3.0	5.0	3.0	4.5
18	.	3.0	5.5	3.0	4.5
19	.	3.0	5.5	3.0	4.5
20	.	3.0	5.5	3.5	5.0
21	.	3.0	5.0	3.5	5.0
22	.	3.5	5.0	3.5	6.0
23	.	3.5	5.5	3.5	6.0
24	.	3.5	5.5	3.5	6.0
25	.	4.0	5.5	3.5	6.0
26	.	4.0	6.0	3.5	5.0
27	.	4.0	6.0	4.0	5.0
28	.	4.0	5.5	4.0	5.0
29	.	4.0	6.0	4.0	5.0
30	.	4.0	6.0	4.0	6.0
31	.	4.0	6.0	4.0	6.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

APRIL					
DAY	1979	1980	1981	1982	1983
1	.	4.0	6.0	4.5	6.0
2	.	4.0	6.0	4.5	6.0
3	.	4.5	6.0	4.5	6.0
4	.	4.5	6.0	4.5	6.0
5	.	4.5	6.0	4.5	6.0
6	.	5.0	5.5	4.5	6.0
7	.	5.5	6.0	4.5	6.0
8	.	5.5	6.0	5.0	6.0
9	.	6.0	6.0	5.0	6.0
10	.	6.0	5.5	4.5	6.0
11	.	6.0	5.5	4.5	6.0
12	.	6.0	5.5	4.5	6.0
13	.	6.0	6.0	4.5	6.0
14	.	6.0	6.0	4.5	7.0
15	.	6.0	6.0	4.5	7.0
16	.	6.0	6.0	5.0	6.0
17	.	6.0	6.0	5.0	6.0
18	.	6.0	6.0	5.0	6.0
19	.	6.0	6.0	5.0	7.0
20	.	6.0	6.5	4.5	7.0
21	.	6.0	6.5	4.5	7.5
22	.	6.0	6.5	4.5	7.5
23	.	6.0	6.5	5.0	7.5
24	.	6.0	7.0	5.0	7.5
25	.	6.0	7.0	5.0	7.5
26	.	6.0	7.0	5.5	8.0
27	.	6.0	7.0	5.5	8.0
28	.	6.0	7.0	5.5	8.0
29	.	6.0	7.0	5.5	8.0
30	.	6.0	7.5	5.5	8.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MAY					
DAY	1979	1980	1981	1982	1983
1	.	6.0	8.0	6.0	8.0
2	.	6.5	9.5	6.0	8.0
3	.	6.5	8.0	6.0	8.5
4	.	7.0	8.5	6.0	9.0
5	.	7.0	8.0	6.0	9.0
6	.	7.0	7.5	6.0	9.0
7	.	7.0	8.5	6.0	10.0
8	.	8.0	9.0	6.0	10.0
9	.	8.0	9.0	6.5	10.0
10	.	8.0	9.5	6.5	10.0
11	.	7.5	10.5	6.5	10.0
12	.	7.5	9.0	6.5	10.0
13	.	8.0	9.5	6.0	10.0
14	.	8.5	10.0	6.5	10.0
15	.	8.5	10.0	6.5	10.0
16	.	8.5	9.5	7.0	10.0
17	.	9.0	10.0	7.0	10.0
18	.	9.0	10.5	8.0	11.0
19	.	9.0	10.5	8.0	11.0
20	.	9.0	10.0	8.0	11.0
21	.	9.0	10.0	8.0	11.0
22	.	10.0	10.0	8.0	11.0
23	.	9.5	11.0	8.0	11.0
24	.	8.5	11.5	8.0	11.0
25	.	9.0	11.5	8.0	11.0
26	.	9.0	12.0	8.0	11.0
27	.	9.0	12.5	8.0	11.0
28	.	9.0	13.0	8.0	11.0
29	.	9.5	13.5	8.0	11.0
30	.	10.0	13.5	8.0	11.0
31	.	10.0	13.5	8.0	12.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JUNE					
DAY	1979	1980	1981	1982	1983
1	.	.	13.5	8.5	11.0
2	.	.	13.5	8.5	11.0
3	.	.	13.5	9.0	11.0
4	.	.	13.0	9.0	11.0
5	.	.	13.0	9.5	11.0
6	.	.	13.0	9.5	11.0
7	.	.	13.0	9.5	12.0
8	.	.	13.5	10.0	13.0
9	.	.	13.5	10.0	14.0
10	.	.	13.5	10.5	15.0
11	.	.	12.5	10.5	15.0
12	.	.	13.5	11.0	15.0
13	.	.	14.0	11.0	15.0
14	.	.	13.5	11.5	15.0
15	.	.	13.0	12.5	15.0
16	.	.	15.0	13.5	15.0
17	.	.	14.0	14.0	15.0
18	.	.	14.5	14.0	15.0
19	.	.	15.5	14.0	15.0
20	.	.	15.5	14.0	15.0
21	.	.	15.5	14.0	15.0
22	.	.	15.0	14.0	15.0
23	.	.	14.5	14.0	15.0
24	.	.	13.5	14.0	15.0
25	.	.	14.0	15.0	15.0
26	.	.	14.5	15.0	15.0
27	.	.	14.5	16.0	15.0
28	.	.	14.0	16.0	15.0
29	.	.	14.5	16.0	16.0
30	.	.	14.5	16.0	16.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JULY					
DAY	1979	1980	1981	1982	1983
1	13.5	.	15.0	16.5	16.0
2	13.5	.	15.0	16.5	16.0
3	14.5	.	14.0	16.5	16.0
4	15.0	.	14.0	16.5	16.0
5	14.5	.	14.5	16.5	16.0
6	14.0	.	15.0	16.5	16.0
7	15.0	.	14.0	16.5	16.0
8	15.5	.	14.0	16.0	16.0
9	16.5	.	14.0	16.0	16.0
10	16.0	.	14.0	16.0	16.0
11	16.5	.	14.0	16.0	16.0
12	17.0	.	14.0	15.5	16.0
13	17.0	.	14.5	15.0	16.0
14	16.0	.	15.0	14.5	16.0
15	16.0	.	15.0	14.0	16.0
16	15.0	.	15.0	14.0	16.0
17	15.5	.	15.5	14.0	16.0
18	16.0	.	16.0	14.0	16.0
19	16.5	.	16.5	14.0	16.0
20	17.0	.	17.0	14.0	16.0
21	16.0	.	17.0	14.0	17.0
22	16.0	.	17.0	13.5	17.0
23	16.0	.	17.5	13.5	17.0
24	17.0	.	17.0	14.0	17.0
25	15.5	.	17.5	14.0	17.0
26	15.5	.	17.5	14.0	17.0
27	16.0	.	17.5	14.0	17.0
28	16.0	.	17.5	15.0	17.0
29	16.0	.	17.5	15.5	17.0
30	17.0	.	17.0	15.5	17.0
31	17.0	.	17.0	15.5	17.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

AUGUST					
DAY	1979	1980	1981	1982	1983
1	17.0	.	17.0	15.5	17.0
2	17.0	.	17.5	15.5	17.0
3	16.5	.	17.5	16.0	17.0
4	16.5	.	17.5	16.0	17.0
5	16.5	.	17.0	16.0	17.0
6	17.0	.	17.0	16.0	16.5
7	16.5	.	16.5	16.0	16.5
8	16.5	.	16.5	17.0	16.5
9	16.5	.	16.5	16.5	16.5
10	16.5	.	16.5	16.0	16.5
11	16.5	.	17.0	16.0	16.5
12	17.0	.	17.0	16.0	16.5
13	17.0	.	17.5	16.0	16.5
14	17.0	.	17.5	16.0	16.5
15	18.0	.	17.5	16.0	16.5
16	18.0	.	17.5	16.0	16.0
17	18.0	.	17.5	16.0	16.0
18	18.0	.	17.5	16.0	16.0
19	17.5	.	17.0	16.0	15.5
20	17.5	.	17.0	16.0	16.0
21	17.5	.	17.0	16.0	16.0
22	17.5	.	17.0	16.0	16.0
23	18.0	.	17.5	16.0	15.5
24	18.0	.	17.5	16.0	15.5
25	18.0	.	17.0	16.0	15.0
26	18.0	.	17.0	16.0	15.0
27	18.0	.	17.0	16.0	15.0
28	18.0	.	17.0	15.5	15.0
29	18.0	.	16.5	15.5	15.0
30	17.5	.	17.0	15.5	15.0
31	17.5	.	16.5	15.5	15.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

SEPTEMBER					
DAY	1979	1980	1981	1982	1983
1	17.5	.	16.5	15.0	15.0
2	18.0	.	16.5	15.0	15.0
3	17.5	.	16.0	15.5	15.0
4	17.0	.	16.0	15.5	15.0
5	16.5	.	16.0	15.5	15.0
6	17.0	.	16.0	15.5	14.5
7	17.5	.	16.0	15.0	14.5
8	17.0	.	15.5	15.0	14.0
9	17.0	.	15.0	15.0	14.0
10	17.0	13.5	15.0	14.5	14.0
11	16.5	13.5	14.5	14.5	14.0
12	16.0	13.5	14.5	14.5	14.0
13	16.0	13.5	14.5	14.0	14.0
14	16.0	13.0	14.5	14.0	14.0
15	15.5	13.5	14.0	14.0	13.5
16	15.0	13.0	14.0	14.0	13.5
17	15.5	13.0	14.0	14.0	13.0
18	15.0	13.0	14.0	14.0	13.0
19	15.5	13.0	13.5	14.0	13.0
20	15.0	13.5	14.0	14.0	13.0
21	15.0	13.5	13.5	14.0	13.0
22	15.0	13.0	13.5	14.0	13.0
23	15.0	13.0	13.5	14.0	13.0
24	15.0	13.0	13.5	14.0	13.0
25	15.0	13.0	13.5	14.0	13.0
26	15.0	13.0	13.5	14.0	12.0
27	15.5	13.5	13.5	13.0	12.0
28	15.0	13.0	13.0	13.0	12.0
29	15.0	13.0	13.0	13.0	12.0
30	15.0	13.0	12.5	13.0	12.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

