F I S H E R I E S R E S E A R C H B O A R D

O F C A N A D A

Manuscript Reports of Great Slave Lake Investigation

No. 1

MANUSCRIPT REPORTS OF THE BIOLOGICAL STATIONS

No. 487

Title

A study of the commercial fishery of Great Slave Lake, N.W.T., during the summer season of 1948 with a revision of 1945, 1946 and 1947 data

Author

W. A. Kennedy

Central Fisheries Research Station

FISHERIES RESEARCH BOARD OF CANADA

MANUSCRIPT REPORTS OF THE BIOLOGICAL STATIONS

No.

487

Title

A study of the commercial fishery of Great Slave Lake, N.W.T.,
during the summer season 1948
with a revision of 1945, 1946 and 1947 data

Author

W. A. Kennedy
Central Fisheries Research Station

October, 1950

INTRODUCTION

A study of the commercial fishery in Great Slave Lake which was reported on in 1946 and 1947 was continued. Lake trout, Cristivomer namaycush, and lake whitefish, Coregonus clupeaformis, were the principle species involved, although appreciable numbers of inconnu, Stenodus leucichthys mackenzii, and a few yellow pike-perch, Stizostedion vitreum, were also sold.

The fishing methods remained the same as those reported in 1946. Since the 1946 and 1947 reports were issued, some minor changes have been made in the methods of analysing and presenting the data. Also some of the boundaries of the areas into which the lake has been arbitrarily divided for statistical purposes have been changed slightly, and the whole lake has been subdivided. There have been minor changes in the factors used to convert various values to round weights of fish, and in the conversion factors used in connection with fishing effort.

In view of these changes, the 1945, 1946 and 1947 data have been revised, and are presented in Appendix 1. The revisions actually are slight and do not invalidate previously expressed conclusions. Details of the revised subdivisions of the lake are given in Appendix II. Appendix II includes calculated areas and a calculated volume of water for Great Slave Lake which are different from, and probably more accurate than, previously published estimates of area. Appendix III shows the various conversion factors used in analysing the data.

In August, 1948, a road was completed which connects the settlement of Hay River - which has a harbour on Great Slave Lake - to the railway at Peace River, Alberta. Although this event had little effect on the fishery in 1948, it opened the way for considerable development by solving a major transportation problem.

ACKNOWLEDGEMENTS

My able assistants, F. M. Atton (in charge), T. K. Goodhand, and L. C. Hewson collected most of the data presented here. The excellent cooperation from the fishermen and from McInnes Products Corporation Limited is greatly appreciated.

SIZE COMPOSTION OF THE CATCH

Commercial fish taken at random from the catch were weighed individually on small spring scales by Fisheries Research Board personnel. All the weights representing a given statistical subdivision for a given half month are together regarded as a sample. As far as possible each sample consisted of several subsamples to represent different parts of the statistical subdivisions and different days, since average size is known to vary significantly from one day to the next at a particular place and from place to place within a statistical subdivision on any given day.

The subsamples were taken at random from the catch and generally consisted of several randomly selected boxes of fish in

the case of trout, or one randomly selected box of fish in the case of whitefish, or all the individual fish taken by one or more fishermen in the case of inconnu. Care was taken to avoid using boxes in which the fish had been deliberately or inadvertently selected for size. Since trout weighing eight pounds or more generally had the head removed in dressing, while those weighing less generally did not, and since the "headless" trout were weighed separately from the others, a system of representatively sampling each kind was required to produce a sample which would be random for size distribution.

All lake trout and some whitefish and inconnu were dressed before they became available for sampling. The weights of the dressed fish were recorded, and these values were later converted individually to round weights by use of the first four values of Table 72, Appendix III. The size distribution of a sample after conversion is presumably approximately the same as the size distribution would be if the round weights could be recorded as the fish came from the nets.

Lake trout

A total of 4,721 lake trout (41,440 pounds) were weighed in 62 subsamples. The average weight in each sample with its standard error is shown in Table I. The frequency distribution of weights in the various samples are shown in Table 2. Corresponding data for 1945 are shown in Tables 23 and 24, for 1946 in Tables 28 and 29 and for 1947 in Tables 49 and 50.

There was a tendency for lake trout from the more westerly of the the grounds, and a tendency for fish caught early in the season to be larger than those caught later. These tendencies also appeared in 1946 and 1947. There has been no consistent tendency for average weight to decrease or to increase between 1945 and 1948.

Whitefish

A total of 4,623 whitefish (15,102 pounds) were weighed in 57 subsamples. The average weight in each subsample with its standard error is shown in Table 3. The frequency distributions in the various samples are shown in Table 4. Corresponding data for 1945 are shown in Tables 25 and 26, for 1946 in Tables 30 and 31 and for 1947 in Tables 51 and 52.

As in 1946 and 1947, whitefish from the more easterly of the grounds fished tended to be slightly larger than those from the more westerly grounds, and there was no apparent change in average size during the fishing season. There has been no consistent tendency for average weight to decrease or to increase between 1945 and 1948.

Inconnu

A total of 368 inconnu (3,709 pounds) were weighed in 12 subsamples. The average weight in each sample with its standard error is shown in Table 5. The frequency distribtuions in the

various samples are shown in Table 6. Corresponding data for 1946 are shown in Tables 32 and 33 and for 1947 in Tables 53 and 54. The samples are too small to indicate possible trends related to time or place. There has been no consistent tendency for a change in average weight between 1945 and 1948.

CATCH

Commercial fish

Most of the commercial fish removed from the lake by commercial fishermen were bought by the McInnes Products Corporation Limited, and catches recorded here are based on the weights recorded by this company. All these weights were converted to round weights by using the factors given in Table 72. The factors used include the allowance for "shrinkage" that was deducted by the buyers before the weights were recorded. The converted weights represent the best estimate of the original round weights of all fish which were bought.

Each fisherman was interviewed daily and was asked to make an estimate of the quantity of fish which was caught but not bought (fish used by the fishermen or discarded because of poor quality or for other reasons). Where necessary, the estimates have been converted to round weights by using the conversion factors given in Table 72. These estimated round weights of fish which were caught but not bought were added to the calculated round weights of the fish that were bought to give the round weights

of fish caught at various times and places. Tables 8, 9, 10 and 11 show these values.

Table 7 shows that proportion of the estimated total catch was actually landed (bought) and what proportion is based on fishermen's estimates. It also indicates that - as opposed to 1946 and 1947, for which similar data are shown in Tables 34 and 55 respectively - no fish were landed by fishermen other than those interviewed.

To the best of our knowledge in 1948 all the fishermen were interviewed daily. Total catch for each half month as calculated from our data coincides with similar totals from the report of the Fisheries Officer at Gros Cap when both sets of figures are similarly treated. In 1946 and 1947, however, it was not always possible to interview all the fishermen every day. The catch analyses given in Tables 35, 36, 37 and 38 for 1946 and in Tables 56, 57, 58 and 59 for 1947 have therefore been further corrected as follows: the Fisheries Officer's report was used to estimate the original round weight of total landings by half months. The difference between these totals, and the corresponding totals based on catches by fishermen who were interviewed must be the amount of fish landed by fishermen who were not interviewed. The proportion of this total which was taken in each area was estimated, and added to the observed catch of each area. An estimate of the most likely amount which would have been caught but not landed was also added. The extent of

these corrections are indicated in Tables 34 and 44. In 1946 "headless" and dressed trout were weighed together. The ratios between quantities of "headless" and of dressed trout at given times and places in 1947 were used to convert these combined weights for 1946 to estimated round weights of trout as caught.

About 2,293,000 pounds of commercial fish were taken by the fishermen based at Gros Cap in 1948, slightly less than in 1947 and appreciably less than in 1946. (See discussion of this decline on page 13). Of this amount about 60 per cent was trout, 27 per cent whitefish, and 3 per cent inconnu. About 1,000 pounds of pike-perch were also bought (for the first time at Gros Cap) out of an estimated total of about 1,600 pounds caught. They are included among the weights of rough fish given below.

About 200,000 pounds of commercial fish were landed at the settlement of Hay River after the road was opened in August, probably mostly from Area A. Of this amount about 32 per cent was trout, 65 per cent whitefish, 1 per cent inconnu and 2 per cent pike-perch.

From the lake as a whole about 1,418,000 pounds of trout, 975,000 pounds of whitefish 94,000 pounds of inconnu and 4,000 pounds of pike-perch were taken by commercial fishermen during the summer season of 1948.

The short-weight question

The fishermen often complain that the buyer records considerably less fish than he receives. This is an important matter since the weights recorded by the buyer are the basis of the calculations used in this paper. Fortunately the report of the Fisheries Officer for 1948 contains pertinent information on this point since it shows the weights for which the fishermen were paid, and the weights of the finished product after processing. Both series of weights are based on the buyer's records, but the weights of the finished products as recorded have been found to correspond satisfactorily with the sum of the weights shown on the packages containing the finished product whenever this has been checked. Since the latter is the basis on which the company will be paid, it is unlikely that it is falsefied. Therefore, the recorded weight of the finished product is probably accurate.

If the values given in the Fisheries Officer's report are converted to round weight by the conversion factors given in Table 72, and assuming that fillets (mostly whitefish fillets in this case) represent 45 per cent of the weight of freshly caught fish, then the values given in Table 12 can be derived. Table 60 shows similar data based on the Fisheries Officer's report for 1947. Considering the various sources of error involved in converting weights these data do not suggest the need for adjusting the estimated catches to take account of possible dishonesty on the part of the buyer.

Rough fish

At the daily interviews fishermen were asked to estimate their catch of rough fish. Appropriate factors from Table 72 have been used to convert these estimates to round weights. Where necessary the estimates of reliable fishermen who reported on rough fish were used to correct the totals for the cases where the interviewer neglected to get the data, and cases where the estimates given were considered to be grossly unreliable. The following rough fish were recorded: cisco (locally known as tullibee) Leucichthys spp., burbot, Lota lota, pike, Esox lucius, black whitefish, Coregonus clupeaformis (the characteristics which make them undesirable commercially are considered to be the result of environment), suckers (almost entirely longnose suckers, Catostomus catostomus, but sometimes a few white suckers, Catostomus commersonnii), yellow pike-perch, Stizostedion vitreum vitreum, American grayling, Thymallus signifer, and round whitefish, Prosopium cylindraceum quadrilaterale.

The estimated weights of rough fish caught in 1948 are shown in Table 13. Tables 39 and 61 show similar estimated weights of rough fish in 1946 and 1947.

The quantity of rough fish caught increased from 1946 to 1947 and again from 1947 to 1948. In each case burbot have accounted for a large part of the increase. This increase is being watched with interest.

FISHING EFFORT

The natural unit of fishing effort in Great Slave Lake is the effort of one gill net - 100 yards in length of 30/6 or 36/6 cotton web, 5½-inch mesh, 30 meshes deep - for one night, since, in general, the nets are cleared of fish daily. However, sometimes nets are left for two or more nights without being cleared. It is comparable with the fishing effort for nets that are cleared daily. Since it is an established fact that doubling the fishing time does not double the catch, the fishing efforts cannot be made comparable simply by multiplying the number of nets by the number of days since they were last cleared.

Factors are given in Tables 73 to 83 inclusive, Appendix III by which the number of nets can be multiplied to give a value for fishing effort that will be comparable with the fishing effort exerted by nets that are cleared daily. The sum of the products of the number of nets times these factors is referred to in this paper as the effort in "equivalent net-nights", and equivalent net-nights are defined as such a sum. The basis of Tables 73 to 83 inclusive, and how to use them is explained in Appendix III. The number of equivalent net-nights is essentially the effort in net-nights that would be required to produce the same catch if the nets were cleared daily.

Table 14 shows the fishing efforts in Great Slave Lake for 1948. Similar data are shown for 1946 in Table 40 and for 1947 in Table 62.

AVAILABILITY

In this paper availability is defined as the catch in pounds round weight produced per unit of fishing effort in equivalent net-nights. Presumably availability is related to abundance, although the relationship is probably not linear. Tables 15, 16, 17 and 18 show respectively the availabilities of lake trout, whitefish, inconnu and of the three species combined in 1948.

There was an overall tendency for availability to increase with an increased distance from the fishing station at Gros Cap. Superimposed on this tendency was a tendency for lake trout to increase in abundance from west to east. The availabilities of inconnu were generally low, but occasionally concentrations occurred, probably in connection with pre-spawning behaviour. There was a slight tendency for the availability of lake trout to increase and for the availability of whitefish to decrease throughout the season.

Table 27 shows availabilities for the short time that data were recorded in 1945. Tables 41, 42, 43, and 44 show availabilities for 1946 and Tables 63, 64, 65 and 66 for 1947. The observations regarding changes in availability within a single year are essentially the same for the years 1946 and 1947 as for 1948.

There has been little change since 1945 in the availability at a particular time and place. The increase in overall availability has resulted mostly from the expending of a greater

proportion of the fishing effort on fishing grounds where the availability is consistently high.

As noted in a previous report (1947) Area H has always had the lowest availability, Areas G and K have always had higher availabilities and Areas E, F and M have always had the highest availabilities of the grounds fished previous to 1948. The increase in availability with an increase in distance from the fishing station at Gros Cap would lead to the erroneous impression that there had been over-exploitation, if these facts were not known. The early records show that within each subdivision availabilities decreased about 25 per cent within a short time after exploitation began, after which they remained relatively unchanged. The factors which determined the original availabilities appear to have been more important than exploitation in fixing present availabilities.

