Size-frequency distributions of the dominant macrozooplankton in Frobisher Bay, N.W.T. during the open water season

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SIZE-FREQUENCY DISTRIBUTIONS OF THE DOMINANT MACROZOOPLANKTON IN FROBISHER BAY, N.W.T. DURING THE OPEN WATER SEASON

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CONTENTS

ABSTRACT

Percy, J. A. and F. J. Fife. 1985. Size-frequency distributions of the dominant macrozooplankton in Frobisher Bay, N.W.T. during the open water season. Can. Data Rep. Fish. Aquat. Sci. 538: v + 117 pp.

This report serves as a repository for tabular data pertaining to the size frequency distributions of populations of the four dominant species of macrozooplankton present in Frobisher Bay. Data are presented for the ctenophore Mertensia ovum, the hyperiid amphipod Parathemisto libellula, the chaetognath Sagitta elegans and the euphausiid Thysanoessa inermis. Collections were obtained at frequent intervals from two stations in the Upper Bay during several open water seasons and on two occasions at two stations in the lower bay.

Key words: Arctic macrozooplankton, size-frequency, Mertensia ovum, Sagitta elegans, Parathemisto libellula, Thysanoessa inermis.

RESUME

Percy, J. A. and F. J. Fife. 1985. Size-frequency distributions of the dominant macrozooplankton in Frobisher Bay, N.W.T. during the open water season. Can. Data Rep. Fish. Aquat. Sci. 538: v + 117 pp.

Ce rapport présente un répertoire des données tabulaires reliées à la distribution de la fréquence de la taille des quatre principales espèces de macrozooplancton présentes dans la Baie de Frobisher, T.N.O. Les résultats sont donnés pour le cténaire, Mertensia ovum, l'amphipode hyperidée, Parathemisto libellula, le chaetognathe Sagitta elegans et l'euphausiacée, Thysanoessa inermis. On a échantillonée fréquemment à deux stations dans la partie supérieure de la baie pendant quelques saisons d'été et deux fois à deux stations dans la partie inférieure de la baie.

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INTRODUCTION

Marine macrozooplankton (>2 mm) play an important intermediary role in the transfer of energy between herbivorous microzooplankton and carnivorous marine vertebrates. In polar seas many species of fish, birds and mammals rely heavily, at least for part of the year, on macrozooplankton. In recent years a great deal has been learned about the basic ecology of many of the common species of arctic macrozooplankton. There is, however, relatively little quantitative information about their standing stock biomass at different times and places, their rates of production and their trophic relationships.

The present report is part of a continuing study of macrozooplankton production in upper Frobisher Bay, Southeastern Baffin Island. An earlier report (Percy and Fife, 1983) presented data on the proportion of biomass and caloric energy within the major classes of organisms constituting the macrozooplankton community. It was found that four species, the ctenophore *Mertensia ovum*, the chaetognath, *Sagitta elegans*, the hyperiid amphipod *Parathemisto libellula* and the euphausiid *Thysanoessa inermis* consistently dominated the community during the open water season. A subsequent report (Percy and Fife, 1985) presented detailed information about the vertical distribution and estimates of the absolute abundance for these four dominant species during six consecutive open water seasons.

In the present report we present tabular data, based on these same macrozooplankton collections, pertaining to the size frequencies of animals in each of the populations.

METHODS

The collecting procedures, species composition and abundance estimates for the zooplankton collections used in this study have been fully described elsewhere (Percy and Fife, 1985). Sampling was carried out at irregular intervals during the open water season (August-September) at two stations in Upper Frobisher Bay from 1978 to 1983. Stations 5 and 51 were occupied a total of 24 and 13 times, respectively. Two additional stations in lower Frobisher Bay, 327 and 313a were occupied twice and once, respectively. The original tow collections are numbered consecutively from the beginning each year. The number is preceded by the last two digits of the year. Thus, collection number 81-04 is the fourth plankton tow of 1981. If the data are for a set of collections from different depths at one station on the same day then the beginning and ending collection numbers (usually the shallowest and the deepest) are given, separated by a period. Thus 8209.17 refers to the pooled data from the 1982 collections 09 to 17,inclusive. Station locations and pertinent hydrographic data are presented in the earlier report.

The total lengths of fully extended and straightened formalin preserved (except for *Mertensia*) animals were measured to the nearest 0.1 mm using dial calipers. The length of *P. libellula* was measured from the front of the head to the tip of the longest uropod; of *I. inermis* from the tip of the rostrum to the end of the longest uropod and for *S. elegans* from the front of the head to the end of the tail, excluding the tail fin which is soft and readily damaged. The data has not been corrected for shrinkage during preservation. However, experiments were carried out on

each species to estimate the degree of shrinkage. Animals were measured while alive (after narcotization by bubbling CO_2 through the medium) and then at intervals after preservation.

Mertensia ovum kept in buffered formalin disintegrated rapidly and could not be measured. An attempt was made to preserve the ctenophores by first fixing them in 1% TCA and then holding them in a special ctenophore preservative (Steedman, 1976; Percy and Fife, 1985). With this treatment the animals remained intact but shrank dramatically. An experiment in which the ctenophore volumes were measured (by displacement in graduated cylinders) before and after preservation indicated a reduction in volume of over 90%. It was thus not feasible to obtain size estimates from preserved specimens. From 1981 on Mertensia were carefully removed from the zooplankton samples upon collection and transported alive to the laboratory in large jugs of chilled seawater. They were placed individually in petri plates with a small quantity of water and the maximum length (excluding tentacles) was measured by calipers along the long axis of the body. Ctenophores less than 2 mm were generally not counted or measured although their presence in significant numbers in the samples was noted.

Very large samples were subsampled prior to measurement. Animals were spread uniformly in an 8-sectored circular pan and all animals from an appropriate number of sectors were removed and measured. Where necessary the mean lengths for the pooled depth samples have been corrected for the variations in the degree of subsampling carried out on individual depth samples.

Mean lengths of each species were calculated for each depth sample in order to detect vertical partitioning of different size groups. The mean lengths of animals from all depths sampled during a given station occupation were also calculated for each species. Size frequency histograms were prepared for each of these pooled-depth data sets that contained more than 10 measurements.

RESULTS

LIST OF TABLES

Table 1. List of macrozooplankton collections from Frobisher Bay from which body length data of the dominant species were obtained. Size frequency histograms were prepared for pooled station samples that contained at least 10 specimens of *M. ovum* (M), *P. libellula* (P), *S. elegans* (S) or *T. inermis* (T).