OCTOBER					
DAY	1979	1980	1981	1982	1983
1	14.0	12.5	12.0	13.0	12.0
2	14.0	12.0	12.0	13.0	12.0
3	13.5	12.5	11.5	13.0	12.0
4	13.0	12.0	11.5	12.5	12.0
5	13.0	12.0	11.5	12.5	12.0
6	12.5	12.0	12.0	12.0	11.5
7	12.5	12.0	11.0	12.0	11.5
8	12.5	12.0	11.0	12.0	11.0
9	12.5	12.0	11.0	12.0	11.5
10	12.5	11.5	11.0	11.5	11.0
11	12.5	11.5	11.0	11.5	11.0
12	12.5	11.0	11.0	11.0	11.0
13	12.0	11.0	11.0	11.0	11.0
14	12.0	11.0	11.0	11.0	10.5
15	12.0	11.0	11.0	11.0	10.0
16	11.5	11.0	11.0	10.0	10.0
17	11.5	11.0	11.0	10.0	10.0
18	11.0	11.0	11.0	10.0	10.0
19	11.0	10.5	11.0	10.0	10.0
20	10.5	10.5	10.5	10.0	10.0
21	10.5	10.5	10.5	10.0	10.0
22	10.5	10.5	10.5	10.0	10.0
23	10.5	10.0	10.5	9.5	10.0
24	10.0	10.0	10.0	9.5	10.0
25	10.0	10.0	10.0	9.5	9.0
26	10.0	10.0	10.0	9.0	9.0
27	10.0	10.0	10.0	9.0	9.0
28	10.0	10.0	10.0	9.0	8.5
29	10.0	9.5	10.0	8.5	8.5
30	10.0	9.5	9.5	8.5	8.5
31	10.0	9.5	9.0	8.5	8.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

NOVEMBER					
DAY	1979	1980	1981	1982	1983
1	9.5	9.5	9.0	8.5	8.0
2	9.5	9.5	9.0	8.5	8.0
3	8.5	9.5	9.0	8.0	8.0
4	8.5	9.5	9.0	8.0	8.0
5	8.5	9.0	8.5	8.0	7.5
6	8.5	9.5	8.0	8.0	7.5
7	8.0	9.5	8.0	8.0	7.0
8	7.5	9.0	8.0	7.5	7.0
9	7.5	9.0	8.0	7.5	7.0
10	7.0	8.5	8.0	7.0	7.0
11	7.0	8.5	8.0	7.0	7.0
12	8.0	8.5	8.0	7.0	7.0
13	8.0	8.5	8.0	7.0	7.0
14	8.0	8.5	7.5	7.0	7.0
15	8.0	8.0	7.5	7.0	7.0
16	8.0	8.0	7.0	6.5	7.0
17	7.5	8.0	7.0	6.0	7.0
18	7.5	7.5	7.0	6.0	7.0
19	7.5	7.5	7.0	5.0	6.0
20	7.5	7.0	7.0	4.0	6.0
21	7.5	7.0	7.0	4.0	6.0
22	7.5	7.0	7.0	4.0	6.0
23	7.0	7.0	7.0	4.0	6.0
24	7.0	7.0	7.0	4.0	6.0
25	6.5	7.0	7.0	4.5	6.0
26	6.5	6.5	6.5	4.5	6.0
27	6.5	6.5	6.5	4.5	6.0
28	6.0	6.5	6.5	4.5	5.0
29	6.0	6.0	6.5	4.5	5.0
30	6.0	5.5	6.5	4.5	5.0

TABLE 6 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

DECEMBER					
DAY	1979	1980	1981	1982	1983
1	5.5	5.0	6.0	4.5	4.0
2	5.5	4.5	6.0	4.5	5.0
3	5.5	4.0	6.0	4.5	4.5
4	5.5	3.5	6.0	4.5	4.0
5	5.5	3.5	5.0	4.0	4.0
6	5.0	3.5	5.0	4.0	4.0
7	5.5	3.0	5.0	4.0	3.5
8	5.5	3.0	5.0	4.0	3.5
9	5.5	3.5	4.5	4.0	3.0
10	5.0	3.5	4.0	4.0	3.5
11	4.5	3.5	3.5	4.0	4.0
12	4.5	3.5	3.5	4.0	4.0
13	4.5	3.5	4.0	4.0	4.0
14	3.0	3.5	4.0	4.0	3.5
15	3.0	3.5	4.0	4.0	3.0
16	3.0	3.5	4.0	4.0	3.0
17	3.0	3.5	4.0	4.0	3.0
18	3.0	3.5	4.0	3.5	3.5
19	3.0	2.5	4.0	3.5	3.5
20	3.0	2.0	4.0	3.5	3.5
21	3.0	2.0	4.0	3.5	3.5
22	3.0	2.0	4.0	3.5	3.5
23	3.0	2.5	4.0	3.5	3.5
24	2.5	2.0	4.0	3.0	3.5
25	2.5	2.5	3.5	3.0	3.5
26	2.5	3.0	3.5	3.0	3.5
27	2.5	3.0	3.5	3.0	3.5
28	3.0	3.0	3.0	3.0	3.0
29	3.0	3.0	3.0	3.0	3.0
30	3.0	3.0	3.0	3.0	3.0
31	3.0	2.5	3.0	3.0	3.0

TABLE 7. KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JANUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	2.9	2.9	2.5	2.5	3.0	3.0
2	2.8	5.6	2.5	5.0	3.0	6.0
3	2.9	8.5	2.5	7.5	3.0	9.0
4	2.8	11.3	2.5	10.0	3.0	12.0
5	2.9	14.1	2.5	12.5	3.5	15.5
6	2.8	16.9	2.0	14.5	3.5	19.0
7	2.8	19.6	2.0	16.5	3.5	22.5
8	2.5	22.1	1.0	17.5	3.5	26.0
9	2.5	24.6	1.0	18.5	3.5	29.5
10	2.5	27.1	1.0	19.5	4.0	33.5
11	2.5	29.6	1.0	20.5	4.0	37.5
12	2.5	32.1	1.0	21.5	4.0	41.5
13	2.5	34.6	1.0	22.5	4.0	45.5
14	2.5	37.1	1.0	23.5	4.0	49.5
15	2.8	39.9	1.5	25.0	4.5	54.0
16	2.6	42.5	1.5	26.5	4.5	58.5
17	2.6	45.1	1.5	28.0	4.5	63.0
18	2.8	47.9	1.5	29.5	4.5	67.5
19	2.9	50.8	1.5	31.0	5.0	72.5
20	2.6	53.4	1.0	32.0	5.0	77.5
21	2.6	56.0	1.0	33.0	5.0	82.5
22	2.8	58.8	1.5	34.5	5.0	87.5
23	2.8	61.5	1.5	36.0	5.0	92.5
24	2.9	64.4	1.5	37.5	5.0	97.5
25	2.9	67.3	1.5	39.0	5.0	102.5
26	2.9	70.1	1.5	40.5	5.0	107.5
27	2.6	72.8	1.0	41.5	5.0	112.5
28	2.5	75.3	1.0	42.5	4.5	117.0
29	2.5	77.8	1.0	43.5	4.5	121.5
30	2.5	80.3	1.0	44.5	4.5	126.0
31	2.5	82.8	1.0	45.5	4.0	130.0

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

FEBRUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	2.9	85.6	2.0	47.5	4.5	134.5
2	2.9	88.5	2.0	49.5	4.5	139.0
3	2.9	91.4	2.0	51.5	4.5	143.5
4	2.9	94.3	2.0	53.5	4.5	148.0
5	2.8	97.0	2.0	55.5	4.0	152.0
6	2.8	99.8	2.0	57.5	4.0	156.0
7	2.8	102.5	2.0	59.5	4.0	160.0
8	2.8	105.3	2.0	61.5	4.0	164.0
9	2.8	108.0	2.0	63.5	4.0	168.0
10	2.8	110.8	2.0	65.5	4.0	172.0
11	2.8	113.5	2.0	67.5	4.0	176.0
12	2.8	116.3	2.0	69.5	4.0	180.0
13	2.9	119.1	2.0	71.5	4.0	184.0
14	2.9	122.0	2.0	73.5	4.0	188.0
15	3.0	125.0	2.0	75.5	4.0	192.0
16	2.9	127.9	2.0	77.5	4.0	196.0
17	3.1	131.0	2.0	79.5	4.5	200.5
18	3.1	134.1	2.0	81.5	4.0	204.5
19	3.3	137.4	2.0	83.5	4.5	209.0
20	3.1	140.5	2.0	85.5	4.0	213.0
21	3.3	143.8	2.0	87.5	4.0	217.0
22	3.1	146.9	2.0	89.5	4.0	221.0
23	3.1	150.0	2.0	91.5	4.0	225.0
24	3.1	153.1	2.0	93.5	4.0	229.0
25	3.1	156.3	2.0	95.5	4.0	233.0
26	3.1	159.4	2.0	97.5	4.0	237.0
27	3.1	162.5	2.0	99.5	4.0	241.0
28	3.1	165.6	2.0	101.5	4.0	245.0