Tables 19, 20 and 21 show the respective availabilities of lake trout, whitefish, and of lake trout, whitefish, and inconnu combined, where only records from nets that were cleared daily were used in making the calculations. The effort is, of course, net-nights rather than equivalent net-nights. Tables 45, 46 and 47 show similar data for 1946 and Tables 67, 68, and 69 those fro 1947. The 1945 data given in Table 27 are based entirely on nets that were cleared daily.

Comparisons of the availabilities based on nets which are cleared daily with availabilities based on equivalent net-nights, show that the former tend to have lower values than the latter,

especially for lake trout. This tendency could be interpreted to mean that the factors which were used in calculating the effort in equivalent net-nights were incorrect. However, two characteristics of the fishery offer a satisfactory alternative explanation. First, for a given time and place, the availability seems to be related to weather conditions, particularly wind velocity and direction. A series of calm days gnerally results in comparatively low catches, while moderate winds improve fishing. Most fishermen will clear their nets daily when calm weather prevails, but after a series of days, many will taken even a moderate wind as an excuse to take a rest, since they normally work seven days a weeks for twelve or more hours per day. It is obvious how the availabilities in nets that are cleared daily can be consistently lower than in nets that are not. In Area K where most of the fishing grounds are sheltered from the prevailing (easterly) winds, the discrepancies between availabilities are negligible while in Area E which is the area most exposed to the prevailing winds the discrepancies are most apparent. The second factor applies to the fishing grounds which are farthest from the fishing station, that is Areas E and M. It is almost impossible to clear the nets daily when they are set on these grounds because of the distances involved. Generally a fisherman who moves his nets will reach these grounds late in the day, set his nets, then early the following morning clear them and take in his fish. Perhaps he will get back within 24 hours the

first time, but within one or two days he will begin making the trip every other day or less often, otherwise he would get no sleep and few substantial meals. After a few lifts he will generally move his nets closer to the fishing station. Often after a week or two he will again move his nets to distant fishing grounds, and the cycle will be repeated. For these grounds a large proportion of the catches used in calculating availabilities based on nets cleared daily will actually come from nets which are only in the water for six to eight hours, and the resulting availabilities will, of course, not compare favourably with those based on the majority of the cases where the nets are cleared after two or more nights.

Availabilities based on equivalent net-nights are therefore probably more representative of the true situation than availabilities based only on nets which are cleared daily, however, it does seem advisable to record the latter. Comparisons of these among themselves lead to the same conclusions as the comparisons made above among the availabilities based on equivalent net-nights.

DISCUSSION OF DIMINISHING ANNUAL CATCHES

Taking into account the percentage of fishermen who were not interviewed in 1946 and 1947, the effort in 1948 was 94 per cent of the effort in 1947 and 76 per cent of the effort in 1946. In spite of an overall increase in availability, the total catch in 1948 was only about 97 per cent of the total catch in 1947 and 83 per cent of the total catch in 1946.

When the fishermen first came to Great Slave Lake they had the idea that since the lake had never been exploited before, catches should be remarkable. In 1945 and 1946 when the catches on the grounds nearest to Gros Cap failed to meet their expectations, they went farther afield. Some of the most distant grounds did produce remarkable catches, but the trip to them was so long that it was not possible to clear the nets daily, nor was it possible to endure for long the lack of sleep and substantial meals entailed in these long runs, even when the nets were cleared on alternate days. After about a week they would generally put their nets on the druing racks and catch up on sleep. During a ten day period the nets would be left out of the water for a night or two, where as they would have been in the water for the whole ten days if the fishing had been done nearer to Gros Cap. More important still at the availabilities prevailing on the more distant grounds, almost all the fish that can be caught are caught during the first night and very few additional fish the second night (the factor for getting effort in equivalent net-nights is close to 1.0). Further, many fishermen found it necessary to fish considerably less than the usual number of nets on the more remote grounds. The average fishing effort that is exerted on the more remote grounds is probably only one-half the fishing effort that could be exerted by the same men and equipment near the fishing station. Therefore, although there was a slight increase in the number of boat days from 1946 to 1948, the decrease in fishing effort during that time is not surprising.

McInnes Products Corp. Ltd. was interested primarily in handling lake trout. They regarded the whitefish and inconnu which were caught with the trout as definitely less desirable, almost a nuisance. They encouraged the fishermen to go further afield to those grounds where the proportion of trout to whitefish was greater than on the grounds closer to Gros Cap. They succeeded in slightly increasing the proportion of lake trout taken, but the actual production of lake trout decreased. Thus the paradox that the fishermen caught less fish by going to the most productive fishing grounds, and the buyer got less trout by encouraging the fishermen to fish where lake trout were relatively most abundant.

DEPTHS FISHED

When a fisherman was interviewed he was asked to estimate roughly the depths at which he fished. He generally gave a range of depths within which his nets were set, and range of depths rather than average depth seems to be the best way in which to express these data. The complete range in which nets were set during a certain time period within a specific area might be misleading because of unusual cases exploratory in nature. Therefore in preparing Table 22 which shows ranges in depths, some of the lowest and highest values have been disregarded. Similar data for 1946 and 1947 are shown in Tables 48 and 70.

The values shown in these tables are derived as follows: All the minimum depths recorded for a particular time and place were arranged in order of magnitude. The lowest 20 per cent of these values were eliminated and the lowest value then remaining was tablulated as the minimum value. The maximum depths recorded were eliminated and the highest value then remaining was tabulated as the maximum value. Cases which involved less than ten interviews are not recorded.

RELATED DATA

Scales have been collected from random samples of commercial fish. The ages of these fish are now being determined. It will probably take two or three years to bring them up to date. A preliminary analysis indicates no change in average age, and no change in total mortality rate of whitefish since fishing began.

Fish tags that were attached in 1946 and 1947 are still being returned. These data will be analysed when returns become negligible. A preliminary analysis indicates that lake trout move a good deal, while whitefish move very little.

Meteorological data have been collected daily at Gros Cap. Limnological data have been collected weekly at one station. Eventually an attempt will be made to relate these data to the availability of fish.

SUMMARY

1. The 1945, 1946 and 1947 data are revised, and the 1948 data are here recorded.

2. The fish populations that are exploited by the commercial fishery are showing no signs of appreciable changes in average size or in availability.

3. The difficulties encountered in exploiting the more productive grounds that are now favoured have so decreased the effective fihsing effort, that in spite of better catches per unit of effort, the total annual production has decreased.

4. The total area of Great Slave Lake has been determined by a more accurate method than was formerly used, as about 11,070 square miles, of which islands make up about 640 square miles, and water about 10,430 square miles. The total volume is about 50,000,000,000,000 cubic feet.

RECOMMENDATIONS

To the Fisheries Research Board and

To the Fisheries Department

The necessary recommendations have already been made on the basis of a preliminary analysis of these data, and have been acted upon.

To the Fishing Industry

The daily catch on Great Slave Lake could be considerably increased by having the fishing boats based nearer to the best fishing grounds so that nets could be cleared daily.

Table I. The average size of lake trout in pounds round weight and its standard error in samples taken at random from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1948. The number of fish in each sample is shown in brackets.

Area	June 16-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	-	10.9±0.4 (165)	12.2±0.2 (366)	-	-	-
F	-	9.3±0.5 (136)	9.1±0.3 (261)	-	5.6±0.2 (110)	4.9±0.1 (84)
G	11.7±0.6 (92)	10.4±0.6 (79)	-	7.5±0.4 (104)	-	5.1±0.03 (172)
H	9.0±0.5 (91)	9.6±0.3 (262)	8.8±0.4 (112)	8.2±0.3 (93)	8.9±0.3 (248)	7.0±0.5 (32)
K	8.6±0.8 (67)	11.6±0.4 (243)	7.9±0.4 (91)	7.8±0.2 (269)	7.5±0.2 (180)	7.4±0.4 (135)
L	-	-	-	7.0±0.2 (280)	-	-
M	-	9.9±0.4 (153)	7.6±0.5 (76)	9.0±0.3 (301)	8.5±0.3 (267)	7.3±0.2 (252)

Table II. The frequency distribution of round weights of lake trout in samples taken at random from the fish landed by commercial fishermen from Great Slave Lake during the summer of 1948.

Wt. in lbs.	Area E		Area F				Area G			
	July 1-15	July 16-31	July 1-15	July 16-31	Aug. 16-31	Sept. 1-15	June 15-30	July 1-15	Aug. 1-15	Sept. 1-15
2	1	1	-	-	1	-	-	-	-	-
3	1	2	1	1	4	3	-	1	-	25
4	9	9	6	10	30	40	4	10	1	54
5	18	43	20	37	35	22	10	10	19	53
6	17	35	25	73	14	9	15	9	41	21
7	10	33	31	40	7	7	3	5	22	10
8	6	13	11	15	10	2	5	2	6	0
9	13	22	4	10	2	0	3	5	5	0
10	10	21	4	9	3	1	3	1	0	2
11	11	9	4	5	1	-	8	1	1	1
12	10	25	1	6	1	-	4	6	1	2
13	6	17	4	6	1	-	4	5	0	1
14	11	18	2	8	1	-	4	4	0	1
15	7	9	2	4	-	-	4	1	1	1
16	13	16	1	6	-	-	6	6	0	0
17	6	11	3	3	-	-	2	3	1	0
18	2	15	1	6	-	-	4	3	1	0
19	3	11	2	4	-	-	2	2	1	0
20	3	13	3	6	-	-	1	0	0	0
21	0	7	3	2	-	-	2	2	0	1
22	0	6	3	5	-	-	1	1	0	-
23	2	5	1	0	-	-	1	0	1	-
24	3	7	1	0	-	-	2	1	2	-
25	2	6	1	1	-	-	3	1	1	-
26	0	2	0	0	-	-	0	-	-	-
27	0	4	1	1	-	-	0	-	-	-
28	0	1	0	2	-	-	0	-	-	-
29	1	2	0	0	-	-	0	-	-	-
30	-	2	0	0	-	-	0	-	-	-
31	-	0	0	0	-	-	1	-	-	-
32	-	0	1	0	-	-	-	-	-	-
33	-	0	-	0	-	-	-	-	-	-
34	-	0	-	1	-	-	-	-	-	-
35	-	1	-	-	-	-	-	-	-	-
36	-	-	-	-	-	-	-	-	-	-
37	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-	-	-	-

Table II. (Cont'd.)

Wt. in lbs.	Area H						Area K					
	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	June 16-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
2	-	1	1	-	-	-	-	-	-	-	-	-
3	1	5	2	-	1	3	-	-	2	1	2	-
4	5	21	4	1	5	5	4	3	4	8	15	6
5	14	38	8	11	27	6	17	8	12	42	34	22
6	14	39	17	21	48	3	12	27	19	47	29	30
7	11	27	18	12	37	1	9	24	17	54	23	37
8	10	19	15	13	24	4	4	34	15	38	25	20
9	6	11	14	8	21	4	4	15	2	26	12	7
10	7	10	6	8	22	1	4	26	6	17	17	3
11	3	12	5	7	17	1	3	19	4	15	8	0
12	4	15	8	6	9	2	1	19	2	2	9	3
13	2	9	1	2	7	2	2	5	3	5	0	0
14	1	8	2	2	6	-	1	13	0	2	2	1
15	1	6	1	0	2	-	0	1	0	2	0	1
16	2	8	1	0	3	-	0	4	0	2	1	1
17	3	6	5	0	4	-	1	6	2	3	0	1
18	2	2	2	1	5	-	0	7	1	2	1	0
19	3	2	0	1	3	-	1	7	0	1	0	0
20	0	4	1	-	1	-	1	3	0	0	1	0
21	0	4	1	-	3	-	1	3	0	0	0	1
22	1	6	-	-	2	-	0	5	0	2	0	1
23	0	2	-	-	1	-	1	1	0	-	0	0
24	0	2	-	-	-	-	0	2	1	-	0	0
25	0	3	-	-	-	-	0	1	0	-	0	0
26	0	0	-	-	-	-	0	0	1	-	1	0
27	0	1	-	-	-	-	0	2	-	-	-	1
28	0	0	-	-	-	-	0	3	-	-	-	-
29	1	0	-	-	-	-	0	0	-	-	-	-
30	-	1	-	-	-	-	0	3	-	-	-	-
31	-	-	-	-	-	-	0	0	-	-	-	-
32	-	-	-	-	-	-	0	0	-	-	-	-
33	-	-	-	-	-	-	0	0	-	-	-	-
34	-	-	-	-	-	-	0	0	-	-	-	-
35	-	-	-	-	-	-	0	1	-	-	-	-
36	-	-	-	-	-	-	0	0	-	-	-	-
37	-	-	-	-	-	-	0	0	-	-	-	-
38	-	-	-	-	-	-	0	0	-	-	-	-
42	-	-	-	-	-	-	0	1	-	-	-	-
49	-	-	-	-	-	-	1	-	-	-	-	-

Table II. (Cont'd.)