Year	Date	Station	Collection No.	Histograms
1978	July 30	5	7802.06	PS
	July 30	51	7807.12	PST
	Aug. 26	5	7813.18	PST
	Aug. 26	51	7819.24	PST
	Sept. 19	5	7825.30	PS
	Sept. 20	51	7831.38	PST
1979	July 28	5	7901.07	PS
	July 29	51	7908.16	PST
	Aug. 16	51	7917.25	PST
	Aug. 17	5	7926.32	PST
	Sept. 11	5	7933.37	PS
	Sept. 12	51	7938.44	PST
	Sept. 24	5	7945.50	PS
	Sept. 25	51	7951.58	PS
1980	Aug. 21	5	8001.06	PST
	Aug. 28	5	8007.12	PS
	Aug. 31	51	8013.20	PST
	Sept. 2	5	8021.27	PST
	Sept. 5	5	8028.33	PST
	Sept. 10	5	8034.39	PS
	Sept. 12	5	8040.45	ST
1981	Aug. 3	5	8101.06	MPS
	Aug. 4	51	8107.15	MPST
	Aug. 10	5	8116.22	MPS
	Aug. 21	5	8123.28	MPS
	Aug. 24	51	8129.37	MPST
	Sept. 2	5	8138.43	MPS
	Sept. 7	5	8144.50	MPS
	Sept. 10	51	8151.59	MPST
	Sept. 13	5	8160.66	MPS
1982	Aug. 8	5	8201.08	PST
	Aug. 13	51	8209.17	MPST
	Aug. 14	327	8218.25	MPST
	Aug. 24	5	8229.33	MPS
	Sept. 2	5	8234.39	MPS
	Sept. 3	51	8240.48	MPST
	Sept. 5	327	8249.58	MPST
	Sept. 7	313a	8259.64	MPS
1983	Aug. 18	5	8301.06	MPS
	Aug. 25	5	8307.11	MPS

Table 2. Shrinkage in length (L,mm) or volume (V,ml) of macrozooplankton following preservation for varying periods. (Day 0 represents measurement on live animal).

Species	L or V	N	DAY	MEAN	S.D.	Δ%*	t**	P
P. libellula	L	24	0	19.0	1.1	-	-	-
			10	18.8	1.3	-1.1	2.1	0.05
			602	18.4	1.1	-3.2	7.6	0.001
S. elegans	L	24	0	29.3	4.1	-	-	-
			8	26.9	4.2	-8.2	12.4	0.001
			600	26.6	4.2	-9.2	7.9	0.001
T. inermis	L	27	0	28.2	2.1	-	-	-
			9	26.4	2.0	-6.4	2.9	0.01
			32	26.6	2.0	-5.7	-0.4	0.73
			697	26.6	2.1	-5.7	-0.1	0.90
M. ovum	V	25	0	5.9	1.6	-	-	-
			12	0.4	0.1	-93.2	18.3	0.001

* Difference from day 0.

** t-statistic for significance of difference from preceding measurement.

Table 3. Mean lengths of *Mertensia ovum* at different depths (m) and for all depths combined (Σ) at various stations in Frobisher Bay from 1981 to 1983. N is the total number of animals in the sample and n is the number measured.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
3.8.81	5	81-01	0.5	0	0	-	-	-	-
		-02	5	7	7	19.2	6.3	9.8	27.9
		-03	9	20	20	22.7	10.1	11.9	48.1
		-04	21	49	49	19.0	6.3	7.2	35.9
		-05	39	17	14	22.4	3.6	17.0	31.2
		-06	40	19	14	18.3	6.1	12.1	37.0
		Σ		112	104	20.1	7.1	7.2	48.1
4.8.81	51	81-07	0.5	0	0	-	-	-	-
		-08	5	5	5	22.5	6.3	14.3	29.7
		-09	10	12	12	22.0	8.7	11.2	41.9
		-10	22	16	15	17.8	5.9	8.8	52.1
		-11	36	37	37	19.7	5.4	11.9	30.6
		-12	62	22	22	24.0	7.9	11.2	41.7
		-13	83	50	50	22.4	6.2	12.9	42.5
		-14	118	41	41	25.0	8.9	12.2	52.3
		-15	135	57	42	26.5	7.0	13.7	48.9
		Σ		240	225	23.2	7.8	8.8	52.3
10.8.81	5	81-16	0.5	1	1	30.9	-	30.9	30.9
		-17	5	0	0	-	-	-	-
		-18	9	23	23	24.6	9.7	13.2	63.5
		-19	13	14	14	23.6	9.7	5.6	45.6
		-20	26	38	38	21.6	7.7	6.3	37.3
		-21	28	67	62	21.9	6.6	10.5	36.5
		-22	47	51	49	27.4	8.2	10.9	51.7
		Σ		194	187	23.8	8.3	5.6	63.5

Table 3. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
21.8.81	5	81-23	0.5	0	0	-	-	-	-
		-24	2	8	8	21.7	5.1	15.5	32.0
		-25	6	5	5	28.0	5.3	21.5	34.8
		-26	13	46	46	28.6	6.8	12.5	41.6
		-27	23	30	29	28.3	10.9	9.5	58.3
		-28	33	40	40	25.3	7.1	13.6	36.4
		Σ		129	128	27.0	8.1	9.5	58.3
24.8.81	51	81-29	0.5	0	0	-	-	-	-
		-30	5	0	0	-	-	-	-
		-31	9	3	3	24.4	6.5	16.9	28.4
		-32	18	13	13	28.7	7.0	17.0	46.5
		-33	44	66	66	27.1	9.1	9.9	71.5
		-34	59	38	38	27.4	8.2	17.1	59.9
		-35	87	78	78	26.3	5.3	13.4	38.5
		-36	115	57	53	31.5	10.1	15.3	57.5
		-37	144	78	75	26.9	8.3	12.8	53.3
		Σ		333	326	27.7	8.3	9.9	71.5
2.9.81	5	81-38	0.5	0	0	-	-	-	-
		-39	6	15	15	34.7	6.3	22.8	42.7
		-40	10	18	18	28.1	5.7	19.1	42.3
		-41	21	21	20	28.3	7.0	15.6	46.1
		-42	29	30	28	26.1	6.8	15.0	38.1
		-43	37	65	61	28.6	8.5	9.7	49.0
		Σ		149	142	28.6	7.8	9.7	49.0