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MARCH

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.1	168.8	2.0	103.5	4.0	249.0
2	3.4	172.1	2.5	106.0	4.5	253.5
3	3.4	175.5	2.5	108.5	4.5	258.0
4	3.3	178.8	2.5	111.0	4.0	262.0
5	3.3	182.0	2.5	113.5	4.0	266.0
6	3.1	185.1	2.5	116.0	4.0	270.0
7	3.1	188.3	2.5	118.5	4.0	274.0
8	3.4	191.6	2.5	121.0	4.0	278.0
9	3.5	195.1	2.5	123.5	4.5	282.5
10	3.5	198.6	2.5	126.0	4.5	287.0
11	3.4	202.0	2.5	128.5	4.0	291.0
12	3.5	205.5	2.5	131.0	4.5	295.5
13	3.5	209.0	2.5	133.5	4.5	300.0
14	3.8	212.8	3.0	136.5	4.5	304.5
15	3.8	216.5	3.0	139.5	4.5	309.0
16	3.9	220.4	3.0	142.5	5.0	314.0
17	3.9	224.3	3.0	145.5	5.0	319.0
18	4.0	228.3	3.0	148.5	5.5	324.5
19	4.0	232.3	3.0	151.5	5.5	330.0
20	4.3	236.5	3.0	154.5	5.5	335.5
21	4.1	240.6	3.0	157.5	5.0	340.5
22	4.5	245.1	3.5	161.0	6.0	346.5
23	4.6	249.8	3.5	164.5	6.0	352.5
24	4.6	254.4	3.5	168.0	6.0	358.5
25	4.8	259.1	3.5	171.5	6.0	364.5
26	4.6	263.8	3.5	175.0	6.0	370.5
27	4.8	268.5	4.0	179.0	6.0	376.5
28	4.6	273.1	4.0	183.0	5.5	382.0
29	4.8	277.9	4.0	187.0	6.0	388.0
30	5.0	282.9	4.0	191.0	6.0	394.0
31	5.0	287.9	4.0	195.0	6.0	400.0

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

APRIL

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.1	293.0	4.0	199.0	6.0	406.0
2	5.1	298.1	4.0	203.0	6.0	412.0
3	5.3	303.4	4.5	207.5	6.0	418.0
4	5.3	308.6	4.5	212.0	6.0	424.0
5	5.3	313.9	4.5	216.5	6.0	430.0
6	5.3	319.1	4.5	221.0	6.0	436.0
7	5.5	324.6	4.5	225.5	6.0	442.0
8	5.6	330.3	5.0	230.5	6.0	448.0
9	5.8	336.0	5.0	235.5	6.0	454.0
10	5.5	341.5	4.5	240.0	6.0	460.0
11	5.5	347.0	4.5	244.5	6.0	466.0
12	5.5	352.5	4.5	249.0	6.0	472.0
13	5.6	358.1	4.5	253.5	6.0	478.0
14	5.9	364.0	4.5	258.0	7.0	485.0
15	5.9	369.9	4.5	262.5	7.0	492.0
16	5.8	375.6	5.0	267.5	6.0	498.0
17	5.8	381.4	5.0	272.5	6.0	504.0
18	5.8	387.1	5.0	277.5	6.0	510.0
19	6.0	393.1	5.0	282.5	7.0	517.0
20	6.0	399.1	4.5	287.0	7.0	524.0
21	6.1	405.3	4.5	291.5	7.5	531.5
22	6.1	411.4	4.5	296.0	7.5	539.0
23	6.3	417.6	5.0	301.0	7.5	546.5
24	6.4	424.0	5.0	306.0	7.5	554.0
25	6.4	430.4	5.0	311.0	7.5	561.5
26	6.6	437.0	5.5	316.5	8.0	569.5
27	6.6	443.6	5.5	322.0	8.0	577.5
28	6.6	450.3	5.5	327.5	8.0	585.5
29	6.6	456.9	5.5	333.0	8.0	593.5
30	6.8	463.6	5.5	338.5	8.0	601.5

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TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MAY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	7.0	470.6	6.0	344.5	8.0	609.5
2	7.5	478.1	6.0	350.5	9.5	619.0
3	7.3	485.4	6.0	356.5	8.5	627.5
4	7.6	493.0	6.0	362.5	9.0	636.5
5	7.5	500.5	6.0	368.5	9.0	645.5
6	7.4	507.9	6.0	374.5	9.0	654.5
7	7.9	515.8	6.0	380.5	10.0	664.5
8	8.3	524.0	6.0	386.5	10.0	674.5
9	8.4	532.4	6.5	393.0	10.0	684.5
10	8.5	540.9	6.5	399.5	10.0	694.5
11	8.6	549.5	6.5	406.0	10.5	705.0
12	8.3	557.8	6.5	412.5	10.0	715.0
13	8.4	566.1	6.0	418.5	10.0	725.0
14	8.8	574.9	6.5	425.0	10.0	735.0
15	8.8	583.6	6.5	431.5	10.0	745.0
16	8.8	592.4	7.0	438.5	10.0	755.0
17	9.0	601.4	7.0	445.5	10.0	765.0
18	9.6	611.0	8.0	453.5	11.0	776.0
19	9.6	620.6	8.0	461.5	11.0	787.0
20	9.5	630.1	8.0	469.5	11.0	798.0
21	9.5	639.6	8.0	477.5	11.0	809.0
22	9.8	649.4	8.0	485.5	11.0	820.0
23	9.9	659.3	8.0	493.5	11.0	831.0
24	9.8	669.0	8.0	501.5	11.5	842.5
25	9.9	678.9	8.0	509.5	11.5	854.0
26	10.0	688.9	8.0	517.5	12.0	866.0
27	10.1	699.0	8.0	525.5	12.5	878.5
28	10.3	709.3	8.0	533.5	13.0	891.5
29	10.5	719.8	8.0	541.5	13.5	905.0
30	10.6	730.4	8.0	549.5	13.5	918.5
31	10.9	741.3	8.0	557.5	13.5	932.0

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JUNE

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	11.0	752.3	8.5	566.0	13.5	945.5
2	11.0	763.3	8.5	574.5	13.5	959.0
3	11.2	774.4	9.0	583.5	13.5	972.5
4	11.0	785.4	9.0	592.5	13.0	985.5
5	11.2	796.6	9.5	602.0	13.0	998.5
6	11.2	807.7	9.5	611.5	13.0	1011.5
7	11.5	819.2	9.5	621.0	13.0	1024.5
8	12.2	831.4	10.0	631.0	13.5	1038.0
9	12.5	843.9	10.0	641.0	14.0	1052.0
10	13.0	856.9	10.5	651.5	15.0	1067.0
11	12.7	869.6	10.5	662.0	15.0	1082.0
12	13.2	882.7	11.0	673.0	15.0	1097.0
13	13.3	896.1	11.0	684.0	15.0	1112.0
14	13.3	909.4	11.5	695.5	15.0	1127.0
15	13.5	922.9	12.5	708.0	15.0	1142.0
16	14.5	937.4	13.5	721.5	15.0	1157.0
17	14.3	951.7	14.0	735.5	15.0	1172.0
18	14.5	966.2	14.0	749.5	15.0	1187.0
19	14.8	981.1	14.0	763.5	15.5	1202.5
20	14.8	995.9	14.0	777.5	15.5	1218.0
21	14.8	1010.7	14.0	791.5	15.5	1233.5
22	14.7	1025.4	14.0	805.5	15.0	1248.5
23	14.5	1039.9	14.0	819.5	15.0	1263.5
24	14.2	1054.1	13.5	833.0	15.0	1278.5
25	14.7	1068.7	14.0	847.0	15.0	1293.5
26	14.8	1083.6	14.5	861.5	15.0	1308.5
27	15.2	1098.7	14.5	876.0	16.0	1324.5
28	15.0	1113.7	14.0	890.0	16.0	1340.5
29	15.5	1129.2	14.5	904.5	16.0	1356.5
30	15.5	1144.7	14.5	919.0	16.0	1372.5

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JULY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	15.3	1160.0	13.5	932.5	16.5	1389.0
2	15.3	1175.2	13.5	946.0	16.5	1405.5
3	15.3	1190.5	14.0	960.0	16.5	1422.0
4	15.4	1205.9	14.0	974.0	16.5	1438.5
5	15.4	1221.2	14.5	988.5	16.5	1455.0
6	15.4	1236.6	14.0	1002.5	16.5	1471.5
7	15.4	1252.0	14.0	1016.5	16.5	1488.0
8	15.4	1267.4	14.0	1030.5	16.0	1504.0
9	15.6	1283.0	14.0	1044.5	16.5	1520.5
10	15.5	1298.5	14.0	1058.5	16.0	1536.5
11	15.6	1314.1	14.0	1072.5	16.5	1553.0
12	15.6	1329.7	14.0	1086.5	17.0	1570.0
13	15.6	1345.4	14.5	1101.0	17.0	1587.0
14	15.4	1360.7	14.5	1115.5	16.0	1603.0
15	15.3	1376.0	14.0	1129.5	16.0	1619.0
16	15.0	1391.0	14.0	1143.5	16.0	1635.0
17	15.3	1406.2	14.0	1157.5	16.0	1651.0
18	15.5	1421.7	14.0	1171.5	16.0	1667.0
19	15.8	1437.5	14.0	1185.5	16.5	1683.5
20	16.0	1453.5	14.0	1199.5	17.0	1700.5
21	16.0	1469.5	14.0	1213.5	17.0	1717.5
22	15.9	1485.4	13.5	1227.0	17.0	1734.5
23	16.0	1501.4	13.5	1240.5	17.5	1752.0
24	16.3	1517.6	14.0	1254.5	17.0	1769.0
25	16.0	1533.6	14.0	1268.5	17.5	1786.5
26	16.0	1549.6	14.0	1282.5	17.5	1804.0
27	16.1	1565.7	14.0	1296.5	17.5	1821.5
28	16.4	1582.1	15.0	1311.5	17.5	1839.0
29	16.5	1598.6	15.5	1327.0	17.5	1856.5
30	16.6	1615.2	15.5	1342.5	17.0	1873.5
31	16.6	1631.9	15.5	1358.0	17.0	1890.5