Wt. in lbs.	Area L Aug. 1-15	July 1-15	July 16-31	Area M Aug. 1-15	Aug. 16-31	Sept. 1-15
2	1	-	-	-	-	2
3	1	3	-	2	2	4
4	19	8	4	10	15	14
5	68	21	19	37	51	49
6	67	26	19	56	49	52
7	50	30	10	47	44	38
8	25	7	5	27	16	34
9	16	12	2	25	10	15
10	7	8	4	25	11	19
11	5	5	2	14	14	8
12	7	2	2	5	8	4
13	0	2	3	6	8	7
14	5	2	3	7	12	1
15	0	3	2	10	3	0
16	3	2	0	6	4	0
17	3	6	0	3	5	1
18	0	1	0	4	6	0
19	1	0	0	3	2	2
20	1	5	0	4	3	0
21	0	2	0	2	1	0
22	0	1	0	4	0	0
23	1	0	0	0	1	2
24	-	2	0	3	0	-
25	-	1	0	0	2	-
26	-	1	0	0	-	-
27	-	0	0	0	-	-
28	-	1	0	0	-	-
29	-	1	0	0	-	-
30	-	0	1	0	-	-
31	-	1	-	0	-	-
32	-	-	-	0	-	-
33	-	-	-	0	-	-
34	-	-	-	0	-	-
35	-	-	-	0	-	-
36	-	-	-	0	-	-
37	-	-	-	0	-	-
38	-	-	-	1	-	-
42	-	-	-	-	-	-
49	-	-	-	-	-	-

Table III. The average size of whitefish in pounds round weight and its standard error in samples taken at random from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1948. The number of fish in each sample is shown in brackets.

Area	June 16-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	-	2.8±0.05 (150)	3.0±0.03 (308)	-	-	-
F	-	2.8±0.05 (170)	2.9±0.03 (252)	-	-	3.3±0.09 (88)
G	-	2.7±0.02 (370)	-	2.7±0.03 (160)	2.7±0.03 (255)	3.0±0.04 (262)
H	-	2.8±0.06 (101)	3.1±0.08 (103)	3.1±0.08 (116)	3.2±0.07 (250)	-
K	3.4±0.08 (73)	3.5±0.04 (199)	4.2±0.11 (131)	3.6±0.07 (264)	5.0±0.13 (126)	3.1±0.05 (263)
L	-	-	-	3.3±0.04 (234)	-	-
M	-	-	2.9±0.06 (65)	3.9±0.08 (300)	4.0±0.09 (227)	4.5±0.13 (151)

Table IV. The frequency distribution of round weights of whitefish in samples taken at random from the fish landed by commercial fishermen from Great Slave Lake during the summer of 1948.

Wt. in lbs.	Area E		Area F			Area G			
	July 1-15	July 16-31	July 1-15	July 16-31	Sept. 1-15	July 1-15	Aug. 1-15	Aug. 16-31	Sept. 1-15
1	-	-	-	-	-	-	1	-	-
1½	-	-	-	-	-	-	0	-	-
1½	-	-	-	-	-	-	0	-	-
1¾	1	-	-	-	-	5	0	1	1
2	11	10	8	9	6	26	6	16	10
2¼	22	24	20	26	4	72	20	45	32
2½	31	67	46	64	13	91	47	79	37
2¾	19	60	31	45	6	78	34	39	40
3	29	48	30	41	11	49	24	31	41
3¼	13	40	23	30	3	30	20	18	35
3½	8	20	6	12	12	10	3	13	25
3¾	7	13	2	10	7	4	1	5	13
4	4	12	3	7	12	3	4	5	8
4¼	2	3	0	5	1	1	-	0	7
4½	1	6	0	1	7	0	-	1	10
4¾	1	1	0	2	3	0	-	1	1
5	1	2	0	-	3	1	-	1	1
5¼	-	1	1	-	-	-	-	-	1
5½	-	0	-	-	-	-	-	-	-
5¾	-	0	-	-	-	-	-	-	-
6	-	1	-	-	-	-	-	-	-
6¼	-	-	-	-	-	-	-	-	-
6½	-	-	-	-	-	-	-	-	-
6¾	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-
7¼	-	-	-	-	-	-	-	-	-
7½	-	-	-	-	-	-	-	-	-
7¾	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-
8¼	-	-	-	-	-	-	-	-	-
8½	-	-	-	-	-	-	-	-	-
8¾	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-
9¼	-	-	-	-	-	-	-	-	-
9½	-	-	-	-	-	-	-	-	-
9¾	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-
10¼	-	-	-	-	-	-	-	-	-
11½	-	-	-	-	-	-	-	-	-

Table IV. (Cont'd.)

Wt. in lbs.	Area H July 1-15	Area H July 16-31	Area H Aug. 1-15	Area H Aug. 16-31	Area K June 15-30	Area K July 1-15	Area K July 16-31	Area K Aug. 1-15	Area K Aug. 16-31	Area K Sept. 1-15
1	-	-	-	-	-	-	-	-	-	-
1½	-	-	-	-	-	-	-	-	-	-
1¾	-	-	-	-	-	-	-	-	-	-
1¾	1	1	1	2	-	-	-	-	-	2
2	6	10	7	5	3	-	1	1	3	8
2¼	19	10	10	27	2	4	1	15	0	20
2½	26	16	21	40	2	11	3	27	6	48
2¾	18	16	15	31	8	27	5	34	5	36
3	7	11	14	31	11	21	11	28	4	41
3¼	10	5	12	30	13	30	18	39	5	28
3½	5	8	18	24	10	36	10	15	6	19
3¾	2	6	5	19	11	19	11	16	3	24
4	3	8	4	12	4	22	16	22	5	9
4¼	1	4	2	5	4	13	6	15	5	11
4½	1	2	2	6	1	8	12	10	10	2
4¾	1	2	2	2	1	5	4	9	4	3
5	0	2	1	4	2	1	7	11	14	5
5¼	1	2	0	3	0	1	4	2	8	3
5½	-	-	0	3	0	1	3	4	9	1
5¾	-	-	0	0	0	-	3	2	6	0
6	-	-	0	1	1	-	6	3	9	0
6¼	-	-	0	0	-	-	2	3	4	0
6½	-	-	1	2	-	-	4	2	3	2
6¾	-	-	1	0	-	-	0	1	5	0
7	-	-	-	0	-	-	1	1	3	1
7¼	-	-	-	0	-	-	0	1	3	-
7½	-	-	-	1	-	-	1	1	2	-
7¾	-	-	-	1	-	-	0	0	1	-
8	-	-	-	0	-	-	1	0	0	-
8¼	-	-	-	0	-	-	0	0	0	-
8½	-	-	-	0	-	-	0	2	1	-
8¾	-	-	-	0	-	-	0	-	1	-
9	-	-	-	0	-	-	0	-	0	-
9¼	-	-	-	0	-	-	0	-	1	-
9½	-	-	-	0	-	-	1	-	-	-
9¾	-	-	-	0	-	-	-	-	-	-
10	-	-	-	0	-	-	-	-	-	-
10¾	-	-	-	1	-	-	-	-	-	-
11½	-	-	-	-	-	-	-	-	-	-

Table IV. (Cont'd.)

Wt. in lbs.	Area L Aug. 1-15	July 16-31	Area M Aug. 1-15	Aug. 16-31	Sept. 1-15
1	-	-	-	-	-
1¼	-	-	-	-	-
1½	-	-	-	-	-
1¾	1	-	-	-	-
2	1	2	4	2	3
2¼	1	4	16	10	8
2½	13	12	23	18	7
2¾	30	19	16	18	8
3	39	13	29	24	10
3¼	55	5	35	8	4
3½	43	5	23	23	11
3¾	18	2	19	15	5
4	14	0	20	21	8
4¼	9	2	23	8	7
4½	2	1	17	16	9
4¾	3	-	14	11	6
5	2	-	19	10	13
5¼	2	-	8	6	11
5½	1	-	9	10	13
5¾	-	-	7	7	3
6	-	-	5	0	8
6¼	-	-	2	9	1
6½	-	-	3	4	4
6¾	-	-	1	1	1
7	-	-	1	0	3
7¼	-	-	0	2	3
7½	-	-	1	0	2
7¾	-	-	1	0	1
8	-	-	0	1	1
8¼	-	-	0	1	0
8½	-	-	1	1	0
8¾	-	-	0	0	0
9	-	-	0	0	1
9¼	-	-	0	0	-
9½	-	-	0	1	-
9¾	-	-	0	-	-
10	-	-	2	-	-
10¾	-	-	0	-	-
11½	-	-	1	-	-

Table V. The average size of inconnu in pounds round weight and its standard error in samples taken at random from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1948. The number of fish in each sample is shown in brackets.

Area	June 16-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31
G	-	-	-	-	9.3±0.3 (106)
H	-	-	11.6±0.4 (74)	10.3±0.6 (11)	-
K	10.1±0.5 (55)	10.8±0.3 (80)	-	7.6±0.4 (25)	-
M	-	-	-	8.3±0.7 (17)	-

Table VI. The frequency distribution of round weights of inconnu in samples taken at random from the fish landed by commercial fishermen from Great Slave Lake during the summer of 1948.

Wt. in lbs.	Area G	Area H		Area K			Area M
	Aug. 16-31	July 16-31	Aug. 1-15	June 15-30	July 1-15	Aug. 1-15	Aug. 1-15
4	1	-	-	1	-	1	-
5	6	-	-	3	1	4	1
6	18	3	1	3	2	4	2
7	11	4	0	5	8	2	5
8	10	5	2	9	10	4	6
9	16	13	1	4	11	6	0
10	12	11	3	7	7	2	0
11	10	4	1	7	8	2	1
12	3	9	1	5	9	-	0
13	6	7	1	3	7	-	0
14	5	3	0	3	10	-	1
15	2	3	1	1	4	-	0
16	4	5	-	2	1	-	1
17	0	1	-	1	1	-	-
18	2	3	-	0	0	-	-
19	-	0	-	0	0	-	-
20	-	1	-	0	1	-	-
21	-	0	-	0	-	-	-
22	-	0	-	0	-	-	-
23	-	1	-	1	-	-	-
24	-	1	-	-	-	-	-

Table VII. An analysis of estimated catches in calculated round weights taken by the commercial fishery in Great Slave Lake during the summer season of 1948.

	Lake trout	Whitefish	Inconnu	Combined
Estimated total catch in thousands of pounds	1353	850	90	2293
Percentage landed by fishermen, the location and number of whose nets were known.	98.0	95.3	94.1	96.9
Percentage landed by other fishermen.	0.0	0.0	0.0	0.0
Percentage caught but not landed	2.0	4.7	5.9	3.1

Table VIII. The estimated catches of lake trout in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1948.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	12	79	6	-	-	97
F	-	18	61	12	7	53	151
G	40	35	19	45	27	36	202
H	8	15	23	59	84	25	214
K	33	57	19	69	31	48	257
L	-	-	10	53	11	-	74
M	-	20	10	158	56	114	358
Whole lake	81	157	221	402	216	276	1353

Table IX. The estimated catches of whitefish in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1948.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	16	60	3	-	-	79
F	-	47	156	12	10	17	242
G	21	56	14	17	14	26	148
H	6	9	5	4	27	21	72
K	51	70	19	13	18	20	191
L	-	-	5	25	3	-	33
M	-	9	8	21	16	31	85
Whole lake	78	207	267	95	88	115	850

Table X. The estimated catches of inconnu in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1948.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	1	3	+	-	-	4
F	-	2	3	0	5	5	15
G	3	2	1	3	14	5	28
H	1	1	2	2	4	7	17
K	6	8	4	2	2	3	25
L	-	-	+	+	+	-	+
M	-	+	+	1	+	+	1
Whole lake	10	14	13	8	25	20	90

Table XI. The estimated catches of lake trout, whitefish and inconnu combined in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1948.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	29	142	9	-	-	180
F	-	67	220	24	22	75	408
G	64	93	34	65	55	67	378
H	15	25	30	65	115	53	303
K	90	135	42	84	51	71	473
L	-	-	15	78	14	-	107
M	-	29	18	180	72	145	444
Whole lake	169	378	501	505	329	411	2,293

Table XII. The round weights of fish in thousands of pounds which would be equivalent to actual weights reported by the Fisheries Officer at Gros Cap, Great Slave Lake for the summer season of 1948.

	Trout	Whitefish	Inconnu	Total
Landed by the Fishermen	1,310	828	86	2,224
Shrinkage allowance on above	66	58	4	128
Recorded weight (i.e. amount for which fishermen were paid	1,244	770	82	2,096
Final product	1,220	824	85	2,129
Recorded weight as a percentage of final product	102.0	93.6	96.5	98.4

Table XIII. The estimated catches of rough fish in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1948. The "others" consist of 70 per cent suckers, 29 per cent pike-perch, 0.5 per cent grayling and 0.5 per cent round whitefish.