Table 3. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
7.9.81	5	81-44	0.5	1	1	22.5	-	22.5	22.5
		-45	6	0	0	-	-	-	-
		-46	9	14	14	31.9	12.8	2.8	54.9
		-47	19	29	29	29.5	8.5	14.7	46.2
		-48	33	49	48	28.1	6.9	12.7	45.2
		-49	38	45	44	32.2	10.7	12.3	55.0
		-50	50	60	59	31.3	8.4	17.5	55.5
		Σ		198	195	30.4	9.1	2.8	55.5
10.9.81	51	81-51	0.5	1	1	18.5	-	18.5	18.5
		-52	6	0	0	-	-	-	-
		-53	10	9	8	27.2	9.2	18.5	44.4
		-54	23	33	32	34.1	8.5	24.2	57.5
		-55	44	63	63	31.0	9.2	10.6	55.6
		-56	59	119	117	33.0	7.7	13.6	61.5
		-57	86	90	89	34.8	8.7	13.5	65.9
		-58	120	56	55	33.6	7.0	17.3	50.9
		-59	164	45	40	28.0	7.4	13.1	43.8
		Σ		416	406	32.5	8.4	10.6	65.9
13.9.81	5	81-60	0.5	0	0	-	-	-	-
		-61	5	0	0	-	-	-	-
		-62	10	7	7	26.6	7.4	13.7	37.9
		-63	21	9	9	34.7	7.5	21.1	45.2
		-64	28	32	29	32.4	8.2	16.5	51.8
		-65	47	8	8	36.1	8.6	19.8	44.6
		-66	62	5	5	30.5	9.4	20.2	40.4
		Σ		61	58	32.4	8.3	13.7	51.8

Table 3. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
8.8.82	5	82-01	0.5	9	0	-	-	-	-
		-02	5	54	0	-	-	-	-
		-03	11	24	0	-	-	-	-
		-04	16	24	0	-	-	-	-
		-05	21	14	0	-	-	-	-
		-06	28	11	0	-	-	-	-
		-07	41	5	0	-	-	-	-
		-08	48	5	0	-	-	-	-
		Σ		146	0	-	-	-	-
13.8.82	51	82-09	0.5	0	0	-	-	-	-
		-10	8	6	6	37.4	6.9	29.2	48.7
		-11	11	15	15	35.1	8.1	23.6	53.0
		-12	19	22	22	33.7	10.9	14.3	50.0
		-13	48	18	18	31.9	8.4	18.0	47.9
		-14	56	19	17	36.5	9.3	23.0	55.0
		-15	77	29	28	32.4	10.5	6.0	54.0
		-16	88	70	61	33.2	9.6	16.0	69.0
		-17	170	35	35	34.7	8.9	18.0	50.0
		Σ		214	202	33.8	9.4	6.0	69.0
14.8.82	327	82-18	0.5	3	3	23.3	13.8	13.0	39.0
		-19	1	37	36	11.1	5.5	2.0	21.0
		-20	4	310	85	21.8	10.3	8.0	55.0
		-21	10	546	118	19.7	9.6	10.0	65.0
		-22	21	210	151	20.7	9.7	10.0	48.0
		-23	49	330	184	18.2	10.5	5.0	65.0
		-24	101	16	16	19.4	12.3	10.0	53.0
		-25	244	10	10	23.9	9.8	12.0	43.0
		Σ		1462	603	19.8	9.9	2.0	65.0

Table 3. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
24.8.82	5	82-29	0.5	1	1	18.8	-	18.8	18.8
		-30	5	43	43	21.3	15.5	3.9	54.6
		-31	12	57	57	19.3	13.1	2.3	51.1
		-32	27	25	25	21.8	15.5	5.2	52.8
		-33	48	12	12	14.5	10.8	5.0	44.0
		Σ		138	138	20.0	14.1	2.3	54.6
2.9.82	5	82-34	0.5	0	0	-	-	-	-
		-35	5	53	53	16.1	7.8	7.0	50.8
		-36	8	90	55	19.9	8.3	6.3	46.3
		-37	18	80	79	16.7	8.6	4.0	46.1
		-38	27	66	65	19.3	12.0	6.2	57.1
		-39	36	47	47	16.6	9.4	5.6	49.5
		Σ		336	299	17.7	9.4	4.0	57.1
3.9.82	51	82-40	0.5	2	2	41.3	11.7	33.0	49.2
		-41	6	18	17	18.7	11.9	4.2	44.6
		-42	11	44	41	21.1	12.7	2.9	55.4
		-43	20	126	110	23.2	12.6	4.5	55.0
		-44	41	66	60	19.3	9.8	5.0	45.9
		-45	64	55	54	23.6	11.9	8.6	58.1
		-46	82	60	54	22.9	11.2	5.9	48.2
		-47	92	61	61	23.2	11.1	7.4	54.6
		-48	165	59	53	22.0	10.5	5.6	52.8
		Σ		491	452	22.3	11.6	2.9	58.1

Table 3. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
5.9.82	327	82-49	0.5	2	2	18.8	18.5	5.7	31.8
		-50	9	198	179	17.6	7.0	2.6	47.3
		-51	24	635	320	17.8	8.7	4.3	51.9
		-52	50	180	172	20.8	9.9	6.2	55.0
		-54	99	64	60	19.0	9.7	5.5	53.5
		-55	198	59	57	17.5	8.8	7.2	50.2
		-56	294	32	23	18.3	7.3	8.5	36.2
		-58	486	40	30	19.1	8.9	7.0	43.0
		Σ		1210	843	18.3	8.8	2.6	55.0
7.9.82	313a	82-59	6	8	8	11.4	9.1	5.0	32.5
		-60	22	53	42	15.3	8.1	6.9	50.4
		-64	120	53	44	19.6	7.4	8.1	42.9
		-62	323	24	17	14.6	7.0	5.5	28.4
		-63	484	27	23	19.5	10.9	7.1	45.4
		Σ		165	134	17.9	9.1	5.1	57.2
18.8.83	5	83-01	0.5	3	3	22.9	3.9	19.0	26.7
		-02	5	166	156	26.8	12.0	4.0	59.4
		-03	12	172	156	23.6	8.5	2.8	44.4
		-04	21	86	75	26.2	10.5	4.0	58.5
		-05	31	32	31	23.5	9.0	4.2	40.4
		-06	45	18	15	23.8	10.9	3.0	42.7
		Σ		477	436	25.2	10.4	2.8	59.4