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

AUGUST

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	16.6	1648.5	15.5	1373.5	17.0	1907.5
2	16.8	1665.2	15.5	1389.0	17.5	1925.0
3	16.8	1682.0	16.0	1405.0	17.5	1942.5
4	16.8	1698.7	16.0	1421.0	17.5	1960.0
5	16.6	1715.4	16.0	1437.0	17.0	1977.0
6	16.6	1732.0	16.0	1453.0	17.0	1994.0
7	16.4	1748.4	16.0	1469.0	16.5	2010.5
8	16.6	1765.0	16.5	1485.5	17.0	2027.5
9	16.5	1781.5	16.5	1502.0	16.5	2044.0
10	16.4	1797.9	16.0	1518.0	16.5	2060.5
11	16.5	1814.4	16.0	1534.0	17.0	2077.5
12	16.6	1831.0	16.0	1550.0	17.0	2094.5
13	16.8	1847.7	16.0	1566.0	17.5	2112.0
14	16.8	1864.5	16.0	1582.0	17.5	2129.5
15	17.0	1881.5	16.0	1598.0	18.0	2147.5
16	16.9	1898.4	16.0	1614.0	18.0	2165.5
17	16.9	1915.2	16.0	1630.0	18.0	2183.5
18	16.9	1932.1	16.0	1646.0	18.0	2201.5
19	16.5	1948.6	15.5	1661.5	17.5	2219.0
20	16.6	1965.2	16.0	1677.5	17.5	2236.5
21	16.6	1981.9	16.0	1693.5	17.5	2254.0
22	16.6	1998.5	16.0	1709.5	17.5	2271.5
23	16.8	2015.2	15.5	1725.0	18.0	2289.5
24	16.8	2032.0	15.5	1740.5	18.0	2307.5
25	16.5	2048.5	15.0	1755.5	18.0	2325.5
26	16.5	2065.0	15.0	1770.5	18.0	2343.5
27	16.5	2081.5	15.0	1785.5	18.0	2361.5
28	16.4	2097.9	15.0	1800.5	18.0	2379.5
29	16.3	2114.1	15.0	1815.5	18.0	2397.5
30	16.3	2130.4	15.0	1830.5	17.5	2415.0
31	16.1	2146.5	15.0	1845.5	17.5	2432.5

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

SEPTEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	16.0	2162.5	15.0	1860.5	17.5	2450.0
2	16.1	2178.6	15.0	1875.5	18.0	2468.0
3	16.0	2194.6	15.0	1890.5	17.5	2485.5
4	15.9	2210.5	15.0	1905.5	17.0	2502.5
5	15.8	2226.2	15.0	1920.5	16.5	2519.0
6	15.8	2242.0	14.5	1935.0	17.0	2536.0
7	15.8	2257.7	14.5	1949.5	17.5	2553.5
8	15.4	2273.1	14.0	1963.5	17.0	2570.5
9	15.3	2288.4	14.0	1977.5	17.0	2587.5
10	14.8	2303.2	13.5	1991.0	17.0	2604.5
11	14.6	2317.8	13.5	2004.5	16.5	2621.0
12	14.5	2332.3	13.5	2018.0	16.0	2637.0
13	14.4	2346.7	13.5	2031.5	16.0	2653.0
14	14.3	2361.0	13.0	2044.5	16.0	2669.0
15	14.1	2375.1	13.5	2058.0	15.5	2684.5
16	13.9	2389.0	13.0	2071.0	15.0	2699.5
17	13.9	2402.9	13.0	2084.0	15.5	2715.0
18	13.8	2416.7	13.0	2097.0	15.0	2730.0
19	13.8	2430.5	13.0	2110.0	15.5	2745.5
20	13.9	2444.4	13.0	2123.0	15.0	2760.5
21	13.8	2458.2	13.0	2136.0	15.0	2775.5
22	13.7	2471.9	13.0	2149.0	15.0	2790.5
23	13.7	2485.6	13.0	2162.0	15.0	2805.5
24	13.7	2499.3	13.0	2175.0	15.0	2820.5
25	13.7	2513.0	13.0	2188.0	15.0	2835.5
26	13.5	2526.5	12.0	2200.0	15.0	2850.5
27	13.5	2540.0	12.0	2212.0	15.5	2866.0
28	13.2	2553.2	12.0	2224.0	15.0	2881.0
29	13.2	2566.4	12.0	2236.0	15.0	2896.0
30	13.1	2579.5	12.0	2248.0	15.0	2911.0

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

OCTOBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	12.7	2592.2	12.0	2260.0	14.0	2925.0
2	12.6	2604.8	12.0	2272.0	14.0	2939.0
3	12.5	2617.3	11.5	2283.5	13.5	2952.5
4	12.2	2629.5	11.5	2295.0	13.0	2965.5
5	12.2	2641.7	11.5	2306.5	13.0	2978.5
6	12.0	2653.7	11.5	2318.0	12.5	2991.0
7	11.8	2665.5	11.0	2329.0	12.5	3003.5
8	11.7	2677.2	11.0	2340.0	12.5	3016.0
9	11.8	2689.0	11.0	2351.0	12.5	3028.5
10	11.5	2700.5	11.0	2362.0	12.5	3041.0
11	11.5	2712.0	11.0	2373.0	12.5	3053.5
12	11.3	2723.3	11.0	2384.0	12.5	3066.0
13	11.2	2734.5	11.0	2395.0	12.0	3078.0
14	11.1	2745.6	10.5	2405.5	12.0	3090.0
15	11.0	2756.6	10.0	2415.5	12.0	3102.0
16	10.7	2767.3	10.0	2425.5	11.5	3113.5
17	10.7	2778.0	10.0	2435.5	11.5	3125.0
18	10.6	2788.6	10.0	2445.5	11.0	3136.0
19	10.5	2799.1	10.0	2455.5	11.0	3147.0
20	10.3	2809.4	10.0	2465.5	10.5	3157.5
21	10.3	2819.7	10.0	2475.5	10.5	3168.0
22	10.3	2830.0	10.0	2485.5	10.5	3178.5
23	10.1	2840.1	9.5	2495.0	10.5	3189.0
24	9.9	2850.0	9.5	2504.5	10.0	3199.0
25	9.7	2859.7	9.0	2513.5	10.0	3209.0
26	9.6	2869.3	9.0	2522.5	10.0	3219.0
27	9.6	2878.9	9.0	2531.5	10.0	3229.0
28	9.5	2888.4	8.5	2540.0	10.0	3239.0
29	9.3	2897.7	8.5	2548.5	10.0	3249.0
30	9.2	2906.9	8.5	2557.0	10.0	3259.0
31	9.0	2915.9	8.0	2565.0	10.0	3269.0

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

NOVEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	8.9	2924.8	8.0	2573.0	9.5	3278.5
2	8.9	2933.7	8.0	2581.0	9.5	3288.0
3	8.6	2942.3	8.0	2589.0	9.5	3297.5
4	8.6	2950.9	8.0	2597.0	9.5	3307.0
5	8.3	2959.2	7.5	2604.5	9.0	3316.0
6	8.3	2967.5	7.5	2612.0	9.5	3325.5
7	8.1	2975.6	7.0	2619.0	9.5	3335.0
8	7.8	2983.4	7.0	2626.0	9.0	3344.0
9	7.8	2991.2	7.0	2633.0	9.0	3353.0
10	7.5	2998.7	7.0	2640.0	8.5	3361.5
11	7.5	3006.2	7.0	2647.0	8.5	3370.0
12	7.7	3013.9	7.0	2654.0	8.5	3378.5
13	7.7	3021.6	7.0	2661.0	8.5	3387.0
14	7.6	3029.2	7.0	2668.0	8.5	3395.5
15	7.5	3036.7	7.0	2675.0	8.0	3403.5
16	7.3	3044.0	6.5	2681.5	8.0	3411.5
17	7.1	3051.1	6.0	2687.5	8.0	3419.5
18	7.0	3058.1	6.0	2693.5	7.5	3427.0
19	6.6	3064.7	5.0	2698.5	7.5	3434.5
20	6.3	3071.0	4.0	2702.5	7.5	3442.0
21	6.3	3077.3	4.0	2706.5	7.5	3449.5
22	6.3	3083.6	4.0	2710.5	7.5	3457.0
23	6.2	3089.8	4.0	2714.5	7.0	3464.0
24	6.2	3096.0	4.0	2718.5	7.0	3471.0
25	6.2	3102.2	4.5	2723.0	7.0	3478.0
26	6.0	3108.2	4.5	2727.5	6.5	3484.5
27	6.0	3114.2	4.5	2732.0	6.5	3491.0
28	5.7	3119.9	4.5	2736.5	6.5	3497.5
29	5.6	3125.5	4.5	2741.0	6.5	3504.0
30	5.5	3131.0	4.5	2745.5	6.5	3510.5