Area	Cisco	Burbot	Pike	Black Whitefish	Others	All Species
E	10	3	+	4	+	18
F	8	4	3	+	1	16
G	27	42	3	1	1	74
H	15	31	5	3	2	56
K	14	30	4	+	1	49
L	+	+	+	5	+	6
M	1	1	+	5	+	8
Whole lake	75	112	16	18	6	227

Table XIV. The fishing effort in equivalent net-nights (see text for definition) exerted in Great Slave Lake by the fishermen who were interviewed during the summer season of 1948.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	0	216	619	37	0	0	872
F	0	511	1346	66	122	463	2508
G	846	1397	235	559	367	672	4076
H	218	373	390	481	1474	819	3755
K	796	1313	342	677	488	734	4350
L	0	0	169	532	103	0	804
M	0	403	231	1389	487	963	3473
Whole lake	1860	4213	3332	3741	3041	3651	19,838

Table XV. The availability of lake trout in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	54	126	170*	-	-	112
F	-	35	46	184*	56*	115	60
G	47	25	82	81	74	54	50
H	39	41	60	122	56	31	57
K	41	42	55	102	65	66	59
L	-	-	61*	99	103*.	-	90
M	-	49	43	114	116	118	103
Whole lake	44	37	66	108	72	76	68

Table XVI. The availability of whitefish in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	75	97	78*	-	-	92
F	-	92	116	177*	80*	38	96
G	25	40	59	30	38	38	36
H	26	23	12	10	19	27	19
K	63	54	56	19	36	28	44
L	-	-	29*	46	35*	-	41
M	-	22	35	15	33	32	24
Whole lake	42	49	80	25	29	31	43

Table XVII. The availability of inconnu in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	3	5	4*	-	-	4
F	-	3	2	0*	43*	10	6
G	3	1	6	5	38	7	7
H	6	2	6	4	3	7	5
K	8	6	11	3	4	3	6
L	-	-	0.3*	0.7	0.3*	-	0.6
M	-	0.1	0.1	0.8	0.3	0.5	0.6
Whole lake	5	3	4	2	8	5	5

Table XVIII. The availability of lake trout, whitefish and inconnu combined in pounds round weight caught per equivalent net-nights (see text for definition) to fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	132	228	252*	-	-	208
F	-	130	164	361*	179*	163	162
G	75	66	147	116	150	99	93
H	71	66	78	136	78	65	81
K	112	102	122	124	105	97	109
L	-	-	90*	146	138*	-	132
M	-	71	78	130	149	150	128
Whole lake	91	89	150	135	109	112	116

Table XIX. The availability of lake trout in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	54	77	-	-	-	65
F	-	37	38	-	54*	131	60
G	33	27	54*	75	42*	44	42
H	35*	22	50	121	38	30	47
K	36	34	44*	96	49	51	48
L	-	-	43*	66*	-	-	50*
M	-	45	43	101	65*	116	74
Whole lake	35	35	48	95	44	64	52

Table XX. The availability of whitefish in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	75	95	-	-	-	85
F	-	99	109	-	86*	22	84
G	27	60	5*	25	23*	33	36
H	21*	14	11	9	16	29	18
K	57	37	33*	18	44	23	39
L	-	-	28*	58*	-	-	37*
M	-	27	35	15	18*	28	26
Whole lake	42	54	60	19	30	28	41

Table XXI. The availability of lake trout, whitefish and inconnu combined in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1948. An asterisk indicates a value based on less than 200 net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	132	175*	-	-	-	154
F	-	138	149	-	173*	168	152
G	63	89	70*	106	118*	85	87
H	61*	37	65	136	58	66	69
K	101	79	90*	117	96	79	94
L	-	-	71*	124*	-	-	87*
M	-	73	78	117	83*	146	100
Whole lake	82	91	118	118	90	99	98

Table XXII. Ranges of depths in feet (extreme values eliminated) of the water in which commercial fishermen set their nets in Great Slave Lake during the summer season of 1948.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	-	-	50-120	-	-	-
F	-	40-75	50-80	-	-	5-100
G	40-140	50-160	40-110	40-70	40-90	15-90
H	-	40-120	25-125	30-120	30-120	5-40
K	40-125	30-130	15-120	30-140	30-140	20-120
L	-	-	-	40-110	-	-
M	-	40-150	-	30-140	25-100	5-90

A P P E N D I X I

Revision of 1945, 1946 and 1947 data.

Appendix I

Tables 23, 24, 25, 26 and 27 show the revised data for 1945; Tables 28 to 48, inclusive, the revised data for 1946 and Tables 49 to 70, inclusive, the revised data for 1947. The tables are in the same order as the corresponding tables for the 1948 report.

Table XXIII. The average size of lake trout in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the period July 29 to August 5, inclusive, in 1945.

Area	
G	7.8 ± 0.6 (48)
K	8.1 ± 0.8 (24)

Table XXIV. The frequency distribution of round weights of lake trout in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the period July 29-August 5 inclusive, in 1945.

Weight in Pounds	Area G	Area K
2	1	
3	0	
4	2	0
5	5	3
6	14	3
7	7	7
8	8	4
9	4	0
10	2	4
11	0	0
12	0	1
13	1	0
14	1	2
15	1	0
16	0	
17	0	
18	1	
19	0	
20	0	
21	0	
22	0	
23	0	
24	0	
25	1	

Table XXV. The average size of whitefish in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the period July 29 to August 5 inclusive, in 1945.

Area	
G	2.9 ± 0.06 (74)
H	3.3 ± 0.07 (61)

Table XXVI. The frequency distribution of round weights of whitefish in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the period July 29 to August 5 inclusive, in 1945.

Weight in Pounds	Area G	Area H
1½	1	-
1¾	1	-
2	7	-
2¼	6	3
2½	15	8
2¾	12	6
3	9	8
3¼	7	14
3½	7	7
3¾	5	6
4	1	0
4¼	0	3
4½	3	4
4¾	-	0
5	-	1
5¼	-	0
5½	-	1

Table XXVII. The availability of commercial species in pounds round weight per net-night--for nets cleared d ily only--to fisherment interviewed at Great Slave Lake during the period July 29 to August 5, inclusive, 1945. An asterisk indicates a value based on less than 200 net-nights.

Area	Lake trout	Whitefish	Inconnu	All Species
G	67	40	9	116
H	65*	20*	8*	93*
K	48	31	19	98
Whole lake	62	34	11	107

Table XXVIII. The average size of lake trout in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1946. The number of fish in each sample is shown in brackets.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31
F	12.6±0.7 (106)	11.8±0.8 (73)	-	-
G	7.7±0.4 (147)	-	-	5.4±0.1 (167)
H	-	-	-	8.5±0.2 (366)
K	-	-	-	8.7±0.4 (145)

Table XXIX. The frequency distribution of round weights of lake trout in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1946.

Weight in Pounds	Area E July 1-15	Area E July 16-31	Area G July 1-15	Area G Aug. 16-31	Area H Aug. 16-31	Area K Aug. 16-31
2	0	0	0	0	2	0
3	0	0	7	3	12	2
4	2	0	12	23	31	11
5	8	4	31	82	47	20
6	12	9	47	36	45	31
7	5	7	13	12	48	14
8	11	10	6	5	42	16
9	6	7	4	2	25	11
10	9	5	3	2	20	6
11	5	1	3	0	19	6
12	6	4	2	1	19	7
13	6	6	1	0	13	8
14	3	4	3	0	11	1
15	3	1	1	1	5	0
16	3	1	3	0	4	1
17	3	1	2		5	0
18	0	1	1		4	3
19	3	2	2		4	0
20	4	2	1		6	1
21	1	0	1		0	1
22	5	0	0		1	1
23	0	3	0		0	0
24	4	2	1		1	2
25	2	1	0		1	0
26	1	0	1		0	1
27	1	0	0		0	0
28	1	0	0		1	0
29	1	0	1		0	1
30	0	0	1			0
31	0	0	0			1
32	0	1				0
33	0	0				
34	0	1				
35	1					

Table XXX. The average size of whitefish in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1946. The number of fish in each sample is shown in brackets.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31
E	-	2.8±0.04 (95)	-	-
G	2.6±0.02 (367)	-	-	3.0±0.04 (435)
H	-	-	-	3.1±0.04 (414)

Table XXXI. The frequency distribution of round weights of whitefish in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1946.

Weight in Pounds	Area E July 16-31	Area G July 1-15	Area G Aug. 16-31	Area H Aug. 16-31
1	-	-	1	-
1½	-	-	0	1
1¾	-	6	4	1
1¾	1	7	4	0
2	5	40	22	17
2¼	15	65	51	40
2½	14	88	81	48
2¾	16	69	69	67
3	19	54	71	60
3¼	13	21	40	49
3½	9	11	39	49
3¾	2	4	14	35
4	0	2	12	20
4¼	1	-	9	7
4½	-	-	6	8
4¾	-	-	1	2
5	-	-	4	1
5¼	-	-	3	2
5½	-	-	1	2
5¾	-	-	0	1
6	-	-	0	2
6¼	-	-	0	1
6½	-	-	1	0
6¾	-	-	0	0
7	-	-	1	1
13½	-	-	1	-

Table XXXII. The average size of inconnu in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1946. The number of fish in each sample is shown in brackets.

Area	July 1 - 15
G	9.2 ± 0.3 (148)
H	8.4 ± 0.9 (15)
K	10.5 ± 0.2 (182)

Table XXXIII. The frequency distribution of round weights of inconnu in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1946.

Weight in Pounds	Area G July 1-15	Area H July 1-15	Area K July 1-15
1			1
2	0	0	2
3	3	1	0
4	12	1	1
5	13	1	0
6	11	1	4
7	14	2	10
8	8	2	23
9	15	1	27
10	21	2	32
11	8	1	26
12	16	1	21
13	10	2	10
14	8	0	10
15	5		6
16	2		5
17	0		1
18	0		1
19	1		0
20	1		0
21	0		0
22			0
23			0
24			1
25			0
26			1

Table XXXIV. An analysis of estimated catches in calculated round weights taken by the commercial fishery in Great Slave Lake during the summer season of 1946.

	Trout	Whitefish	Inconnu	Combined
Estimated catch in thousands of pounds	1581	1042	130	2753
Percentage landed by fishermen the location and number of whose nets were known.	93.2	91.1	94.2	92.5
Percentage landed by other fishermen	3.0	2.5	4.2	2.9
Percentage caught but not landed	3.8	6.4	1.6	4.6

Table XXXV. The estimated catches of lake trout in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1946.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	20	147	18	91	44	320
F	-	2	30	15	24	13	84
G	26	108	77	101	84	105	501
H	11	41	35	83	117	60	347
K	1	78	47	42	28	60	256
M	-	-	3	30	-	40	73
Whole lake	38	249	339	289	344	322	1,581

Table XXXVI. The estimated catches of whitefish in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1946.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	17	90	17	35	26	185
F	-	4	28	14	7	6	59
G	26	146	62	84	45	29	392
H	8	33	22	30	45	30	168
k	+	68	55	27	34	23	207
M	-	-	2	9	-	20	31
Whole lake	34	268	259	181	166	134	1,042

Table XXXVII. The estimated catches of inconnu in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1946.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	1	7	+	4	+	12
F	-	+	2	+	+	+	3
G	3	11	5	4	2	2	27
H	1	4	2	2	3	2	14
K	+	29	14	25	4	2	74
M	-	-	+	+	-	+	+
Whole lake	4	45	30	32	13	6	130

Table XXXVIII. The estimated catches of lake trout, whitefish and inconnu combined in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1946.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	38	244	35	130	70	517
F	-	6	60	30	31	19	146
G	55	265	144	189	131	136	920
H	20	78	59	115	165	92	529
K	1	175	116	94	66	85	537
M	-	-	5	39	-	60	104
Whole lake	76	562	628	502	523	462	2,753

Table XXXIX. The estimated catches of rough fish in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1946. The "others" consist of 97 per cent suckers, 2 per cent pike-perch and 1 per cent grayling.

Area	Cisco	Burbot	Pike	Others	All Species
E	6	3	0	1	10
F	5	3	+	+	8
G	21	12	3	1	37
H	13	9	2	+	24
K	18	18	2	1	39
M	+	+	+	0	1
Whole lake	63	45	8	3	119

Table XL. The fishing effort in equivalent net-nights (see text for definition) exerted in Great Slave Lake by the fishermen who were interviewed during the summer season of 1946.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	0	0	572	309	18	0	899
F	123	45	3082	910	1535	0	5695
G	795	346	1426	794	1163	65	4588
H	147	304	2281	1594	975	332	5633
K	386	174	1343	2261	905	0	5069
M	137	78	995	1314	632	316	3473
Whole lake	1588	9406	9700	7182	5229	712	25,357

Table XLI. The availability of lake trout in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	160*	178	122*	196	321*	188
F	-	39*	77	48	92*	176*	78
G	46	35	53	44	59	106	51
H	34	45	43	52	52	45	48
K	33*	51	39	43	27	94	48
M	-	-	54*	83	-	126	98
Whole lake	41	44	71	51	62	93	61

Table XLII. The availability of whitefish in pounds round weight caught per equivalent net-night(see text for definition) to the fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	126*	114	116*	80	175*	112
F	-	63*	81	48	31*	57*	59
G	45	47	44	34	33	29	40
H	26	36	28	19	20	22	23
K	18*	44	47	28	36	36	39
M	-	-	34*	18	-	63	39
Whole lake	38	46	57	31	31	37	40

Table XLIII. The availability of inconnu in pounds round weight caught per equivalent net-night (see text for definitions) to the fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	7*	7	2*	11	0.3*	7
F	-	5*	5	1	1*	3*	3
G	6	3	3	1	1	2	3
H	4	4	2	1	1	2	2
K	0.4*	19	12	24	4	3	14
M	-	-	0.2*	0.1	-	0.1	0.1
Whole lake	5	8	6	5	3	2	5

Table XLIV. The availability of lake trout, whitefish and inconnu combined in pounds round-weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	293*	299	240*	287	496*	307
F	-	107*	163	97	124*	236*	140
G	97	85	100	79	93	137	94
H	64	85	73	72	73	69	73
K	51*	114	98	95	67	133	101
M	-	-	88*	101	-	189	137
Whole lake	84	98	134	87	96	132	106

Table XLV. The availability of lake trout in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	95*	152	142*	179	-	156
F	-	39*	59	36	63*	158*	60
G	46	34	43	39	55	84	43
H	34	44	37	51	49	44	46
K	32*	49	37	42	38	92	47
M	-	-	46*	98	-	152	121
Whole lake	41	41	53	48	60	80	52

Table XLVI. The availability of whitefish in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	86*	115	133*	57	-	96
F	-	63*	63*	43	18*	30*	47
G	45	48	40	32	28	23	39
H	26	31	27	18	21	22	23
K	18*	42	45	29	36	32	38
M	-	-	42*	19	-	88	53
Whole lake	38	44	48	29	29	32	37

Table XLVII. The availability of lake trout, whitefish and inconnu combined in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1946. An asterisk indicates a value based on less than 200 net-nights.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	All Summer
E	-	187*	275	278*	252	-	262
F	-	107*	125	80	82*	191*	109
G	97	86	85	72	85	109	85
H	64	78	65	70	71	68	71
K	50*	110	94	97	82	127	101
M	-	-	88*	117	-	240	121
Whole lake	84	93	107	83	93	114	95

Table XLVIII. Ranges of depths in feet (extreme values eliminated) of the water in which commercial fishermen set their nets in Great Slave Lake during the summer of 1946.