Table 3. Continued.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
25.8.83	5	83-07	0.5	5	5	32.0	9.9	23.6	47.1
		-08	5	14	14	28.7	12.5	5.4	54.3
		-09	10	69	60	20.9	8.1	4.4	39.5
		-10	19	42	17	24.9	9.6	6.2	37.7
		-11	27	58	48	23.4	8.7	7.4	45.7
		Σ		188	144	23.3	9.4	4.4	54.3

Table 4. Mean lengths of Parathemisto libellula at different depths (m) and for all depths combined (Σ) at various stations in Frobisher Bay from 1978 to 1983. N is the total number of animals in the sample and n the number measured.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
30.7.78	5	78-02	0.5	10	10	6.3	2.2	4.0	11.0
		-03	10	54	54	6.5	2.3	3.5	13.0
		-04	20	23	23	6.0	1.9	4.2	15.0
		-05	30	11	11	5.5	1.8	4.0	11.0
		-06	70	100	100	5.5	1.4	3.2	12.5
		Σ		198	198	5.9	2.0	2.6	15.0
30.7.78	51	78-07	0.5	19	19	4.8	0.5	4.0	6.0
		-08	10	43	43	15.0	3.3	4.5	23.0
		-09	20	4	4	16.3	5.6	8.0	20.0
		-10	40	6	6	7.3	1.6	5.5	10.0
		-11	60	7	7	7.1	2.1	4.5	11.0
		-12	100	28	28	11.9	5.5	4.5	23.0
		Σ		107	107	11.5	5.5	4.0	23.0
26.8.78	5	78-13	0.5	5	4	9.5	4.4	7.0	16.0
		-14	10	32	32	12.9	5.1	4.0	30.0
		-15	20	86	86	17.2	4.1	7.0	29.0
		-16	30	66	66	17.0	4.0	4.9	23.0
		-17	40	32	31	9.2	4.2	4.5	25.0
		-18	60	124	62	8.0	3.3	4.5	22.0
		Σ		345	281	12.6	5.8	4.0	30.0
26.8.78	51	78-19	0.5	300	58	6.9	1.3	5.0	11.0
		-20	10	45	43	15.8	3.8	6.0	22.0
		-21	20	91	91	18.5	4.2	6.0	30.0
		-22	40	216	214	17.2	4.7	5.5	30.0
		-23	60	278	203	17.5	4.6	4.5	33.0
		Σ		930	609	14.7	6.1	4.5	33.0

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
19.9.78	5	78-25	0.5	0	0	-	-	-	-
		-26	10	4	4	14.0	7.4	9.0	25.0
		-27	20	5	5	24.2	2.6	21.0	28.0
		-28	30	28	28	22.1	2.6	17.0	26.0
		-29	40	52	52	21.8	2.0	18.0	27.0
		-30	50	10	10	21.7	2.0	17.0	25.0
		Σ		99	99	21.7	3.0	9.0	28.0
20.9.78	51	78-31	0.5	3	3	12.7	6.4	9.0	20.0
		-32	10	42	42	13.2	4.3	8.0	25.0
		-33	20	17	17	18.7	3.5	11.0	24.0
		-34	40	165	164	21.7	2.3	12.0	27.0
		-35	60	346	155	21.5	1.9	16.0	28.0
		-36	80	25	24	21.5	2.2	17.0	25.0
		-37	100	5	5	22.3	1.6	21.0	25.0
		-38	150	4	4	21.1	0.6	20.5	22.0
		Σ		607	414	20.9	3.3	8.0	28.0
28.7.79	5	79-01	0.5	0	0	-	-	-	-
		-02	5	19	19	8.9	3.5	5.2	15.9
		-03	10	858	150	11.4	2.4	4.2	17.6
		-04	21	95	89	8.9	3.3	4.1	17.1
		-05	29	37	37	6.8	2.3	4.7	14.5
		-06	41	65	65	6.7	3.2	2.5	15.0
		-07	52	52	52	6.1	2.1	4.1	15.2
		Σ		1126	412	10.5	3.4	2.5	17.6

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
29.7.79	51	79-08	0.5	2	2	6.1	0.8	5.5	6.6
		-09	11	154	154	8.5	3.6	4.3	17.1
		-10	19	63	62	6.7	2.4	4.4	14.3
		-11	30	52	52	6.9	2.7	4.4	16.4
		-12	40	88	88	6.2	1.9	4.2	15.4
		-13	54	77	77	8.1	3.1	4.3	15.5
		-14	82	104	104	9.8	3.7	4.2	18.4
		-15	106	80	78	11.2	3.7	4.6	17.3
		-16	146	18	18	11.3	4.1	5.3	17.5
		Σ		638	635	8.4	3.6	4.2	18.4
16.8.79	51	79-17	0.5	0	0	-	-	-	-
		-18	7	42	42	9.2	1.3	6.8	12.3
		-19	19	35	34	12.0	2.2	7.4	17.0
		-20	29	60	60	14.9	4.3	6.6	25.5
		-21	34	95	87	16.5	3.0	7.7	23.1
		-22	48	108	107	16.2	4.5	5.5	26.0
		-23	75	150	149	12.9	5.1	5.8	26.7
		-24	96	56	56	8.5	2.5	6.1	17.5
		-25	123	69	63	9.5	3.1	5.5	18.5
		Σ		615	598	13.1	4.9	5.5	26.7
17.8.79	5	79-26	0.5	15	14	7.6	0.8	6.2	8.9
		-27	5	85	85	9.8	2.0	5.6	14.8
		-28	10	61	60	14.2	4.0	7.8	23.7
		-29	22	208	206	10.9	3.5	5.2	22.4
		-30	33	169	166	9.3	2.2	5.5	19.2
		-31	40	183	182	10.6	3.2	5.8	19.6
		-32	52	150	150	9.0	2.3	4.7	21.9
		Σ		871	863	10.3	3.2	4.7	23.7