TABLE 7 (CONT.). KLAUOCK HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

DECEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.0	3136.0	4.0	2749.5	6.0	3516.5
2	5.1	3141.1	4.5	2754.0	6.0	3522.5
3	4.9	3146.0	4.0	2758.0	6.0	3528.5
4	4.7	3150.7	3.5	2761.5	6.0	3534.5
5	4.4	3155.1	3.5	2765.0	5.5	3540.0
6	4.3	3159.4	3.5	2768.5	5.0	3545.0
7	4.2	3163.6	3.0	2771.5	5.5	3550.5
8	4.2	3167.8	3.0	2774.5	5.5	3556.0
9	4.1	3171.9	3.0	2777.5	5.5	3561.5
10	4.0	3175.9	3.5	2781.0	5.0	3566.5
11	3.9	3179.8	3.5	2784.5	4.5	3571.0
12	3.9	3183.7	3.5	2788.0	4.5	3575.5
13	4.0	3187.7	3.5	2791.5	4.5	3580.0
14	3.6	3191.3	3.0	2794.5	4.0	3584.0
15	3.5	3194.8	3.0	2797.5	4.0	3588.0
16	3.5	3198.3	3.0	2800.5	4.0	3592.0
17	3.5	3201.8	3.0	2803.5	4.0	3596.0
18	3.5	3205.3	3.0	2806.5	4.0	3600.0
19	3.3	3208.6	2.5	2809.0	4.0	3604.0
20	3.2	3211.8	2.0	2811.0	4.0	3608.0
21	3.2	3215.0	2.0	2813.0	4.0	3612.0
22	3.2	3218.2	2.0	2815.0	4.0	3616.0
23	3.3	3221.5	2.5	2817.5	4.0	3620.0
24	3.0	3224.5	2.0	2819.5	4.0	3624.0
25	3.0	3227.5	2.5	2822.0	3.5	3627.5
26	3.1	3230.6	2.5	2824.5	3.5	3631.0
27	3.1	3233.7	2.5	2827.0	3.5	3634.5
28	3.0	3236.7	3.0	2830.0	3.0	3637.5
29	3.0	3239.7	3.0	2833.0	3.0	3640.5
30	3.0	3242.7	3.0	2836.0	3.0	3643.5
31	2.9	3245.6	2.5	2838.5	3.0	3646.5

TABLE 8. SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JANUARY					
DAY	TMP79	TMP80	TMP81	TMP82	TMP83
1	.	4	4	4	4
2	.	4	4	4	4
3	.	4	4	4	4
4	.	4	4	4	4
5	.	4	4	4	4
6	.	4	4	4	4
7	.	4	4	4	4
8	.	4	4	4	4
9	.	4	4	4	4
10	.	4	4	4	4
11	.	4	4	4	4
12	.	4	4	4	4
13	.	4	4	4	4
14	.	4	4	4	4
15	.	4	4	4	4
16	.	4	4	4	4
17	.	4	4	4	4
18	.	4	4	4	4
19	.	4	4	4	4
20	.	4	4	4	4
21	.	4	4	4	4
22	.	4	4	4	4
23	.	4	4	4	4
24	.	4	4	4	4
25	.	4	4	4	4
26	.	4	4	4	4
27	.	4	4	4	4
28	.	4	4	4	4
29	.	4	4	4	4
30	.	4	4	4	4
31	.	4	4	4	4

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

FEBRUARY					
DAY	1979	1980	1981	1982	1983
1	.	4	4	4	4
2	.	4	4	4	4
3	.	4	4	4	4
4	.	4	4	4	4
5	.	4	4	4	4
6	.	4	4	4	4
7	.	4	4	4	4
8	.	4	4	4	4
9	.	4	4	4	4
10	.	4	4	4	4
11	.	4	4	4	4
12	.	4	4	4	4
13	.	4	4	4	4
14	.	4	4	4	4
15	.	4	4	4	4
16	.	4	4	4	4
17	.	4	4	4	4
18	.	4	4	4	4
19	.	4	4	4	4
20	.	4	4	4	4
21	.	4	4	4	4
22	.	4	4	4	4
23	.	4	4	4	4
24	.	4	4	4	4
25	.	4	4	4	4
26	.	4	4	4	4
27	.	4	4	4	4
28	.	4	4	4	4

TABLE 8 (CONT.). SMETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MARCH					
DAY	1979	1980	1981	1982	1983
1	.	4	4	4	4
2	.	4	4	4	4
3	.	4	4	4	4
4	.	4	4	4	4
5	.	4	4	4	4
6	.	4	4	4	4
7	.	4	4	4	4
8	.	4	4	4	4
9	.	4	4	4	4
10	.	4	4	4	4
11	.	4	4	4	4
12	.	4	4	4	4
13	.	4	4	4	4
14	.	4	4	4	4
15	.	4	4	4	4
16	.	4	4	4	4
17	.	4	4	4	4
18	.	4	4	4	4
19	.	4	4	4	4
20	.	4	4	4	4
21	.	4	4	4	4
22	.	4	4	4	4
23	.	4	4	4	4
24	.	4	4	4	4
25	.	4	4	4	4
26	.	4	4	4	4
27	.	4	4	4	4
28	.	4	4	4	4
29	.	4	4	4	4
30	.	4	4	4	4
31	.	4	4	4	4

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

APRIL					
DAY	1979	1980	1981	1982	1983
1	.	4	4	4	.
2	.	4	4	4	.
3	.	4	4	4	.
4	.	4	4	4	.
5	.	4	4	4	.
6	.	4	4	4	.
7	.	4	4	4	.
8	.	4	4	4	.
9	.	4	4	4	.
10	.	4	4	4	.
11	.	4	4	4	.
12	.	4	4	4	.
13	.	4	4	4	.
14	.	4	4	4	.
15	.	4	4	4	.
16	.	4	4	4	.
17	.	4	4	4	.
18	.	4	4	4	.
19	.	4	4	4	.
20	.	4	4	4	.
21	.	4	4	4	.
22	.	4	3	4	.
23	.	4	3	4	.
24	.	4	3	4	.
25	.	4	3	4	.
26	.	4	3	4	.
27	.	4	3	4	.
28	.	4	3	3	.
29	.	4	3	3	.
30	.	4	3	3	.

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

MAY					
DAY	1979	1980	1981	1982	1983
1	.	4	3	3	.
2	.	4	3	3	.
3	.	4	3	3	.
4	.	4	3	3	.
5	.	4	3	3	.
6	.	4	3	3	.
7	.	4	3	3	.
8	.	4	3	3	.
9	.	4	3	3	.
10	.	4	3	3	.
11	.	4	3	3	.
12	.	4	3	3	.
13	.	4	3	3	.
14	.	4	3	3	.
15	.	4	3	3	.
16	.	4	3	3	.
17	.	4	3	3	.
18	.	4	3	3	.
19	.	4	3	3	.
20	.	4	3	3	.
21	.	4	3	3	.
22	.	4	3	3	.
23	.	4	3	3	.
24	.	4	3	3	.
25	.	4	3	3	.
26	.	4	3	3	.
27	.	4	3	3	.
28	.	4	3	3	.
29	.	4	3	3	.
30	.	4	3	3	.
31	.	4	3	3	.

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JUNE					
DAY	1979	1980	1981	1982	1983
1	.	4	3	4	.
2	.	4	3	4	.
3	.	4	3	4	.
4	.	4	3	4	.
5	.	4	3	4	.
6	.	5	3	4	.
7	.	5	3	4	.
8	.	5	3	4	.
9	.	5	3	4	.
10	.	5	3	4	.
11	.	5	3	4	.
12	.	5	5	4	.
13	.	5	5	4	.
14	.	5	5	4	.
15	.	5	5	4	.
16	.	5	5	4	.
17	.	4	5	4	.
18	.	4	5	4	.
19	.	4	5	4	.
20	.	4	5	4	.
21	.	4	5	4	.
22	.	4	5	4	.
23	.	4	5	4	.
24	.	4	5	4	.
25	.	4	5	4	.
26	.	4	5	4	.
27	.	4	5	4	.
28	.	4	5	4	.
29	.	4	5	4	.
30	.	4	5	4	.

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

JULY					
DAY	1979	1980	1981	1982	1983
1	.	4	5	4	.
2	.	4	5	4	.
3	.	4	5	4	.
4	.	5	5	4	.
5	.	5	5	4	.
6	.	5	5	4	.
7	.	5	5	4	.
8	.	5	5	4	.
9	.	5	5	4	.
10	.	5	5	4	.
11	.	5	5	4	.
12	.	4	5	4	.
13	.	4	5	4	.
14	.	4	5	4	.
15	.	4	5	4	.
16	.	4	5	4	.
17	.	4	5	4	.
18	.	5	5	4	.
19	.	5	5	4	.
20	.	5	5	4	.
21	.	5	5	4	.
22	.	5	5	4	.
23	.	5	5	4	.
24	.	5	5	4	.
25	5	5	5	5	.
26	5	5	5	5	.
27	5	5	5	5	.
28	5	5	5	5	.
29	5	5	5	5	.
30	5	5	5	5	.
31	5	5	5	5	.