Area	June 15-30	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	-	-	35-115	-	40-120	-
F	-	-	40-100	-	-	-
G	25-100	40-110	40-110	40-90	40-100	5-60
H	30-125	30-130	35-125	35-120	30-100	10-75
K	-	35-120	20-120	40-120	45-90	50-100

Table XLIX. The average size of lake trout in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1947. The number of fish in each sample is shown in brackets.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	13.3±1.8 (21)	10.5±0.3 (303)	-	-	-
F	10.9±0.7 (67)	12.2±1.1 (44)	12.5±0.6 (115)	7.4±0.4 (97)	-
G	9.5±0.3 (427)	9.9±0.3 (319)	8.1±0.2 (193)	6.4±0.2 (217)	5.0±0.1 (249)
H	8.7±0.3 (263)	8.5±0.4 (111)	7.4±0.2 (292)	8.3±0.4 (94)	7.9±0.3 (243)
K	10.6±0.4 (157)	10.2±0.4 (175)	10.9±0.7 (88)	-	-
M	-	8.7±0.6 (71)	-	8.0±0.2 (403)	7.6±0.2 (344)

Table L. The frequency distribution of round weights of lake trout, in representative samples, from the fish landed by commercial fishermen from Great Slave Lake during the summer of 1947.

Wt. in lbs.	Area E		Area F				Area G				
	July 1-15	July 16-31	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
1	-	-	-	-	-	-	1	-	-	-	-
2	-	3	-	-	-	-	3	-	-	-	3
3	-	5	2	-	1	1	8	2	1	3	25
4	-	9	3	-	2	9	30	14	23	18	93
5	4	29	8	8	6	25	97	62	48	77	72
6	3	49	2	5	12	25	76	59	44	57	33
7	0	26	9	2	9	13	27	28	18	28	11
8	0	17	6	5	4	4	19	22	7	16	3
9	1	19	1	0	7	3	18	8	6	4	1
10	2	16	7	2	5	3	15	10	4	2	2
11	0	18	3	3	8	4	14	17	5	2	2
12	2	20	6	4	11	2	12	11	4	1	0
13	2	14	1	0	7	0	9	12	6	1	0
14	0	15	2	1	7	1	12	7	2	0	1
15	0	10	2	3	5	2	12	8	3	2	0
16	0	8	2	1	4	1	14	7	4	1	0
17	1	6	4	0	7	0	8	9	4	1	1
18	2	10	1	0	4	1	6	9	3	0	1
19	0	8	0	0	0	0	7	4	1	0	0
20	0	6	0	2	5	0	8	8	3	2	0
21	0	3	4	0	0	0	2	3	1	0	0
22	1	1	3	2	2	1	4	5	1	0	1
23	0	2	0	2	1	0	5	2	1	1	-
24	0	4	0	1	2	0	5	5	2	1	-
25	0	2	0	0	1	1	2	1	1	-	-
26	1	1	0	1	1	0	3	2	0	-	-
27	0	1	0	1	0	0	1	1	0	-	-
28	0	1	1	0	2	1	3	3	0	-	-
29	0	1	-	0	0	-	1	-	0	-	-
30	1	-	-	1	2	-	1	-	0	-	-
31	0	-	-	-	-	-	2	-	0	-	-
32	1	-	-	-	-	-	1	-	0	-	-
33	-	-	-	-	-	-	0	-	1	-	-
34	-	-	-	-	-	-	1	-	-	-	-
35	-	-	-	-	-	-	-	-	-	-	-
36	-	-	-	-	-	-	-	-	-	-	-
37	-	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-	-

Table L. (Cont'd.)

Wt. in lbs.	Area H					Area K			Area M		
	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	July 1-15	July 16-31	Aug. 1-15	July 16-31	Aug. 16-31	Sept. 1-15
1	-	-	-	-	-	-	-	-	-	-	-
2	-	1	-	-	1	-	-	-	-	-	-
3	2	0	4	2	13	1	-	-	1	1	2
4	30	14	26	2	33	9	9	1	2	15	34
5	51	18	49	8	42	17	22	9	13	43	63
6	42	14	66	12	37	17	25	13	20	89	69
7	29	15	36	23	25	8	13	9	11	80	59
8	15	8	33	14	18	10	12	7	2	56	41
9	15	9	18	12	9	16	9	12	2	31	18
10	14	3	17	6	13	11	10	3	2	23	12
11	10	7	13	5	10	9	10	6	3	17	13
12	4	3	14	1	7	6	16	2	2	15	8
13	9	4	6	2	5	10	6	3	1	6	1
14	4	2	6	0	6	12	9	5	2	3	3
15	7	2	1	2	6	8	8	2	2	5	3
16	5	2	1	1	5	5	7	3	1	6	1
17	3	1	0	0	5	3	4	3	0	2	4
18	4	4	0	2	1	3	3	0	4	3	3
19	4	0	0	1	0	5	2	1	0	3	1
20	3	1	1	1	2	1	2	1	0	2	2
21	2	1	0	-	2	1	1	1	0	1	0
22	1	1	0	-	1	0	4	0	1	2	2
23	3	0	0	-	0	0	1	1	1	-	0
24	2	0	0	-	0	0	1	1	0	-	1
25	1	0	1	-	0	1	0	0	0	-	1
26	2	0	-	-	1	1	0	0	0	-	2
27	0	0	-	-	0	1	1	2	0	-	0
28	1	0	-	-	0	1	-	1	1	-	0
29	-	0	-	-	0	0	-	0	-	-	0
30	-	1	-	-	0	0	-	1	-	-	1
31	-	-	-	-	0	0	-	0	-	-	-
32	-	-	-	-	0	0	-	1	-	-	-
33	-	-	-	-	0	0	-	-	-	-	-
34	-	-	-	-	1	0	-	-	-	-	-
35	-	-	-	-	-	0	-	-	-	-	-
36	-	-	-	-	-	0	-	-	-	-	-
37	-	-	-	-	-	0	-	-	-	-	-
38	-	-	-	-	-	1	-	-	-	-	-

Table LI. The average size of whitefish in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1947. The number of fish in each sample is shown in brackets.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	2.9±0.09 (41)	2.8±0.03 (477)	-	-	-
F	2.8±0.09 (48)	2.6±0.08 (21)	2.8±0.03 (267)	-	3.1±0.07 (131)
G	3.0±0.03 (418)	2.6±0.02 (804)	2.7±0.03 (322)	2.7±0.03 (173)	2.7±0.04 (381)
H	2.9±0.04 (331)	2.9±0.08 (82)	2.9±0.06 (249)	3.1±0.05 (197)	3.5±0.10 (172)
K	3.1±0.04 (321)	3.4±0.08 (181)	3.4±0.04 (268)	3.0±0.05 (117)	-
M	-	-	-	3.2±0.07 (100)	3.4±0.09 (145)

Table LII. The frequency distribution of round weights of whitefish in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer of 1947.

Wt. in lbs.	Area E		Area F				Area C				
	July 1-15	July 16-31	July 1-15	July 16-31	Aug. 1-15	Sept. 1-15	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
1	-	-	-	-	-	-	-	-	-	-	1
1½	-	-	1	-	-	-	-	-	-	-	1
1½	-	-	0	-	-	-	1	1	-	-	5
1½	-	4	0	-	1	2	2	12	3	2	10
2	2	27	6	1	15	9	16	66	28	13	38
2½	3	61	8	3	48	12	53	164	65	32	80
2½	10	122	7	9	55	16	89	205	79	45	73
2½	8	67	4	4	43	23	68	145	55	33	59
3	6	69	9	2	46	19	52	101	44	16	30
3½	4	53	5	0	30	13	39	56	18	21	31
3½	2	32	3	1	14	9	24	23	16	7	14
3½	2	9	1	1	7	5	23	14	6	1	8
4	3	15	3	-	4	7	15	8	5	1	11
4½	1	9	1	-	2	3	11	4	1	1	7
4½	-	2	-	-	0	1	9	1	0	-	4
4½	-	2	-	-	0	5	9	0	0	-	2
5	-	3	-	-	0	3	5	2	1	-	4
5½	-	1	-	-	1	2	0	0	1	-	1
5½	-	0	-	-	1	1	0	0	-	-	2
5½	-	0	-	-	-	0	1	0	-	-	-
6	-	1	-	-	-	0	1	1	-	-	-
6½	-	-	-	-	-	0	-	0	-	-	-
6½	-	-	-	-	-	1	-	0	-	-	-
6½	-	-	-	-	-	-	-	0	-	-	-
7	-	-	-	-	-	-	-	1	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-
12½	-	-	-	-	-	-	-	-	-	-	-

Table LII. (Cont'd.)

Wt. in lbs.	Area H					Area K				Area M	
	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Aug. 16-31	Sept. 1-15
1	-	-	-	-	-	-	-	-	-	-	-
1¼	-	1	-	-	-	-	-	-	-	-	-
1½	2	0	1	-	-	-	-	-	-	-	1
1¾	4	1	7	2	3	4	-	-	-	-	0
2	21	10	20	5	12	13	3	3	1	4	3
2¼	41	15	43	18	21	29	15	11	9	9	12
2½	74	12	48	30	21	50	28	23	19	11	17
2¾	51	6	34	30	17	38	19	32	28	12	15
3	33	11	25	31	19	41	21	30	21	16	15
3¼	41	9	22	20	13	45	19	42	13	12	22
3½	18	4	9	24	4	27	17	22	13	11	12
3¾	15	3	11	9	5	26	17	29	3	8	7
4	12	4	9	10	7	15	13	24	5	9	9
4¼	7	3	3	8	8	8	5	22	3	2	7
4½	3	1	5	3	10	12	5	13	1	2	8
4¾	4	0	1	1	3	3	5	10	0	1	7
5	3	1	2	1	6	2	7	4	1	2	1
5¼	1	1	1	0	5	6	1	1	-	0	1
5½	1	-	1	2	4	0	3	2	-	0	3
5¾	-	-	2	0	4	2	0	-	-	0	0
6	-	-	1	3	5	-	1	-	-	1	1
6¼	-	-	1	-	2	-	0	-	-	-	0
6½	-	-	1	-	2	-	0	-	-	-	1
6¾	-	-	1	-	0	-	0	-	-	-	1
7	-	-	0	-	0	-	1	-	-	-	2
8	-	-	1	-	1	-	0	-	-	-	-
12½	-	-	-	-	-	-	1	-	-	-	-

Table LIII. The average size of inconnu in pounds round weight and its standard error in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer season of 1947. The number of fish in each sample is shown in brackets.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
E	7.1±0.6 (18)	9.9±0.3 (76)	-	-	-
F	8.8±0.8 (13)	10.2±1.4 (5)	-	-	-
G	10.3±0.4 (78)	11.4±1.1 (25)	14.2±1.3 (11)	11.1±0.5 (38)	10.9±0.3 (84)
H	7.3±0.2 (161)	17.1±3.0 (9)	-	9.7±0.3 (59)	12.3±1.6 (6)
K	8.5±0.4 (65)	9.3±0.4 (48)	8.2±0.4 (17)	-	-
M	-	-	8.6±0.3 (61)	-	-

Table LIV. The frequency distribution of round weights of inconnu in representative samples from the fish landed by commercial fishermen from Great Slave Lake during the summer of 1947.