Table 4. Continued.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
11.9.79	5	79-33	0.5	0	0	-	-	-	-
		-34	4	0	0	-	-	-	-
		-35	10	73	73	16.5	4.2	9.5	29.3
		-36	23	6	6	21.4	4.4	17.9	31.0
		-37	34	1	1	21.2	-	21.2	21.2
		Σ		80	80	16.9	4.5	9.5	31.0
12.9.79	51	79-38	0.5	0	0	-	-	-	-
		-39	8	13	13	14.8	2.7	11.8	21.3
		-40	23	139	138	19.8	2.7	14.8	29.8
		-41	46	44	44	20.4	2.4	14.5	29.0
		-42	62	42	42	20.7	1.9	17.5	26.6
		-43	81	2	2	17.2	1.2	16.0	18.3
		-44	113	4	4	12.5	3.2	9.6	17.5
		Σ		244	243	19.7	3.0	9.6	29.8
24.9.79	5	79-45	0.5	0	0	-	-	-	-
		-46	9	0	0	-	-	-	-
		-47	9	7	7	21.0	4.5	17.2	31.5
		-48	14	40	40	21.4	2.9	13.9	28.8
		-49	30	6	6	21.2	3.6	17.0	28.5
		-50	41	7	7	20.3	2.4	15.7	24.4
		Σ		60	60	21.2	3.2	13.9	31.5

Table 4. Continued.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
25.9.79	51	79-51	0.5	0	0	-	-	-	-
		-52	10	37	37	15.0	1.7	11.4	18.1
		-53	19	71	71	20.0	2.5	13.0	29.8
		-54	43	8	8	23.0	1.5	20.0	24.9
		-56	48	34	34	23.2	2.6	18.5	31.6
		-55	68	0	0	-	-	-	-
		-57	98	4	4	21.1	7.1	10.2	29.4
		-58	145	46	46	24.8	3.6	16.5	31.4
		Σ		200	200	20.9	4.4	10.2	31.6
21.8.80	5	80-01	0.5	0	0	-	-	-	-
		-02	3	6	6	12.8	1.2	11.5	14.8
		-03	10	26	26	15.5	4.6	11.7	31.0
		-04	18	9	9	16.6	6.3	9.9	30.8
		-05	30	9	9	16.6	7.1	9.7	32.6
		-06	34	7	7	12.9	3.1	8.5	17.7
		Σ		57	57	15.2	5.0	8.5	32.6
28.8.80	5	80-07	0.5	0	0	-	-	-	-
		-08	5	9	9	14.8	2.6	11.2	20.9
		-09	12	7	5	16.3	3.1	13.6	20.0
		-10	20	9	9	17.6	2.3	15.1	21.3
		-11	32	1	1	23.9	-	23.9	23.9
		-12	43	7	7	18.3	4.0	10.1	22.1
		Σ		33	31	16.9	3.3	10.1	23.9

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
31.8.80	51	80-13	0.5	2	2	14.8	6.2	10.4	19.1
		-14	5	9	9	12.1	2.2	9.3	16.3
		-15	11	11	11	15.8	1.6	13.1	18.4
		-16	20	15	15	19.9	2.7	14.7	23.5
		-17	26	64	64	19.9	2.7	10.9	25.1
		-18	63	0	0	-	-	-	-
		-19	70	12	12	20.4	2.9	12.2	23.7
		-20	132	46	46	12.5	2.1	8.2	18.6
		Σ		159	159	17.0	4.3	8.2	25.1
2.9.80	5	80-21	0.5	0	0	-	-	-	-
		-22	6	7	7	13.8	3.2	9.8	17.8
		-23	12	10	10	15.0	2.6	10.9	20.0
		-24	24	6	6	17.8	5.1	12.9	25.5
		-25	40	1	1	11.9	-	11.9	11.9
		-26	45	5	5	23.5	3.3	20.6	29.2
		Σ		29	29	16.7	4.8	9.8	29.2
5.9.80	5	80-28	0.5	3	3	15.3	8.9	5.1	20.9
		-29	6	14	14	14.3	2.2	12.0	21.3
		-30	12	7	7	14.6	1.2	13.1	16.3
		-31	23	3	3	17.2	4.9	11.6	20.5
		-32	38	9	9	16.9	2.7	14.1	20.7
		-33	44	5	5	16.9	4.0	12.8	21.4
		Σ		41	41	15.5	3.4	5.1	21.4

Table 4. Continued.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
10.9.80	5	80-34	0.5	3	3	12.9	3.5	9.4	16.3
		-35	5	5	5	14.6	3.4	9.3	17.6
		-36	11	2	2	21.2	4.1	18.3	24.1
		-37	21	5	5	21.2	0.7	20.5	21.5
		-38	33	11	10	19.9	2.0	15.4	22.0
		-39	49	1	1	21.8	-	21.8	21.8
		Σ		27	26	18.5	3.9	9.3	24.1
12.9.80	5	80-40	0.5	1	0	-	-	-	-
		-41	5	4	4	15.2	4.9	8.3	19.8
		-42	12	5	5	16.8	5.2	11.6	23.9
		-43	26	0	0	-	-	-	-
		-44	35	7	7	20.4	1.9	16.9	21.9
		-45	55	1	1	16.9	-	16.9	16.9
		Σ		18	17	17.9	4.2	8.3	23.9
3.8.81	5	81-01	0.5	13	12	6.8	2.0	4.5	10.8
		-02	5	30	30	6.7	2.0	4.4	12.7
		-03	9	58	58	8.0	4.7	4.0	29.2
		-04	21	60	60	7.3	2.1	3.7	15.1
		-05	39	135	135	5.8	1.6	3.0	14.2
		-06	40	480	92	5.8	2.2	4.0	23.6

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
4.8.81	51	81-07	0.5	0	0	-	-	-	-
		-08	5	93	93	6.5	2.2	4.1	24.1
		-09	10	62	62	7.8	3.7	4.1	22.5
		-10	22	32	32	7.9	5.8	4.3	26.6
		-11	36	32	32	7.0	4.3	4.4	23.5
		-12	62	65	62	5.8	1.2	4.1	9.9
		-13	83	39	39	6.9	1.4	4.4	10.7
		-14	118	72	72	8.4	5.4	4.3	31.7
		-15	135	56	56	7.9	4.9	4.1	26.9
		Σ		451	448	7.2	3.9	4.1	31.7
10.8.81	5	81-16	0.5	0	0	-	-	-	-
		-17	5	19	19	6.2	1.1	4.9	9.8
		-18	9	11	11	7.3	2.2	4.7	13.0
		-19	13	3	3	15.9	11.1	4.6	26.8
		-20	26	8	8	11.2	8.0	4.9	26.2
		-21	28	22	22	8.5	6.2	4.1	30.4
		-22	47	23	23	5.9	1.3	4.6	9.5
		Σ		86	86	7.6	5.0	4.1	30.4
21.8.81	5	81-23	0.5	0	0	-	-	-	-
		-24	2	0	0	-	-	-	-
		-25	6	7	7	11.1	2.3	9.5	13.6
		-26	13	5	5	12.9	10.3	5.5	30.3
		-27	23	6	6	8.0	1.6	6.5	10.5
		-28	33	5	5	8.3	1.4	7.0	9.9
		Σ		23	23	10.1	5.1	5.5	30.3