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

AUGUST					
DAY	1979	1980	1981	1982	1983
1	5	5	5	5	5
2	5	5	5	5	5
3	5	5	5	5	5
4	5	5	5	5	5
5	5	5	5	5	5
6	5	5	5	5	5
7	5	5	5	5	5
8	5	6	5	5	5
9	5	6	5	5	5
10	5	6	5	5	5
11	5	6	5	5	5
12	5	6	5	5	5
13	5	6	5	5	5
14	5	6	5	5	5
15	5	5	5	5	5
16	5	5	5	5	5
17	5	5	5	5	5
18	5	5	5	5	5
19	5	5	5	5	5
20	5	5	5	5	5
21	5	5	5	5	5
22	5	5	5	5	5
23	5	5	5	5	5
24	5	5	5	5	5
25	5	5	5	5	5
26	5	5	5	5	5
27	5	5	5	5	5
28	5	5	5	5	5
29	5	6	5	5	5
30	5	6	5	5	5
31	5	6	5	5	5

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

SEPTEMBER					
DAY	1979	1980	1981	1982	1983
1	5	6	5	5	5
2	5	6	5	5	5
3	5	6	5	5	5
4	5	6	5	5	5
5	5	5	5	5	5
6	5	5	5	5	5
7	5	5	5	5	5
8	5	5	5	5	6
9	5	6	5	5	6
10	5	6	5	5	6
11	5	6	5	5	6
12	5	6	5	5	6
13	5	6	5	5	6
14	5	6	5	5	6
15	5	6	5	5	6
16	5	6	5	5	6
17	5	6	6	5	6
18	5	6	6	5	6
19	5	6	6	5	6
20	5	6	6	5	6
21	5	6	6	5	6
22	5	6	6	5	6
23	5	6	6	5	6
24	5	6	6	5	6
25	5	6	6	5	6
26	5	6	6	5	6
27	5	6	6	5	6
28	5	6	6	5	6
29	5	6	6	5	6
30	5	6	6	5	6

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

OCTOBER					
DAY	1979	1980	1981	1982	1983
1	5	6	6	5	6
2	5	6	6	5	6
3	5	6	6	5	6
4	5	6	6	5	6
5	5	6	6	5	6
6	5	6	6	6	6
7	5	6	6	6	6
8	5	6	6	6	6
9	5	6	6	6	6
10	5	6	6	6	6
11	5	6	6	6	6
12	5	6	6	6	6
13	5	6	6	6	6
14	5	6	6	6	6
15	5	6	6	6	6
16	5	6	6	6	6
17	5	6	6	6	6
18	5	6	6	6	7
19	5	6	6	6	7
20	5	6	6	6	7
21	5	6	6	6	7
22	5	6	6	6	7
23	5	6	6	6	7
24	5	6	6	6	7
25	5	6	6	6	6
26	5	6	6	6	6
27	5	6	6	6	6
28	5	6	6	6	6
29	5	6	6	6	6
30	5	6	6	6	6
31	5	6	6	6	6

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

NOVEMBER					
DAY	1979	1980	1981	1982	1983
1	5	6	6	6	6
2	5	6	6	6	6
3	5	6	6	6	6
4	5	6	6	6	6
5	5	6	5	6	6
6	5	6	5	6	6
7	5	6	5	6	6
8	5	6	5	6	6
9	5	6	6	6	6
10	5	6	6	6	6
11	5	6	6	6	6
12	5	6	5	6	6
13	5	6	5	6	6
14	5	6	5	6	6
15	5	6	5	6	6
16	5	6	5	6	6
17	5	6	5	5	6
18	5	6	5	5	6
19	5	6	5	5	6
20	5	6	5	5	6
21	5	5	5	5	6
22	5	5	5	5	6
23	5	5	5	5	5
24	5	5	5	5	5
25	5	5	5	5	5
26	5	5	5	5	5
27	5	5	5	5	5
28	5	5	5	5	5
29	5	5	5	5	5
30	5	5	5	5	5

TABLE 8 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
DAILY WATER TEMPERATURES BY YEAR, IN DEGREES CELSIUS
1979 THROUGH 1983

DECEMBER					
DAY	1979	1980	1981	1982	1983
1	5	5	5	5	5
2	5	5	5	5	5
3	5	5	5	5	5
4	5	4	5	5	5
5	5	4	5	5	5
6	5	4	5	5	5
7	5	4	5	5	5
8	5	4	5	4	5
9	5	4	5	4	5
10	5	4	5	4	5
11	5	5	5	4	5
12	5	5	5	4	5
13	5	5	5	4	5
14	4	5	4	4	4
15	4	5	4	4	4
16	4	4	4	4	4
17	4	4	4	4	4
18	4	4	4	4	4
19	4	4	4	4	4
20	4	4	4	4	4
21	4	4	4	4	4
22	4	4	4	4	4
23	4	4	4	4	4
24	4	4	4	4	4
25	4	4	4	4	4
26	4	4	4	4	4
27	4	4	4	4	4
28	4	4	4	4	4
29	4	4	4	4	4
30	4	4	4	4	4
31	4	4	4	4	4

TABLE 9. SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JANUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.0	4.0	4.0	4.0	4.0	4.0
2	4.0	8.0	4.0	8.0	4.0	8.0
3	4.0	12.0	4.0	12.0	4.0	12.0
4	4.0	16.0	4.0	16.0	4.0	16.0
5	4.0	20.0	4.0	20.0	4.0	20.0
6	4.0	24.0	4.0	24.0	4.0	24.0
7	4.0	28.0	4.0	28.0	4.0	28.0
8	4.0	32.0	4.0	32.0	4.0	32.0
9	4.0	36.0	4.0	36.0	4.0	36.0
10	4.0	40.0	4.0	40.0	4.0	40.0
11	4.0	44.0	4.0	44.0	4.0	44.0
12	4.0	48.0	4.0	48.0	4.0	48.0
13	4.0	52.0	4.0	52.0	4.0	52.0
14	4.0	56.0	4.0	56.0	4.0	56.0
15	4.0	60.0	4.0	60.0	4.0	60.0
16	4.0	64.0	4.0	64.0	4.0	64.0
17	4.0	68.0	4.0	68.0	4.0	68.0
18	4.0	72.0	4.0	72.0	4.0	72.0
19	4.0	76.0	4.0	76.0	4.0	76.0
20	4.0	80.0	4.0	80.0	4.0	80.0
21	4.0	84.0	4.0	84.0	4.0	84.0
22	4.0	88.0	4.0	88.0	4.0	88.0
23	4.0	92.0	4.0	92.0	4.0	92.0
24	4.0	96.0	4.0	96.0	4.0	96.0
25	4.0	100.0	4.0	100.0	4.0	100.0
26	4.0	104.0	4.0	104.0	4.0	104.0
27	4.0	108.0	4.0	108.0	4.0	108.0
28	4.0	112.0	4.0	112.0	4.0	112.0
29	4.0	116.0	4.0	116.0	4.0	116.0
30	4.0	120.0	4.0	120.0	4.0	120.0
31	4.0	124.0	4.0	124.0	4.0	124.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

FEBRUARY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.0	128.0	4.0	128.0	4.0	128.0
2	4.0	132.0	4.0	132.0	4.0	132.0
3	4.0	136.0	4.0	136.0	4.0	136.0
4	4.0	140.0	4.0	140.0	4.0	140.0
5	4.0	144.0	4.0	144.0	4.0	144.0
6	4.0	148.0	4.0	148.0	4.0	148.0
7	4.0	152.0	4.0	152.0	4.0	152.0
8	4.0	156.0	4.0	156.0	4.0	156.0
9	4.0	160.0	4.0	160.0	4.0	160.0
10	4.0	164.0	4.0	164.0	4.0	164.0
11	4.0	168.0	4.0	168.0	4.0	168.0
12	4.0	172.0	4.0	172.0	4.0	172.0
13	4.0	176.0	4.0	176.0	4.0	176.0
14	4.0	180.0	4.0	180.0	4.0	180.0
15	4.0	184.0	4.0	184.0	4.0	184.0
16	4.0	188.0	4.0	188.0	4.0	188.0
17	4.0	192.0	4.0	192.0	4.0	192.0
18	4.0	196.0	4.0	196.0	4.0	196.0
19	4.0	200.0	4.0	200.0	4.0	200.0
20	4.0	204.0	4.0	204.0	4.0	204.0
21	4.0	208.0	4.0	208.0	4.0	208.0
22	4.0	212.0	4.0	212.0	4.0	212.0
23	4.0	216.0	4.0	216.0	4.0	216.0
24	4.0	220.0	4.0	220.0	4.0	220.0
25	4.0	224.0	4.0	224.0	4.0	224.0
26	4.0	228.0	4.0	228.0	4.0	228.0
27	4.0	232.0	4.0	232.0	4.0	232.0
28	4.0	236.0	4.0	236.0	4.0	236.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MARCH

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.0	240.0	4.0	240.0	4.0	240.0
2	4.0	244.0	4.0	244.0	4.0	244.0
3	4.0	248.0	4.0	248.0	4.0	248.0
4	4.0	252.0	4.0	252.0	4.0	252.0
5	4.0	256.0	4.0	256.0	4.0	256.0
6	4.0	260.0	4.0	260.0	4.0	260.0
7	4.0	264.0	4.0	264.0	4.0	264.0
8	4.0	268.0	4.0	268.0	4.0	268.0
9	4.0	272.0	4.0	272.0	4.0	272.0
10	4.0	276.0	4.0	276.0	4.0	276.0
11	4.0	280.0	4.0	280.0	4.0	280.0
12	4.0	284.0	4.0	284.0	4.0	284.0
13	4.0	288.0	4.0	288.0	4.0	288.0
14	4.0	292.0	4.0	292.0	4.0	292.0
15	4.0	296.0	4.0	296.0	4.0	296.0
16	4.0	300.0	4.0	300.0	4.0	300.0
17	4.0	304.0	4.0	304.0	4.0	304.0
18	4.0	308.0	4.0	308.0	4.0	308.0
19	4.0	312.0	4.0	312.0	4.0	312.0
20	4.0	316.0	4.0	316.0	4.0	316.0
21	4.0	320.0	4.0	320.0	4.0	320.0
22	4.0	324.0	4.0	324.0	4.0	324.0
23	4.0	328.0	4.0	328.0	4.0	328.0
24	4.0	332.0	4.0	332.0	4.0	332.0
25	4.0	336.0	4.0	336.0	4.0	336.0
26	4.0	340.0	4.0	340.0	4.0	340.0
27	4.0	344.0	4.0	344.0	4.0	344.0
28	4.0	348.0	4.0	348.0	4.0	348.0
29	4.0	352.0	4.0	352.0	4.0	352.0
30	4.0	356.0	4.0	356.0	4.0	356.0
31	4.0	360.0	4.0	360.0	4.0	360.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