Wt. in lbs.	Area E		Area F		Area G				
	July 1-15	July 16-31	July 1-15	July 16-31	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15
2	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	1
4	4	1	-	-	3	-	-	-	4
5	3	2	1	-	3	1	-	-	1
6	1	2	2	-	4	1	-	4	4
7	2	7	2	-	5	1	-	1	4
8	2	16	1	3	8	4	1	3	9
9	2	10	3	0	9	2	0	3	11
10	2	9	1	0	9	6	1	4	5
11	1	12	1	0	10	1	2	6	9
12	1	6	1	0	11	1	1	4	10
13	-	5	0	1	7	3	1	4	9
14	-	2	0	1	4	2	1	5	5
15	-	1	1	-	1	1	3	2	4
16	-	2	-	-	1	0	0	1	2
17	-	0	-	-	1	0	0	1	1
18	-	0	-	-	0	0	0	-	2
19	-	0	-	-	1	0	0	-	1
20	-	0	-	-	0	0	0	-	1
21	-	0	-	-	0	0	0	-	0
22	-	1	-	-	0	1	0	-	0
23	-	-	-	-	0	0	0	-	0
24	-	-	-	-	0	0	0	-	0
25	-	-	-	-	0	0	0	-	0
26	-	-	-	-	0	0	0	-	0
27	-	-	-	-	0	0	0	-	0
28	-	-	-	-	1	0	0	-	0
29	-	-	-	-	-	1	0	-	0
30	-	-	-	-	-	-	0	-	0
31	-	-	-	-	-	-	0	-	1
32	-	-	-	-	-	-	1	-	-

Table LIV. (Cont'd.)

Wt. in lbs.	Area H July 1-15	Area H Aug. 1-15	Area H Aug. 16-31	Area H Sept. 1-15	Area K July 1-15	Area K July 16-31	Area K Aug. 1-15	Area M Aug. 1-15
2	-	-	-	-	-	-	-	-
3	5	-	-	-	-	-	-	-
4	25	-	2	-	7	2	-	1
5	29	-	1	-	4	1	1	6
6	21	-	3	-	4	5	2	6
7	16	-	6	-	9	3	2	10
8	13	1	6	1	13	10	4	13
9	15	1	7	1	7	3	5	5
10	15	1	9	0	5	7	0	6
11	5	1	9	0	8	7	1	5
12	7	1	9	2	1	4	0	9
13	3	0	5	0	2	4	2	3
14	0	0	1	0	2	1	-	0
15	3	0	1	1	1	1	-	1
16	2	1	-	0	1	-	-	0
17	2	0	-	0	1	-	-	1
18	-	0	-	1	-	-	-	-
19	-	0	-	-	-	-	-	-
20	-	0	-	-	-	-	-	-
21	-	0	-	-	-	-	-	-
22	-	0	-	-	-	-	-	-
23	-	0	-	-	-	-	-	-
24	-	1	-	-	-	-	-	-
25	-	0	-	-	-	-	-	-
26	-	0	-	-	-	-	-	-
27	-	0	-	-	-	-	-	-
28	-	1	-	-	-	-	-	-
29	-	0	-	-	-	-	-	-
30	-	0	-	-	-	-	-	-
31	-	0	-	-	-	-	-	-
32	-	1	-	-	-	-	-	-

Table LV. An analysis of estimated catches in calculated round weights taken by the commercial fishery in Great Slave Lake during the summer season of 1947.

	Trout	Whitefish	Inconnu	Combined
Estimated total catch in thousands of pounds.....	1,450	856	64	2,370
Percentage landed by fishermen, the location and number of whose nets were known....	92.3	93.7	83.7	92.5
Percentage landed by other fishermen.....	6.9	4.8	7.2	6.2
Percentage caught but not landed.....	0.8	1.5	9.1	1.3

Table LVI. The estimated catches of lake trout in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	24	72	-	-	-	-	96
F	1	6	37	16	29	19	108
G	70	50	68	45	85	14	332
H	48	18	24	38	23	5	156
K	39	39	32	53	24	7	194
M	-	16	42	274	187	45	564
Whole lake	182	201	203	426	348	90	1,450

Table LVII. The estimated catches of whitefish in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	18	119	-	-	-	-	137
F	1	10	27	6	4	4	52
G	93	108	81	24	32	9	347
H	30	13	9	11	7	1	71
K	33	16	45	18	6	6	124
M	-	4	4	57	55	5	125
Whole lake	175	270	166	116	104	25	856

Table LVIII. The estimated catches of inconnu in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	3	6	-	-	-	-	9
F	+	+	3	2	+	+	6
G	6	3	3	3	2	0	17
H	5	1	2	5	+	0	13
K	3	5	4	4	1	+	17
M	-	+	1	1	+	0	2
Whole lake	17	15	13	15	4	+	64

Table LIX. The estimated catches of lake trout, whitefish, and inconnu combined in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	45	197	-	-	-	-	242
F	2	16	67	24	34	23	166
G	169	161	152	72	119	23	696
H	83	32	35	54	30	6	240
K	75	60	81	75	31	13	335
M	-	20	47	332	242	50	691
Whole lake	374	486	382	557	456	115	2,370

Table LX. The round weights of fish in thousands of pounds, which would be equivalent to actual weights, reported by the Fisheries office at Gros Cap, Great Slave Lake, for the summer season of 1947.

	Trout	Whitefish	Inconnu	Combined
Landed by fishermen	1,431	842	56	2,329
Shrinkage allowance on above	72	67	4	143
Recorded weight (i.e. amount for which fishermen were paid)	1,359	775	52	2,186
Final Product	1,272	841	53	2,166
Recorded weight as a percentage of final product	106.8	92.0	97.8	99.2

Table LXI. The estimated catches of rough fish in thousands of pounds round weight taken by the commercial fishery in Great Slave Lake during the summer season of 1947. The "others" consist of 96 per cent suckers, 2 per cent pike-perch, 1.5 per cent grayling and 0.5 per cent round whitefish.

Area	Cisco	Burbot	Pike	Black Whitefish	Others	All Species
E	77	2	+	0	+	9
F	2	2	1	+	1	7
G	39	32	4	0	+	75
H	9	9	1	0	+	20
K	10	19	3	0	+	33
M	1	1	1	6	+	9
Whole lake	68	65	10	7	3	153

Table LXII. The fishing effort in equivalent net-nights (see text for definition) exerted in Great Slave Lake by the fishermen who were interviewed during the summer season of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	147	1133	0	0	0	0	1280
F	21	154	328	81	87	152	823
G	1853	1998	1724	753	1048	205	7581
H	1024	624	565	682	324	73	3292
K	640	829	842	757	217	140	3425
M	0	267	255	1662	1084	184	3454
Whole lake	3685	5005	3715	3935	2761	753	19,854

Table LXIII. The availability of lake trout in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1947. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	162*	63	-	-	-	-	75
F	56*	40*	108	155*	255*	128*	118
G	38	25	40	60	68	61	42
H	45	31	43	56	52	67*	46
K	60	47	38	64	81	50*	54
M	-	56	165	152	143	192*	145
Whole lake	51	40	54	101	102	104	68

Table LXIV. The availability of whitefish in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1947. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	115*	101	-	-	-	-	102
F	67*	62*	81	58*	28*	26*	59
G	50	54	47	31	26	44	45
H	25	21	15	16	16	13*	21
K	52	20	53	22	17	40*	35
M	-	7	15	30	41	20*	30
Whole lake	47	53	45	27	31	31	41

Table LXV. The availability of inconnu in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1947. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	18*	4*	-	-	-	-	6
F	2*	2*	6	13*	2*	2*	4
G	3	2	2	4	2	0	2
H	5	1	4	7	1	0*	4
K	4	7	5	5	2	1*	5
M	-	0	1	0.4	0.04	0*	0.3
Whole lake	4	3	3	3	1	0.7	3

Table LXVI. The availability of lake trout, whitefish and inconnu combined in pounds round weight caught per equivalent net-night (see text for definition) to the fishermen who were interviewed during the summer season of 1947. An asterisk indicates a value based on less than 200 equivalent net-nights.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	295*	168	-	-	-	-	183
F	125*	104*	195	226*	285*	156*	181
G	91	81	89	95	96	105	89
H	79	53	62	79	69	80*	71
K	116	74	96	91	100	91*	94
M	-	63	181	182	184	212	175
Whole lake	102	96	102	131	134	136	112

Table LXVII. The availability of lake trout in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1947. An asterisk indicates a value based on less than 200 net-nights.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	75*	47	-	-	-	-	49
F	56*	53*	98*	185*	-	111*	99
G	33	21	30	63	55	60*	34
H	44	31	41	52	49	60*	44
K	61	44	45	75	60*	70*	54
M	-	56	121*	136	198*	231*	118
Whole lake	42	36	46	80	70	77	49

Table LXVIII. The availability of whitefish in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1947. An asterisk indicates a value based on less than 200 net-nights.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	91*	94	-	-	-	-	93
F	67*	67*	66*	54*	-	77*	65
G	45	52	32	34	22	29*	42
H	27	20	14	16	17	12*	20
K	55	19	46	24	34*	46*	35
M	-	7	20*	33	40*	16*	23
Whole lake	43	47	33	27	22	33	38

Table LXIX. The availability of lake trout, whitefish and inconnu combined in pounds round weight per net-night--for nets cleared daily only--to fishermen who were interviewed during the summer season of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31	All Summer
E	180*	145	-	-	-	-	148
F	125*	124*	172*	257*	-	188*	171
G	81	75	65	102	80	89*	78
H	76	52	59	76	66	72*	68
K	121	70	97	102	94*	116*	94
M	-	63	143*	170	238*	246*	141
Whole lake	89	86	83	112	94	110	91

Table LXX. Ranges of depths in feet (extreme values eliminated) of the water in which commercial fishermen set their nets in Great Slave Lake during the summer of 1947.

Area	July 1-15	July 16-31	Aug. 1-15	Aug. 16-31	Sept. 1-15	Sept. 16-31
E	50-90	40-140	-	-	-	-
F	-	50-70	30-130	10-110	20-40	10-20
G	40-120	40-120	40-110	40-90	10-70	5-45
H	40-125	50-120	25-100	25-90	35-80	-
K	40-110	30-120	25-150	30-125	50-150	-
M	-	-	-	25-130	25-140	-

APPENDIX II

Subdivisions of Great Slave Lake

for

Statistical Purposes

Appendix II

Figure I shows the areas into which Great Slave Lake has been arbitrarily subdivided for statistical purposes. These subdivisions are designated as "Area A", "Area B", etc. The alphabetical order corresponds roughly to a gradation from less oligotrophic to more oligotrophic conditions.

Table 71 gives some of the characteristics of the various areas. While preparing this table, the author measured the area of Great Slave Lake as represented on the most recent eight miles to the inch sheets available from the Department of Mines and Resources, by means of a planimeter. The total area as measured was 11,070 square miles of which islands made up 640 square miles and water 10,430 square miles. The value for the area of water is probably accurate within 20 square miles if the map itself is accurate. These values are different from those quoted by Dr. D. S. Rawson in various reports on Great Slave Lake. Dr. Rawson used values supplied to him by the Bureau of Geology and Typography, and since they calculated the area originally by counting squares, which is generally a less accurate method than the planimeter method, the values given here are assumed to be reliable. The total volume was also calculated as approximately 50,000,000,000,000 cubic feet of water.

The second and third columns of Table 14 give information regarding water depths. The fourth column indicates the proportion of each area which is of direct interest to fishermen, since nets are generally set in water between 25 and 150 feet deep, except at spawning time. The last two columns give some idea of the relative sizes of the areas. It is obvious that the subdivisions are not even approximately equal in size. The boundary lines have been drawn in positions which are most useful for statistical purposes.