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
24.8.81	51	81-29	0.5	614	150	8.5	1.2	5.2	11.6
		-30	5	71	71	12.5	4.1	8.1	27.5
		-31	9	72	72	18.5	6.6	8.0	34.0
		-32	18	21	21	17.5	9.1	8.0	33.3
		-33	44	60	60	10.6	4.8	6.1	28.7
		-34	59	61	61	9.5	4.6	5.2	29.0
		-35	87	78	73	9.7	3.4	5.9	31.9
		-36	115	189	95	13.0	7.4	5.9	34.6
		-37	144	287	99	15.1	7.9	6.8	34.4
		Σ		1453	702	11.4	6.4	5.2	34.6
2.9.81	5	81-38	0.5	0	0	-	-	-	-
		-39	6	31	31	11.4	2.9	6.4	18.4
		-40	10	11	11	15.6	4.9	10.0	28.2
		-41	21	19	19	14.8	2.7	10.8	19.5
		-42	29	14	14	14.0	3.5	7.6	18.9
		-43	37	7	7	11.2	4.5	3.8	18.6
		Σ		82	82	13.2	3.9	3.8	29.2
7.9.81	5	81-44	0.5	0	0	-	-	-	-
		-45	6	2	2	8.2	3.5	5.7	10.7
		-46	9	11	11	12.4	5.6	4.7	24.8
		-47	19	26	26	17.7	5.1	4.5	26.5
		-48	33	7	7	20.7	10.0	8.7	33.6
		-49	38	16	16	25.1	6.6	12.4	34.0
		-50	50	8	8	17.6	6.2	8.4	29.5
		Σ		70	70	18.6	7.6	4.5	34.0

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
10.9.81	51	81-51	0.5	10	10	9.1	1.3	8.0	11.9
		-52	6	154	154	11.9	2.8	7.6	26.2
		-53	10	35	35	16.4	5.6	9.2	28.8
		-54	23	18	17	21.1	4.8	11.9	28.4
		-55	44	17	17	20.4	8.7	8.2	30.5
		-56	59	12	12	26.5	3.5	15.8	30.2
		-57	86	15	15	16.8	9.8	4.1	32.8
		-58	120	66	66	14.4	5.4	8.2	31.9
		-59	164	182	91	12.6	3.9	7.8	31.4
		Σ		509	417	13.8	5.7	4.1	32.8
13.9.81	5	81-60	0.5	0	0	-	-	-	-
		-61	5	17	17	12.0	1.6	10.1	17.4
		-62	10	45	45	15.9	4.3	10.7	31.2
		-63	21	13	13	19.3	4.6	12.2	28.8
		-64	28	35	35	18.2	3.3	12.8	28.3
		-65	47	6	6	17.0	1.4	15.5	19.1
		-66	62	29	29	14.8	3.0	10.4	22.6
		Σ		145	145	16.1	4.1	10.1	31.2
8.8.82	5	82-01	0.5	0	0	-	-	-	-
		-02	5	16	16	8.4	2.2	5.6	12.6
		-03	11	32	32	7.9	3.3	4.7	23.4
		-04	16	35	35	8.0	2.3	5.6	18.3
		-05	21	86	86	6.8	1.6	4.1	11.2
		-06	28	98	98	7.1	2.0	3.9	14.6
		-07	41	252	143	7.2	1.5	4.7	13.2
		-08	48	419	92	7.1	1.7	4.7	13.5
		Σ		938	502	7.2	1.8	3.9	23.4

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
13.8.82	51	82-09	0.5	0	0	-	-	-	-
		-10	8	75	75	9.3	2.9	5.2	19.7
		-11	11	47	47	9.4	1.9	6.9	15.9
		-12	19	39	39	9.3	2.8	5.3	18.0
		-13	48	12	12	7.8	1.4	5.3	9.8
		-14	56	9	9	8.6	1.9	6.3	12.5
		-15	77	11	11	9.7	1.8	7.5	13.0
		-16	88	12	12	9.8	3.3	5.2	15.3
		-17	170	3	2	7.6	0.1	7.5	7.6
		Σ		208	207	9.2	2.6	5.2	19.7
14.8.82	327	82-18	0.5	7	7	6.8	1.4	5.9	9.8
		-19	1	12	12	8.6	1.8	6.5	12.0
		-20	4	858	120	9.2	2.5	4.8	19.7
		-21	10	158	80	8.3	2.3	4.9	15.5
		-22	21	114	114	7.7	1.9	4.4	15.2
		-23	49	51	51	8.7	2.1	5.7	19.0
		-24	101	25	25	8.5	2.5	5.4	15.6
		-25	244	53	53	10.1	2.4	6.0	18.3
		Σ		1278	462	8.9	2.4	4.4	19.7
24.8.82	5	82-29	0.5	0	0	-	-	-	-
		-30	5	12	12	10.9	3.0	7.1	17.4
		-31	12	7	7	14.1	6.8	7.1	26.1
		-32	27	7	7	9.7	2.7	5.7	14.3
		-33	48	12	12	8.1	1.2	6.6	9.9
		Σ		38	38	10.4	4.0	5.7	26.1

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
2.9.82	5	82-34	0.5	0	0	-	-	-	-
		-35	5	7	7	13.4	3.6	8.7	19.5
		-36	8	25	25	12.7	3.0	7.2	19.2
		-37	18	8	8	15.0	7.4	7.2	28.2
		-38	27	2	2	8.0	3.0	5.8	10.1
		-39	36	10	10	11.5	2.8	6.5	14.7
		Σ		52	52	12.7	4.1	5.8	28.2
3.9.82	51	82-40	0.5	0	0	-	-	-	-
		-41	6	6	6	13.4	2.5	11.1	17.9
		-42	11	12	12	16.4	3.3	11.3	21.5
		-43	20	1	1	14.4	-	14.4	14.4
		-44	41	2	2	20.0	1.0	19.3	20.7
		-45	64	1	1	7.6	-	7.6	7.6
		-46	82	0	0	-	-	-	-
		-47	92	6	6	12.4	6.2	7.4	21.0
		-48	165	3	3	8.9	2.4	6.6	11.4
		Σ		31	31	14.2	4.6	6.6	21.5
5.9.82	327	82-49	0.5	0	0	-	-	-	-
		-50	9	6	6	15.0	5.1	10.0	22.2
		-51	24	3	3	15.9	3.6	12.4	19.6
		-52	50	2	2	15.7	3.0	13.5	17.8
		-54	99	4	4	12.6	2.4	10.3	15.2
		-55	198	91	89	11.7	1.8	6.6	16.8
		-56	294	6	6	10.7	2.1	8.7	13.9
		-58	486	5	5	9.8	4.2	4.4	16.1
		Σ		117	115	11.9	2.5	4.4	22.2