APRIL

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.0	364.0	4.0	364.0	4.0	364.0
2	4.0	368.0	4.0	368.0	4.0	368.0
3	4.0	372.0	4.0	372.0	4.0	372.0
4	4.0	376.0	4.0	376.0	4.0	376.0
5	4.0	380.0	4.0	380.0	4.0	380.0
6	4.0	384.0	4.0	384.0	4.0	384.0
7	4.0	388.0	4.0	388.0	4.0	388.0
8	4.0	392.0	4.0	392.0	4.0	392.0
9	4.0	396.0	4.0	396.0	4.0	396.0
10	4.0	400.0	4.0	400.0	4.0	400.0
11	4.0	404.0	4.0	404.0	4.0	404.0
12	4.0	408.0	4.0	408.0	4.0	408.0
13	4.0	412.0	4.0	412.0	4.0	412.0
14	4.0	416.0	4.0	416.0	4.0	416.0
15	4.0	420.0	4.0	420.0	4.0	420.0
16	4.0	424.0	4.0	424.0	4.0	424.0
17	4.0	428.0	4.0	428.0	4.0	428.0
18	4.0	432.0	4.0	432.0	4.0	432.0
19	4.0	436.0	4.0	436.0	4.0	436.0
20	4.0	440.0	4.0	440.0	4.0	440.0
21	4.0	444.0	4.0	444.0	4.0	444.0
22	3.7	447.7	3.0	447.0	4.0	448.0
23	3.7	451.3	3.0	450.0	4.0	452.0
24	3.7	455.0	3.0	453.0	4.0	456.0
25	3.7	458.7	3.0	456.0	4.0	460.0
26	3.7	462.3	3.0	459.0	4.0	464.0
27	3.7	466.0	3.0	462.0	4.0	468.0
28	3.3	469.3	3.0	465.0	4.0	472.0
29	3.3	472.7	3.0	468.0	4.0	476.0
30	3.3	476.0	3.0	471.0	4.0	480.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

MAY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.3	479.3	3.0	474.0	4.0	484.0
2	3.3	482.7	3.0	477.0	4.0	488.0
3	3.3	486.0	3.0	480.0	4.0	492.0
4	3.3	489.3	3.0	483.0	4.0	496.0
5	3.3	492.7	3.0	486.0	4.0	500.0
6	3.3	496.0	3.0	489.0	4.0	504.0
7	3.3	499.3	3.0	492.0	4.0	508.0
8	3.3	502.7	3.0	495.0	4.0	512.0
9	3.3	506.0	3.0	498.0	4.0	516.0
10	3.3	509.3	3.0	501.0	4.0	520.0
11	3.3	512.7	3.0	504.0	4.0	524.0
12	3.3	516.0	3.0	507.0	4.0	528.0
13	3.3	519.3	3.0	510.0	4.0	532.0
14	3.3	522.7	3.0	513.0	4.0	536.0
15	3.3	526.0	3.0	516.0	4.0	540.0
16	3.3	529.3	3.0	519.0	4.0	544.0
17	3.3	532.7	3.0	522.0	4.0	548.0
18	3.3	536.0	3.0	525.0	4.0	552.0
19	3.3	539.3	3.0	528.0	4.0	556.0
20	3.3	542.7	3.0	531.0	4.0	560.0
21	3.3	546.0	3.0	534.0	4.0	564.0
22	3.3	549.3	3.0	537.0	4.0	568.0
23	3.3	552.7	3.0	540.0	4.0	572.0
24	3.3	556.0	3.0	543.0	4.0	576.0
25	3.3	559.3	3.0	546.0	4.0	580.0
26	3.3	562.7	3.0	549.0	4.0	584.0
27	3.3	566.0	3.0	552.0	4.0	588.0
28	3.3	569.3	3.0	555.0	4.0	592.0
29	3.3	572.7	3.0	558.0	4.0	596.0
30	3.3	576.0	3.0	561.0	4.0	600.0
31	3.3	579.3	3.0	564.0	4.0	604.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JUNE

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	3.7	583.0	3.0	567.0	4.0	608.0
2	3.7	586.7	3.0	570.0	4.0	612.0
3	3.7	590.3	3.0	573.0	4.0	616.0
4	3.7	594.0	3.0	576.0	4.0	620.0
5	3.7	597.7	3.0	579.0	4.0	624.0
6	4.0	601.7	3.0	582.0	5.0	629.0
7	4.0	605.7	3.0	585.0	5.0	634.0
8	4.0	609.7	3.0	588.0	5.0	639.0
9	4.0	613.7	3.0	591.0	5.0	644.0
10	4.0	617.7	3.0	594.0	5.0	649.0
11	4.0	621.7	3.0	597.0	5.0	654.0
12	4.7	626.3	4.0	601.0	5.0	659.0
13	4.7	631.0	4.0	605.0	5.0	664.0
14	4.7	635.7	4.0	609.0	5.0	669.0
15	4.7	640.3	4.0	613.0	5.0	674.0
16	4.7	645.0	4.0	617.0	5.0	679.0
17	4.3	649.3	4.0	621.0	5.0	684.0
18	4.3	653.7	4.0	625.0	5.0	689.0
19	4.3	658.0	4.0	629.0	5.0	694.0
20	4.3	662.3	4.0	633.0	5.0	699.0
21	4.3	666.7	4.0	637.0	5.0	704.0
22	4.3	671.0	4.0	641.0	5.0	709.0
23	4.3	675.3	4.0	645.0	5.0	714.0
24	4.3	679.7	4.0	649.0	5.0	719.0
25	4.3	684.0	4.0	653.0	5.0	724.0
26	4.3	688.3	4.0	657.0	5.0	729.0
27	4.3	692.7	4.0	661.0	5.0	734.0
28	4.3	697.0	4.0	665.0	5.0	739.0
29	4.3	701.3	4.0	669.0	5.0	744.0
30	4.3	705.7	4.0	673.0	5.0	749.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

JULY

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	4.3	710.0	4.0	677.0	5.0	754.0
2	4.3	714.3	4.0	681.0	5.0	759.0
3	4.3	718.7	4.0	685.0	5.0	764.0
4	4.7	723.3	4.0	689.0	5.0	769.0
5	4.7	728.0	4.0	693.0	5.0	774.0
6	4.7	732.7	4.0	697.0	5.0	779.0
7	4.7	737.3	4.0	701.0	5.0	784.0
8	4.7	742.0	4.0	705.0	5.0	789.0
9	4.7	746.7	4.0	709.0	5.0	794.0
10	4.7	751.3	4.0	713.0	5.0	799.0
11	4.7	756.0	4.0	717.0	5.0	804.0
12	4.3	760.3	4.0	721.0	5.0	809.0
13	4.3	764.7	4.0	725.0	5.0	814.0
14	4.3	769.0	4.0	729.0	5.0	819.0
15	4.3	773.3	4.0	733.0	5.0	824.0
16	4.3	777.7	4.0	737.0	5.0	829.0
17	4.3	782.0	4.0	741.0	5.0	834.0
18	4.7	786.7	4.0	745.0	5.0	839.0
19	4.7	791.3	4.0	749.0	5.0	844.0
20	4.7	796.0	4.0	753.0	5.0	849.0
21	4.7	800.7	4.0	757.0	5.0	854.0
22	4.7	805.3	4.0	761.0	5.0	859.0
23	4.7	810.0	4.0	765.0	5.0	864.0
24	4.7	814.7	4.0	769.0	5.0	869.0
25	5.0	819.7	5.0	774.0	5.0	874.0
26	5.0	824.7	5.0	779.0	5.0	879.0
27	5.0	829.7	5.0	784.0	5.0	884.0
28	5.0	834.7	5.0	789.0	5.0	889.0
29	5.0	839.7	5.0	794.0	5.0	894.0
30	5.0	844.7	5.0	799.0	5.0	899.0
31	5.0	849.7	5.0	804.0	5.0	904.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

AUGUST

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.0	854.7	5.0	809.0	5.0	909.0
2	5.0	859.7	5.0	814.0	5.0	914.0
3	5.0	864.7	5.0	819.0	5.0	919.0
4	5.0	869.7	5.0	824.0	5.0	924.0
5	5.0	874.7	5.0	829.0	5.0	929.0
6	5.0	879.7	5.0	834.0	5.0	934.0
7	5.0	884.7	5.0	839.0	5.0	939.0
8	5.2	889.9	5.0	844.0	6.0	945.0
9	5.2	895.1	5.0	849.0	6.0	951.0
10	5.2	900.3	5.0	854.0	6.0	957.0
11	5.2	905.5	5.0	859.0	6.0	963.0
12	5.2	910.7	5.0	864.0	6.0	969.0
13	5.2	915.9	5.0	869.0	6.0	975.0
14	5.2	921.1	5.0	874.0	6.0	981.0
15	5.0	926.1	5.0	879.0	5.0	986.0
16	5.0	931.1	5.0	884.0	5.0	991.0
17	5.0	936.1	5.0	889.0	5.0	996.0
18	5.0	941.1	5.0	894.0	5.0	1001.0
19	5.0	946.1	5.0	899.0	5.0	1006.0
20	5.0	951.1	5.0	904.0	5.0	1011.0
21	5.0	956.1	5.0	909.0	5.0	1016.0
22	5.0	961.1	5.0	914.0	5.0	1021.0
23	5.0	966.1	5.0	919.0	5.0	1026.0
24	5.0	971.1	5.0	924.0	5.0	1031.0
25	5.0	976.1	5.0	929.0	5.0	1036.0
26	5.0	981.1	5.0	934.0	5.0	1041.0
27	5.0	986.1	5.0	939.0	5.0	1046.0
28	5.0	991.1	5.0	944.0	5.0	1051.0
29	5.2	996.3	5.0	949.0	6.0	1057.0
30	5.2	1001.5	5.0	954.0	6.0	1063.0
31	5.2	1006.7	5.0	959.0	6.0	1069.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

SEPTEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.2	1011.9	5.0	964.0	6.0	1075.0
2	5.2	1017.1	5.0	969.0	6.0	1081.0
3	5.2	1022.3	5.0	974.0	6.0	1087.0
4	5.2	1027.5	5.0	979.0	6.0	1093.0
5	5.0	1032.5	5.0	984.0	5.0	1098.0
6	5.0	1037.5	5.0	989.0	5.0	1103.0
7	5.0	1042.5	5.0	994.0	5.0	1108.0
8	5.2	1047.7	5.0	999.0	6.0	1114.0
9	5.4	1053.1	5.0	1004.0	6.0	1120.0
10	5.4	1058.5	5.0	1009.0	6.0	1126.0
11	5.4	1063.9	5.0	1014.0	6.0	1132.0
12	5.4	1069.3	5.0	1019.0	6.0	1138.0
13	5.4	1074.7	5.0	1024.0	6.0	1144.0
14	5.4	1080.1	5.0	1029.0	6.0	1150.0
15	5.4	1085.5	5.0	1034.0	6.0	1156.0
16	5.4	1090.9	5.0	1039.0	6.0	1162.0
17	5.6	1096.5	5.0	1044.0	6.0	1168.0
18	5.6	1102.1	5.0	1049.0	6.0	1174.0
19	5.6	1107.7	5.0	1054.0	6.0	1180.0
20	5.6	1113.3	5.0	1059.0	6.0	1186.0
21	5.6	1118.9	5.0	1064.0	6.0	1192.0
22	5.6	1124.5	5.0	1069.0	6.0	1198.0
23	5.6	1130.1	5.0	1074.0	6.0	1204.0
24	5.6	1135.7	5.0	1079.0	6.0	1210.0
25	5.6	1141.3	5.0	1084.0	6.0	1216.0
26	5.6	1146.9	5.0	1089.0	6.0	1222.0
27	5.6	1152.5	5.0	1094.0	6.0	1228.0
28	5.6	1158.1	5.0	1099.0	6.0	1234.0
29	5.6	1163.7	5.0	1104.0	6.0	1240.0
30	5.6	1169.3	5.0	1109.0	6.0	1246.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

OCTOBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.6	1174.9	5.0	1114.0	6.0	1252.0
2	5.6	1180.5	5.0	1119.0	6.0	1258.0
3	5.6	1186.1	5.0	1124.0	6.0	1264.0
4	5.6	1191.7	5.0	1129.0	6.0	1270.0
5	5.6	1197.3	5.0	1134.0	6.0	1276.0
6	5.8	1203.1	5.0	1139.0	6.0	1282.0
7	5.8	1208.9	5.0	1144.0	6.0	1288.0
8	5.8	1214.7	5.0	1149.0	6.0	1294.0
9	5.8	1220.5	5.0	1154.0	6.0	1300.0
10	5.8	1226.3	5.0	1159.0	6.0	1306.0
11	5.8	1232.1	5.0	1164.0	6.0	1312.0
12	5.8	1237.9	5.0	1169.0	6.0	1318.0
13	5.8	1243.7	5.0	1174.0	6.0	1324.0
14	5.8	1249.5	5.0	1179.0	6.0	1330.0
15	5.8	1255.3	5.0	1184.0	6.0	1336.0
16	5.8	1261.1	5.0	1189.0	6.0	1342.0
17	5.8	1266.9	5.0	1194.0	6.0	1348.0
18	6.0	1272.9	5.0	1199.0	7.0	1355.0
19	6.0	1278.9	5.0	1204.0	7.0	1362.0
20	6.0	1284.9	5.0	1209.0	7.0	1369.0
21	6.0	1290.9	5.0	1214.0	7.0	1376.0
22	6.0	1296.9	5.0	1219.0	7.0	1383.0
23	6.0	1302.9	5.0	1224.0	7.0	1390.0
24	6.0	1308.9	5.0	1229.0	7.0	1397.0
25	5.8	1314.7	5.0	1234.0	6.0	1403.0
26	5.8	1320.5	5.0	1239.0	6.0	1409.0
27	5.8	1326.3	5.0	1244.0	6.0	1415.0
28	5.8	1332.1	5.0	1249.0	6.0	1421.0
29	5.8	1337.9	5.0	1254.0	6.0	1427.0
30	5.8	1343.7	5.0	1259.0	6.0	1433.0
31	5.8	1349.5	5.0	1264.0	6.0	1439.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

NOVEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.8	1355.3	5.0	1269.0	6.0	1445.0
2	5.8	1361.1	5.0	1274.0	6.0	1451.0
3	5.8	1366.9	5.0	1279.0	6.0	1457.0
4	5.8	1372.7	5.0	1284.0	6.0	1463.0
5	5.6	1378.3	5.0	1289.0	6.0	1469.0
6	5.6	1383.9	5.0	1294.0	6.0	1475.0
7	5.6	1389.5	5.0	1299.0	6.0	1481.0
8	5.6	1395.1	5.0	1304.0	6.0	1487.0
9	5.8	1400.9	5.0	1309.0	6.0	1493.0
10	5.8	1406.7	5.0	1314.0	6.0	1499.0
11	5.8	1412.5	5.0	1319.0	6.0	1505.0
12	5.6	1418.1	5.0	1324.0	6.0	1511.0
13	5.6	1423.7	5.0	1329.0	6.0	1517.0
14	5.6	1429.3	5.0	1334.0	6.0	1523.0
15	5.6	1434.9	5.0	1339.0	6.0	1529.0
16	5.6	1440.5	5.0	1344.0	6.0	1535.0
17	5.4	1445.9	5.0	1349.0	6.0	1541.0
18	5.4	1451.3	5.0	1354.0	6.0	1547.0
19	5.4	1456.7	5.0	1359.0	6.0	1553.0
20	5.4	1462.1	5.0	1364.0	6.0	1559.0
21	5.2	1467.3	5.0	1369.0	6.0	1565.0
22	5.2	1472.5	5.0	1374.0	6.0	1571.0
23	5.0	1477.5	5.0	1379.0	5.0	1576.0
24	5.0	1482.5	5.0	1384.0	5.0	1581.0
25	5.0	1487.5	5.0	1389.0	5.0	1586.0
26	5.0	1492.5	5.0	1394.0	5.0	1591.0
27	5.0	1497.5	5.0	1399.0	5.0	1596.0
28	5.0	1502.5	5.0	1404.0	5.0	1601.0
29	5.0	1507.5	5.0	1409.0	5.0	1606.0
30	5.0	1512.5	5.0	1414.0	5.0	1611.0

TABLE 9 (CONT.). SNETTISHAM HATCHERY TEMPERATURE DATA
SUMMARY OF AVERAGE, MINIMAL AND MAXIMAL DAILY TEMPERATURE
AND CUMULATIVE AVERAGE, MINIMAL AND MAXIMAL
TEMPERATURE UNITS, IN DEGREES CELSIUS, 1979 THROUGH 1983

DECEMBER

DAY	AVERAGE TEMPERATURE	CUMULATIVE AVERAGE TEMPERATURE UNITS	MINIMAL TEMPERATURE	CUMULATIVE MINIMAL TEMPERATURE UNITS	MAXIMAL TEMPERATURE	CUMULATIVE MAXIMAL TEMPERATURE UNITS
1	5.0	1517.5	5.0	1419.0	5.0	1616.0
2	5.0	1522.5	5.0	1424.0	5.0	1621.0
3	5.0	1527.5	5.0	1429.0	5.0	1626.0
4	4.8	1532.3	4.0	1433.0	5.0	1631.0
5	4.8	1537.1	4.0	1437.0	5.0	1636.0
6	4.8	1541.9	4.0	1441.0	5.0	1641.0
7	4.8	1546.7	4.0	1445.0	5.0	1646.0
8	4.6	1551.3	4.0	1449.0	5.0	1651.0
9	4.6	1555.9	4.0	1453.0	5.0	1656.0
10	4.6	1560.5	4.0	1457.0	5.0	1661.0
11	4.8	1565.3	4.0	1461.0	5.0	1666.0
12	4.8	1570.1	4.0	1465.0	5.0	1671.0
13	4.8	1574.9	4.0	1469.0	5.0	1676.0
14	4.2	1579.1	4.0	1473.0	5.0	1681.0
15	4.2	1583.3	4.0	1477.0	5.0	1686.0
16	4.0	1587.3	4.0	1481.0	4.0	1690.0
17	4.0	1591.3	4.0	1485.0	4.0	1694.0
18	4.0	1595.3	4.0	1489.0	4.0	1698.0
19	4.0	1599.3	4.0	1493.0	4.0	1702.0
20	4.0	1603.3	4.0	1497.0	4.0	1706.0
21	4.0	1607.3	4.0	1501.0	4.0	1710.0
22	4.0	1611.3	4.0	1505.0	4.0	1714.0
23	4.0	1615.3	4.0	1509.0	4.0	1718.0
24	4.0	1619.3	4.0	1513.0	4.0	1722.0
25	4.0	1623.3	4.0	1517.0	4.0	1726.0
26	4.0	1627.3	4.0	1521.0	4.0	1730.0
27	4.0	1631.3	4.0	1525.0	4.0	1734.0
28	4.0	1635.3	4.0	1529.0	4.0	1738.0
29	4.0	1639.3	4.0	1533.0	4.0	1742.0
30	4.0	1643.3	4.0	1537.0	4.0	1746.0
31	4.0	1647.3	4.0	1541.0	4.0	1750.0

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