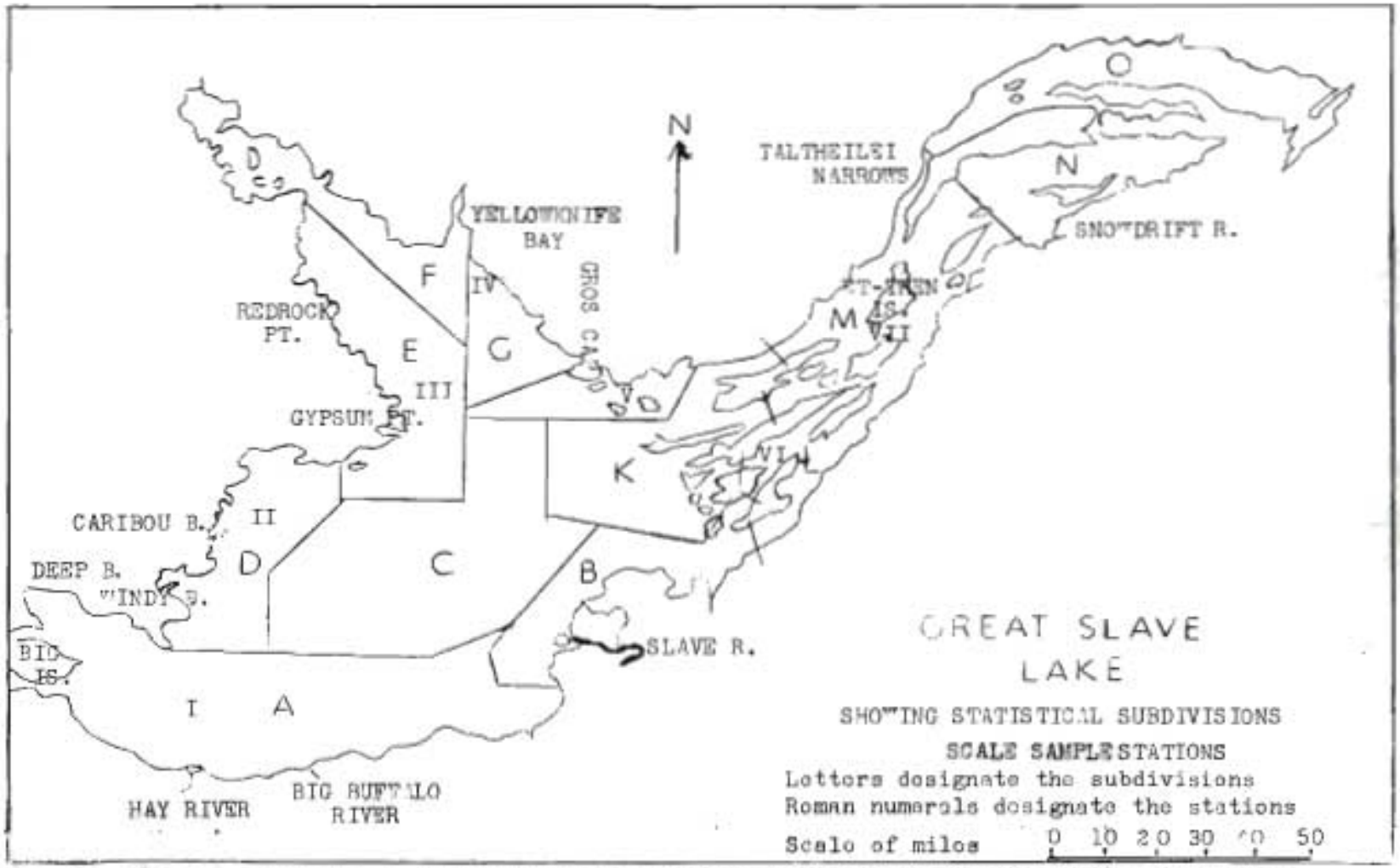

Fig. 1. The areas into which Great Slave Lake has been arbitrarily subdivided for statistical purposes.

Table LXXI. Some characteristics of the subdivisions--known as areas--into which Great Slave Lake has been divided for statistical purposes.

Area	Maximum recorded depth in feet.	Calculated average depth in feet.	Percentage of Area where the water is from 25 to 150 feet deep.	Percentage of total lake water surface included in Area.	Percentage of total lake volume included in Area.
A	150	57	74	19.3	6.0
B	220	67	44	4.6	1.7
C	530	215	36	17.6	20.6
D	230	93	55	7.3	3.7
E	410	129	63	9.1	6.4
F	200	44	43	6.0	1.4
G	160	87	70	3.0	1.4
H	980	140	44	2.8	2.1
K	1050	158	54	7.7	6.6
L	630	175	44	3.5	3.3
M	1820	497	15	6.7	18.3
N	2010	590	12	5.4	17.3
O	980	293	21	7.0	11.2

APPENDIX III

Conversion Tables

Appendix III

Converting Various Quantities to Round Weights

The round weights of fish as they are removed from the water is the quantitative measure which is most valuable for fisheries management, since it represents the actual production of the lake. Round weights are not always directly available at Great Slave Lake since many of the fish taken commercially are dressed or discarded before any record is made of quantity. Fortunately, the weights after dressing in the case of fish that are sold, and generally some estimate of the number of individuals in the case of discarded fish, are available. It is, therefore, possible to estimate original weights by the use of suitable conversion factors. The factors used are shown in Table 72.

The relationship between round weight and dressed weight was found by weighing individual fish before and after they were dressed by various fishermen. The corresponding conversion factors are based on 96 headless trout, 155 dressed trout, 95 dressed whitefish and 26 dressed inconnu. In no case did the relationship appear to vary as the size of the fish varied. The first four values in Table 72 are used in converting the weights of individual fish to round weights when the weights are taken by Fisheries Research Board personnel for determining average size of fish. The conversion factors

involving "shrinkage" are necessary to deal with the weights of the daily catches, since these values were taken from the buyer's records where an allowance for "shrinkage" had been deducted before the weights were recorded.

In the case of the discarded fish, occasionally the quantity is estimated in terms of number of boxes, but generally an estimate or an actual count of the number of individual fish is given. In the case of commercial fish the known average size was used to derive the appropriate factors. The estimated size of discarded trout is assumed to be greater than the average size in the catch as a whole, since big trout tend to die quickly in the nets, and are slightly more likely to be discarded. The factors for the remainder are based on the average size of fish taken in 5½-inch mesh gill-nets set by Fisheries Research Board personnel.

Conversion factors for fishing effort

It is an established fact that doubling the time that nets are left in the water does not double the average catch per lift, which means that the fishing effort exerted by a net cleared every two days is not as great as the fishing effort the same net would exert if cleared daily. Among the Great Slave data for 1946, 1947, and 1948, 151 reliable cases were found in which it was possible to compare the catch per net

when cleared after approximately 48 hours with the average catch per net of the two lifts immediately before and immediately afterwards (sometimes only one of these) when nets were cleared after approximately 24 hours, where all three (or two) catches were made by the same fisherman with the same gear at the same place. These comparisons show that where fish are scarce, as indicated by a small catch per net, doubling the fishing time almost doubles the catch per lift, but the greater the catch per lift--which presumably means the more plentiful the fish--the less does doubling the fishing time increase the catch. At concentrations of fish which are not unusually large for Great Slave Lake, doubling the fishing time leads to no increase in catch per lift.

On the basis of these comparisons, when the catch per lift is known for a group of nets which were cleared after two nights, it is possible to estimate the approximate catch per lift that would have resulted if the nets had been cleared after one night. Alternatively it is possible to estimate the number of nets cleared after one night which would be required to produce the same catch of fish as the observed number of nets produced when cleared after two nights. A paper now being prepared for publication by the author of this report will show the basic data and the derived relationships in detail. It will also show how the relationships between the number of

fish caught in one night and the number caught in two nights can be used to calculate approximate similar relationships between one night and three nights, one night and four, and one night and five nights. Conversion factors based on these relationships that will be presented in the above mentioned paper are shown in Table 73.

A net which is left in Great Slave Lake for five or more nights will usually have accumulated quantities of rotten fish, and the web will be covered with small aquatic organisms in such quantities that their presence will be quite apparent to the naked eye. Both these factors are believed to lessen the chances of catching additional fish. Therefore the conversion factors for nets cleared after more than five nights are assumed to be the same as those for nets cleared after five nights. At values of catch per lift which are exceptionally low for Great Slave Lake the factors for nets left for more than five nights will be slightly low, but since there are few such cases this is a negligible consideration.

Conversion factors for the more complicated situation where part of a catch of fish whose weights are known came from nets which were cleared after a certain number of nights, while another part of the catch--which is indistinguishably mixed with the first part--came from nets which were cleared after a different number of nights are given in Tables 74 to 83 inclusive. The still more complicated situation where three

or more lengths of time are involved seldom occurs, and where it does an approximation to the required factors can be derived by inspection from a comparison of Tables 74 to 83 inclusive.

The following example indicates how the values in Tables 74 to 83 inclusive can be calculated from the values in Table 73. The factor required when the recorded catch is between 80 and 105 pounds per net, and when 30 per cent of the nets were cleared after two nights, and 70 per cent after one night is calculated as follows: Assume that the catch per net is the mid-value of the given range in values, that is 92.5 pounds, and suppose that 10 nets are fished. Then 925 pounds of fish would be caught in ten nets of which three were cleared after two nights, the other seven after one night. As a first approximation, assume that the required factor is 1.3. Then the three nets which were cleared after two nights would be equivalent in fishing effort to 3 x 1.3 = 3.9 nets cleared after one night. With the seven nets which were fished for one night only, the total fishing effort applied would be equivalent to 3.9 + 7.0 = 10.9 nets cleared daily (10.9 equivalent net-nights). The three nets which were cleared after two nights would, therefore, exert about 3.9/10.9 of the total fishing effort, and would be expected to make 3.9/10.9 of the total catch. So the best estimate of the quantity of fish taken by

these three nets is 3.9/10.9 x 925 = 331 pounds. This is equivalent to 110 pounds per net, for which Table 73 indicates the factor 1.4. Therefore, the factor 1.3 assumed above is incorrect. By trial and error the proper factor is found to be 1.4. In actual practice the original curves that will be presented in the paper mentioned above were used rather than Table 73 for greater accuracy. Where both lengths of time after which nets were cleared are greater than one night, the two factors involved can be found simultaneously by trial and error.

The following examples from the 1948 data will serve to explain how Tables 73 to 83 inclusive are used: Card 366 records a catch made by 18 nets left for three nights in which the catch was as follows: Headless trout - 782 pounds, dressed trout - 1,362 pounds, round whitefish - 389 pounds, discarded whitefish - 10 individual fish, discarded ciscoes - 130 individual fish, discarded burbot - 50 individual fish. These values correspond roughly to a total of 4,100 pounds round weight when caught or about 4100 $\div$ 18 = 228 pounds per net. Table 73 gives the factor 1.1 for the present case where catch per net is between 195 and 230 pounds and the number of nights since nets were last cleared is three. Therefore, the fishing effort in this case was 18 x 1.1 = 19.8 equivalent net-nights.

Card 629 records a catch, part of which came from three nets which had been cleared the previous day, part from six nets which had been last cleared two days previously. The quantities of fish recorded correspond roughly to a total of 400 pounds round weight when caught or about 400 ÷ 9 = 44 pounds per net. Table 74 gives the factor 1.7 for a catch per net between 30 and 55 where the proportion of the nets which were cleared after two nights is 70 per cent. Therefore, the fishing effort in this case was 6 x 1.7 = 10.2 equivalent net-nights for the nets cleared after two nights and 3 x 1.0 = 3.0 equivalent net-nights for the nets cleared after one night or a total of 13.2 equivalent net-nights.

Card 592 records a catch part of which came from 6 nets, which had been last cleared two days previously, and part from 12 nets which had been last cleared three days previously. The quantities of fish recorded correspond roughly to a total of 1,300 pounds round weight or about 1,300 ÷ 18 = 72 pounds per net. Table 78 gives the respective factors 1.6 and 1.9 for a catch per net between 55 and 80 where the proportion of nets cleared after two nights is 30 per cent and the proportion cleared after three nights is 70 per cent. The fishing effort in this case was 6 x 1.6 = 9.6 equivalent net-nights for the nets cleared after two nights and 12 x 1.9 = 22.8 equivalent net-nights for the nets cleared after three nights or a total of 32.4 equivalent net-nights.

Table LXXII. Conversion factors used to estimate the weight of fish, when first removed from the water, obtained from available information in connection with the commercial fishery on Great Slave Lake.

To convert these values to pounds round weight as caught	Multiply by
Dressed trout no shrinkage allowance	1.2048
Headless trout no shrinkage allowance	1.6667
Dressed whitefish no shrinkage allowance	1.1765
Dressed inconnu no shrinkage allowance	1.3158
Dressed trout with 5% shrinkage allowance	1.2682
Headless trout with 5% shrinkage allowance	1.7544
Dressed whitefish with 5% shrinkage allowance	1.2384
Dressed inconnu with 5% shrinkage allowance	1.3850
Round whitefish or inconnu with 8% shrinkage allowance	1.0870
Round whitefish or inconnu with 5% shrinkage allowance	1.0638
One box of fish at McInnes' Products Corp.	180.
One individual whitefish	3.0
One individual lake trout	10.0
One individual inconnu	9.0
One individual tullibee	2.5
One individual burbot	5.0
One individual pike	10.0
One individual sucker (either species)	4.0
One individual pike-perch	3.0
One individual round whitefish	3.0
One individual grayling	2.5

Table LXXIII. The factors by which the number of nets, which made up a particular catch, must be multiplied to give fishing effort in equivalent net-nights. The values in the first column show the ranges of catch per net in pounds round weight including discarded and rough fish, in the particular catch.

Catch per net	Number of nights since nets were last cleared				
	1	2	3	4	5 or more
0-10	1.0	2.0	2.8	3.7	4.4
10-20	1.0	1.9	2.6	3.3	3.9
20-30	1.0	1.8	2.4	3.0	3.6
30-55	1.0	1.7	2.2	2.7	3.0
55-80	1.0	1.6	1.9	2.3	2.6
80-105	1.0	1.5	1.8	2.0	2.2
105-130	1.0	1.4	1.6	1.8	1.9
130-160	1.0	1.3	1.5	1.5	1.6
160-195	1.0	1.2	1.3	1.3	1.4
195-230	1.0	1.1	1.1	1.1	1.1
over 230	1.0	1.0	1.0	1.0	1.0

Table LXXIV. The factors by which the number of nets, which were cleared after two nights, must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made partly by nets cleared after two nights. The appropriate factor for the nets cleared after one night is 1.0 in every case. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of the nets which were cleared after two nights.								
	10	20	30	40	50	60	70	80	90
0-10	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0
10-20	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9
20-30	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
30-55	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7
55-80	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6
80-105	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
105-130	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4
130-160	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3
160-195	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
195-230	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1
over 230	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table LXXV. The factors by which the number of nets, which were cleared after three nights, must be multiplied to give fishing efforts in equivalent net-nights, where a particular catch is made partly by nets cleared after one night, partly by nets cleared after three nights. The appropriate factor for the nets cleared after one night is 1.0 in every case. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of the nets which were cleared after three nights.								
	10	20	30	40	50	60	70	80	90
0-10	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8
10-20	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
20-30	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4
30-55	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.2
55-80	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80-105	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.7	1.7
105-130	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6
130-160	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.5
160-195	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3
195-230	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
over 230	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table LXXVI. The factors by which the number of nets, which were cleared after four nights, must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made partly by nets cleared after one night, partly by nets cleared after four nights. The appropriate factor for the nets cleared after one night is 1.0 in every case. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish, in the particular catch.