Table 4. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
7.9.82	313a	82-59	6	216	93	11.1	2.1	7.2	17.7
		-60	22	32	32	15.2	4.7	7.7	21.9
		-64	120	8	8	16.0	4.1	9.8	21.1
		-62	323	8	8	11.1	3.1	8.5	18.4
		-63	484	19	19	10.7	2.6	7.3	19.2
		Σ		283	160	11.7	3.6	7.2	21.9
18.8.83	5	83-01	0.5	1	0	-	-	-	-
		-02	5	12	11	7.0	2.5	4.1	12.8
		-03	12	18	18	9.2	7.7	5.1	32.5
		-04	21	25	24	6.0	1.2	4.0	7.5
		-05	31	74	71	6.1	3.1	3.5	30.4
		-06	45	594	124	7.0	2.8	4.0	27.0
		Σ		704	248	7.1	3.5	3.5	32.5
25.8.83	5	83-07	0.5	9	9	9.1	2.9	4.5	15.3
		-08	5	5	5	16.3	7.7	7.5	25.1
		-09	10	2	2	14.9	11.0	7.1	22.6
		-10	19	22	22	7.0	1.6	4.0	10.0
		-11	27	1	1	9.7	-	9.7	9.7
		Σ		39	39	9.2	4.9	4.0	25.1

Table 5. Mean lengths of *Sagitta elegans* at different depths (m) and for all depths combined (Σ) at various stations in Frobisher Bay from 1978 to 1983. N is the total number of animals in the sample and n is the number measured.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
30.7.78	5	78-02	0.5	0	0	-	-	-	-
		-03	10	49	48	26.1	2.3	20.0	30.0
		-04	20	48	46	25.9	3.1	16.0	30.0
		-05	30	76	72	25.9	2.8	15.0	31.0
		-06	70	686	323	27.6	3.2	15.0	39.0
		Σ		859	489	27.3	3.2	15.0	39.0
30.7.78	51	78-07	0.5	1	1	27.0	-	27.0	27.0
		-08	10	0	0	-	-	-	-
		-09	20	3	1	21.0	-	21.0	21.0
		-10	40	3	3	25.0	6.6	18.0	31.0
		-11	60	1	1	25.0	-	25.0	25.0
		-12	100	46	46	27.5	2.8	22.0	34.0
		Σ		54	52	27.2	3.1	18.0	34.0
26.8.78	5	78-13	0.5	0	0	-	-	-	-
		-14	10	1	1	29.5	-	29.5	29.5
		-15	20	34	33	23.0	5.7	15.0	33.0
		-16	30	16	16	24.5	5.1	17.0	36.0
		-17	40	138	64	29.2	2.7	24.0	37.0
		-18	60	1520	96	30.2	3.0	23.0	37.0
		Σ		1709	210	29.9	3.3	15.0	37.0
26.8.78	51	78-19	0.5	23	19	27.0	2.7	20.0	31.0
		-20	10	2	2	29.0	1.4	28.0	30.0
		-21	20	7	0	-	-	-	-
		-22	40	191	93	30.4	2.9	22.0	38.0
		-23	60	255	121	29.6	3.1	22.0	39.0
		Σ		478	235	29.8	3.1	20.0	39.0

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
19.9.78	5	78-25	0.5	2	2	30.5	5.0	27.0	34.0
		-26	10	68	67	31.4	3.1	24.0	37.0
		-27	20	136	72	31.2	3.8	13.0	37.0
		-28	30	295	74	32.4	3.5	19.0	40.0
		-29	40	336	88	32.8	3.5	24.0	44.0
		-30	50	755	92	31.8	4.3	12.0	41.5
		Σ		1592	395	32.1	3.9	12.0	44.0
20.9.78	51	78-31	0.5	0	0	-	-	-	-
		-32	10	0	0	-	-	-	-
		-33	20	1	0	-	-	-	-
		-34	40	12	2	30.6	3.1	26.0	36.0
		-35	60	28	27	29.8	3.1	24.0	36.0
		-36	80	509	127	33.1	2.2	28.0	41.0
		-37	100	308	74	32.6	2.6	24.0	40.0
		-38	150	262	65	33.0	3.0	26.0	41.0
		Σ		1120	295	32.8	2.5	24.0	41.0
28.7.79	5	79-01	0.5	0	0	-	-	-	-
		-02	5	0	0	-	-	-	-
		-03	10	5	5	27.0	4.0	20.0	32.5
		-04	21	6	6	22.0	4.0	15.2	25.9
		-05	29	39	38	24.9	3.2	18.0	32.0
		-06	41	55	53	23.9	3.6	17.0	33.0
		-07	52	63	60	24.5	3.1	16.0	30.0
		Σ		168	162	24.4	3.5	15.2	33.0

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
29.7.79	51	79-08	0.5	0	0	-	-	-	-
		-09	11	5	5	20.4	5.7	7.5	27.0
		-10	19	5	5	21.4	4.9	13.0	28.0
		-11	30	6	6	23.3	3.0	19.0	28.0
		-12	40	12	12	20.0	2.1	16.0	23.0
		-13	54	31	31	22.3	3.8	15.0	33.0
		-14	82	90	89	22.7	3.4	15.0	31.0
		-15	106	81	78	24.8	3.5	17.0	34.0
		-16	146	59	54	25.8	4.0	17.0	38.0
		Σ		289	280	23.6	4.0	7.5	38.0
16.8.79	51	79-17	0.5	0	0	-	-	-	-
		-18	7	0	0	-	-	-	-
		-19	19	0	0	-	-	-	-
		-20	29	0	0	-	-	-	-
		-21	34	1	1	8.5	-	8.5	8.5
		-22	48	4	4	22.8	3.1	20.0	28.0
		-23	75	17	16	22.1	4.6	16.0	31.0
		-24	96	14	13	26.2	3.5	20.0	31.0
		-25	123	63	61	26.4	5.1	18.0	44.0
		Σ		99	95	25.3	5.3	8.5	44.0
17.8.79	5	79-26	0.5	0	0	-	-	-	-
		-27	5	40	40	27.2	3.3	20.0	33.0
		-28	10	217	97	27.6	3.3	20.0	34.0
		-29	22	718	170	28.4	4.1	18.5	42.0
		-30	33	812	107	29.1	4.6	19.0	40.0
		-31	40	844	101	28.1	3.5	20.0	37.0
		-32	52	1227	159	29.0	3.7	20.0	41.0
		Σ		3858	674	28.6	4.0	18.5	42.0