Catch per net	The proportion (percentage) of nets which were cleared after four nights.								
	10	20	30	40	50	60	70	80	90
0-10	3.3	3.4	3.4	3.4	3.5	3.5	3.6	3.6	3.7
10-20	2.8	2.9	2.9	3.0	3.1	3.1	3.2	3.2	3.2
20-30	2.6	2.6	2.7	2.7	2.8	2.8	2.9	2.9	3.0
30-55	2.2	2.2	2.3	2.4	2.4	2.5	2.6	2.6	2.6
55-80	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.3
80-105	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0
105-130	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.7
130-160	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5
160-195	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3
195-230	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
over 230	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table LXXVII. The factors by which the number of nets which were cleared after five or more nights must be multiplied to give fishing effort in equivalent net-nights where a particular catch is made partly by nets cleared after one night, partly by nets ceared after five or more nights. The appropriate factor for the nets cleared after one night is 1.0 in every case. The values in the first column show the ranges of catch per net in pounds round weight including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of nets which were cleared after five or more nights.								
	10	20	30	40	50	60	70	80	90
0-10	3.8	3.9	4.0	4.1	4.1	4.2	4.2	4.3	4.3
10-20	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.8	3.9
20-30	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5
30-55	2.3	2.4	2.5	2.6	2.6	2.7	2.8	2.9	3.0
55-80	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.4	2.5
80-105	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.2
105-130	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8
130-160	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5
160-195	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3
195-230	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
over 230	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table LXXVIII. The factors by which the number of nets, which were cleared after two nights (top line of each pair), and after three nights (bottom line of each pair), must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made, partly by nets cleared after two nights, partly by nets cleared after three nights. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of nets which were cleared after two nights (top row) and after three nights (bottom row).								
	10 90	20 80	30 70	40 60	50 50	60 40	70 30	80 20	90 10
0-10	2.0 2.8	2.0 2.8	2.0 2.8	2.0 2.8	2.0 2.8	2.0 2.8	2.0 2.8	2.0 2.8	2.0 2.8
10-20	1.9 2.6	1.9 2.6	1.9 2.6	1.9 2.6	1.9 2.6	1.9 2.5	1.9 2.5	1.9 2.5	1.9 2.5
20-30	1.8 2.4	1.8 2.4	1.8 2.4	1.8 2.4	1.8 2.4	1.8 2.3	1.8 2.3	1.8 2.3	1. 2.3
30-55	1.7 2.2	1.7 2.2	1.7 2.2	1.7 2.2	1.7 2.2	1.7 2.2	1.7 2.2	1.7 2.2	1.7 2.2
55-80	1.6 1.9	1.6 1.9	1.6 1.9	1.6 1.9	1.6 1.9	1.6 1.9	1.6 1.9	1.6 1.9	1.6 1.9
80-105	1.5 1.8	1.5 1.8	1.5 1.8	1.5 1.8	1.5 1.8	1.5 1.8	1.5 1.8	1.5 1.8	1.5 1.8
105-130	1.4 1.6	1.4 1.6	1.4 1.6	1.4 1.6	1.4 1.6	1.4 1.6	1.4 1.6	1.4 1.6	1.4 1.6
130-160	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5
160-195	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3
195-230	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
over 230	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0

Table LXXIX. The factors by which the number of nets, which were cleared after two nights (top line of each pair) and after four nights (bottom line of each pair), must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made, partly by nets cleared after two nights, partly by nets cleared after four nights. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of ents which were cleared after two nights (top row) and after four nights (bottom row).								
	10 90	20 80	30 70	40 60	50 50	60 40	70 30	80 20	90 10
0-10	2.0 3.7	2.0 3.6	2.0 3.6	2.0 3.6	2.0 3.6	2.0 3.6	2.0 3.6	2.0 3.6	2.0 3.5
10-20	1.9 3.3	1.9 3.2	1.9 3.2	1.9 3.2	1.9 3.2	1.9 3.1	1.9 3.1	1.9 3.1	1.9 3.1
20-30	1.9 3.0	1.9 3.0	1.9 2.9	1.8 2.9	1.8 2.9	1.8 2.9	1.8 2.8	1.8 2.8	1.8 2.8
30-55	1.8 2.7	1.8 2.6	1.8 2.6	1.8 2.6	1.7 2.6	1.7 2.5	1.7 2.5	1.7 2.5	1.7 2.5
55-80	1.7 2.3	1.7 2.3	1.7 2.3	1.6 2.2	1.6 2.2	1.6 2.2	1.6 2.2	1.6 2.1	1.6 2.1
80-105	1.6 2.0	1.6 2.0	1.6 2.0	1.5 2.0	1.5 1.9	1.5 1.9	1.5 1.9	1.5 1.9	1.5 1.9
105-130	1.5 1.8	1.5 1.8	1.5 1.8	1.4 1.8	1.4 1.8	1.4 1.8	1.4 1.7	1.4 1.7	1.4 1.7
130-160	1.4 1.5	1.4 1.5	1.4 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5
160-195	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3
195-230	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
over 230	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0

Table LXXX. The factors by which the number of nets which were cleared after two nights (top line of each pair) and after five or more nights (bottom line of each pair) must be multiplied to give fishing effort in equivalent net-nights where a particular catch is made partly by nets cleared after two nights, partly by nets cleared after five or more nights. The values in the first column show the ranges of catch per net in pounds round weight including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of nets which were cleared after two nights (top row) and after five or more nights (bottom row).								
	10 90	20 80	30 70	40 60	50 50	60 40	70 30	80 20	90 10
1-10	2.0 4.4	2.0 4.4	2.0 4.4	2.0 4.3	2.0 4.3	2.0 4.3	2.0 4.3	2.0 4.2	2.0 4.2
10-20	1.9 3.9	1.9 3.8	1.9 3.8	1.9 3.8	1.9 3.8	1.9 3.7	1.9 3.7	1.9 3.6	1.9 3.6
20-30	1.9 3.5	1.9 3.5	1.9 3.4	1.9 3.4	1.8 3.3	1.8 3.3	1.8 3.2	1.8 3.2	1.8 3.1
30-55	1.8 3.0	1.8 3.0	1.8 2.9	1.8 2.9	1.7 2.8	1.7 2.8	1.7 2.7	1.7 2.7	1.7 2.6
55-80	1.7 2.5	1.7 2.5	1.7 2.5	1.7 2.4	1.6 2.4	1.6 2.4	1.6 2.3	1.6 2.3	1.6 2.3
80-105	1.6 2.2	1.6 2.1	1.6 2.1	1.6 2.1	1.5 2.1	1.5 2.0	1.5 2.0	1.5 2.0	1.5 2.0
105-130	1.5 1.9	1.5 1.9	1.5 1.8	1.5 1.8	1.4 1.8	1.4 1.8	1.4 1.8	1.4 1.7	1.4 1.7
130-160	1.4 1.6	1.4 1.6	1.4 1.6	1.3 1.6	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5	1.3 1.5
160-195	1.2 1.4	1.2 1.4	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3	1.2 1.3
195-230	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
over 230	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0

Table LXXXI. The factors by which the number of nets, which were cleared after three nights (top line of each pair) and after four nights (bottom line of each pair), must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made partly by nets cleared after three nights, partly by nets cleared after four nights. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish in the particular catch.

Catch per net	The proportion (percentage) of nets which were cleared after three nights (top row) and after four nights (bottom row).								
	10 90	20 80	30 70	40 60	50 50	60 40	70 30	80 20	90 10
0-10	2.9 3.7	2.9 3.7	2.9 3.7	2.9 3.6	2.8 3.6	2.8 3.6	2.8 3.6	2.8 3.6	2.8 3.6
10-20	2.7 3.3	2.6 3.3	2.6 3.3	2.6 3.2	2.6 3.2	2.6 3.2	2.6 3.2	2.6 3.2	2.6 3.2
20-30	2.5 3.0	2.5 3.0	2.5 3.0	2.5 3.0	2.4 3.0	2.4 2.9	2.4 2.9	2.4 2.9	2.4 2.9
30-55	2.3 2.7	2.3 2.7	2.2 2.7	2.2 2.6	2.2 2.6	2.2 2.6	2.2 2.6	2.2 2.6	2.2 2.6
55-80	2.0 2.3	2.0 2.3	2.0 2.3	2.0 2.3	2.0 2.3	2.0 2.3	2.0 2.3	2.0 2.2	1.9 2.2
80-105	1.8 2.0	1.8 2.0	1.8 2.0	1.8 2.0	1.8 2.0	1.8 2.0	1.8 2.0	1.8 2.0	1.8 2.0
105-130	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8
130-160	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5
160-195	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3
195-230	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
over 230	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0

Table LXXXII. The factors by which the number of nets which were cleared after three nights (top line of each pair) and after five or more nights(bottom line of each pair), must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made partly by nets cleared after three nights, partly by nets cleared after five or more nights. The values in the first column show the ranges of catch per net in pounds round weight, including discarded and rough fish.

Catch per net	The proportion (percentage) of nets which were cleared after three nights (top row) and after five or more nights (bottom row).								
	10 90	20 80	30 70	40 60	50 50	60 40	70 30	80 20	90 10
0-10	2.9 4.4	2.9 4.4	2.9 4.4	2.9 4.4	2.9 4.4	2.9 4.4	2.9 4.4	2.8 4.3	2.8 4.3
10-20	2.7 3.9	2.7 3.9	2.7 3.9	2.7 3.8	2.6 3.8	2.6 3.8	2.6 3.8	2.6 3.8	2.6 3.8
20-30	2.5 3.6	2.5 3.5	2.5 3.5	2.5 3.5	2.5 3.4	2.5 3.4	2.4 3.4	2.4 3.3	2.4 3.3
30-55	2.3 3.0	2.3 3.0	2.3 3.0	2.3 2.9	2.2 2.9	2.2 2.9	2.2 2.9	2.2 2.8	2.2 2.8
55-80	2.1 2.5	2.0 2.5	2.0 2.5	2.0 2.5	2.0 2.5	2.0 2.4	2.0 2.4	2.0 2.4	2.0 2.4
80-105	1.9 2.2	1.8 2.1	1.8 2.1	1.8 2.1	1.8 2.1	1.8 2.1	1.8 2.1	1.8 2.1	1.8 2.0
105-130	1.7 1.9	1.7 1.9	1.7 1.9	1.7 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8	1.6 1.8
130-160	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6
160-195	1.3 1.4	1.3 1.4	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3	1.3 1.3
195-230	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
over 230	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0

Table LXXXIII. The factors by which the number of nets which were cleared after four nights (top line of each pair) and after five or more nights (bottom line of each pair) must be multiplied to give fishing effort in equivalent net-nights, where a particular catch is made partly by nets cleared after four nights, partly by nets cleared after five or more nights. The values in the first column show the ranges of catch per net in pounds round weight including discarded and rough fish.

Catch per net	The proportion (percentage) of nets which were cleared after four nights (top row) and after five or more nights (bottom row).								
	10 90	20 80	30 70	40 60	50 50	60 40	70 30	80 20	90 10
0-10	3.7 4.4	3.7 4.4	3.7 4.4	3.7 4.4	3.7 4.4	3.7 4.4	3.7 4.4	3.7 4.4	3.7 4.4
10-20	3.4 3.9	3.4 3.9	3.3 3.9	3.3 3.9	3.3 3.9	3.3 3.9	3.3 3.9	3.3 3.9	3.3 3.9
20-30	3.1 3.6	3.1 3.6	3.1 3.5	3.1 3.5	3.1 3.5	3.0 3.5	3.0 3.5	3.0 3.5	3.0 3.5
30-55	2.8 3.0	2.8 3.0	2.8 3.0	2.8 3.0	2.7 3.0	2.7 3.0	2.7 3.0	2.7 3.0	2.7 3.0
55-80	2.4 2.6	2.4 2.5	2.4 2.5	2.4 2.5	2.4 2.5	2.4 2.5	2.4 2.5	2.3 2.5	2.3 2.5
80-105	2.1 2.2	2.1 2.2	2.1 2.2	2.1 2.2	2.1 2.2	2.0 2.2	2.0 2.1	2.0 2.1	2.0 2.1
105-130	1.8 1.9	1.8 1.9	1.8 1.9	1.8 1.9	1.8 1.9	1.8 1.9	1.8 1.9	1.8 1.9	1.8 1.9
130-160	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6	1.5 1.6
160-195	1.3 1.4	1.3 1.4	1.3 1.4	1.3 1.4	1.3 1.4	1.3 1.4	1.3 1.4	1.3 1.4	1.3 1.4
195-230	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
over 230	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0