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
11.9.79	5	79-33	0.5	0	0	-	-	-	-
		-34	4	0	0	-	-	-	-
		-35	10	1	1	22.0	-	22.0	22.0
		-36	23	41	41	30.7	3.7	20.0	37.0
		-37	34	62	61	31.2	4.0	12.0	38.0
		Σ		104	103	30.9	4.0	12.0	38.0
12.9.79	51	79-38	0.5	0	0	-	-	-	-
		-39	8	0	0	-	-	-	-
		-40	23	0	0	-	-	-	-
		-41	46	4	4	21.3	7.1	12.0	30.0
		-42	62	20	18	28.8	3.3	21.0	33.0
		-43	81	25	24	30.7	2.6	26.0	36.0
		-44	113	145	142	30.7	2.9	23.0	41.5
		Σ		194	188	30.3	3.4	12.0	41.5
24.9.79	5	79-45	0.5	1	1	30.0	-	30.0	30.0
		-46	9	1	1	30.0	-	30.0	30.0
		-47	9	2	2	30.5	2.5	28.0	33.0
		-48	14	8	8	30.4	3.2	27.0	35.0
		-49	30	78	75	32.0	4.0	11.0	39.0
		-50	41	303	127	32.4	3.6	23.0	43.0
		Σ		393	214	32.3	3.7	11.0	43.0

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
25.9.79	51	79-51	0.5	0	0	-	-	-	-
		-52	10	1	0	-	-	-	-
		-53	19	0	0	-	-	-	-
		-54	43	2	2	24.0	8.0	16.0	32.0
		-56	48	2	2	28.0	1.0	27.0	29.0
		-55	68	77	68	30.3	3.4	22.0	40.0
		-57	98	245	87	32.2	3.4	25.0	40.0
		-58	145	921	102	33.4	3.1	26.0	42.0
		Σ		1248	262	32.9	3.3	16.0	42.0
21.8.80	5	80-01	0.5	0	0	-	-	-	-
		-02	3	0	0	-	-	-	-
		-03	10	35	35	28.0	5.1	17.8	36.1
		-04	18	64	64	26.3	3.7	21.1	35.4
		-05	30	342	157	27.8	3.9	18.4	37.5
		-06	34	898	126	28.8	3.9	21.0	37.6
		Σ		1339	382	28.4	3.9	17.8	37.6
28.8.80	5	80-07	0.5	0	0	-	-	-	-
		-08	5	0	0	-	-	-	-
		-09	12	4	4	32.1	4.6	25.8	36.2
		-10	20	52	51	31.0	2.9	24.7	38.6
		-11	32	50	48	30.4	2.7	23.8	37.2
		-12	43	264	133	31.0	3.7	21.1	40.8
		Σ		370	236	30.9	3.5	21.1	40.8

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
31.8.80	51	80-13	0.5	0	0	-	-	-	-
		-14	5	0	0	-	-	-	-
		-15	11	3	3	30.1	0.6	29.4	30.6
		-16	20	3	3	29.5	5.1	23.9	33.8
		-17	26	3	3	29.9	4.5	18.8	26.7
		-18	63	51	50	30.6	3.4	21.4	39.0
		-19	70	128	126	29.8	3.5	22.1	38.3
		-20	132	228	120	30.8	3.3	20.8	41.0
		Σ		416	305	30.4	3.5	18.8	41.0
2.9.80	5	80-21	0.5	0	0	-	-	-	-
		-22	6	0	0	-	-	-	-
		-23	12	3	3	30.4	5.7	24.2	35.3
		-24	24	14	14	28.6	5.3	12.2	34.7
		-25	40	27	27	31.1	4.3	23.2	39.5
		-26	45	188	183	31.6	3.7	13.1	41.2
		Σ		232	227	31.3	4.0	12.2	41.2
5.9.80	5	80-28	0.5	0	0	-	-	-	-
		-29	6	1	1	26.2	-	26.2	26.2
		-30	12	19	18	30.8	4.1	23.8	40.2
		-31	23	123	123	31.6	3.2	23.4	38.7
		-32	38	351	172	29.2	3.9	18.4	40.0
		-33	44	687	178	30.5	3.4	21.4	39.0
		Σ		1181	492	30.2	3.6	18.4	40.2

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
10.9.80	5	80-34	0.5	0	0	-	-	-	-
		-35	5	1	0	-	-	-	-
		-36	11	2	2	35.1	5.2	31.4	38.8
		-37	21	16	14	28.7	7.5	8.7	34.5
		-38	33	447	105	33.1	2.9	24.4	39.3
		-39	49	750	173	32.0	3.2	13.2	39.3
		Σ		1216	294	32.4	3.3	8.7	39.3
12.9.80	5	80-40	0.5	0	0	-	-	-	-
		-41	5	0	0	-	-	-	-
		-42	12	14	14	24.9	8.7	10.6	34.6
		-43	26	169	165	30.9	4.2	9.7	38.6
		-44	35	265	139	31.7	3.3	13.9	40.7
		-45	55	257	121	31.3	4.5	10.2	38.5
		Σ		705	439	31.2	4.2	9.7	40.7
3.8.81	5	81-01	0.5	0	0	-	-	-	-
		-02	5	2	2	27.4	0.3	27.1	27.7
		-03	9	19	18	26.2	3.1	19.1	31.0
		-04	21	20	19	27.7	2.7	22.5	32.4
		-05	39	124	120	28.6	3.9	18.0	40.4
		-06	40	225	108	28.5	3.6	21.9	39.6
		Σ		390	267	28.4	3.7	18.0	40.4

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
4.8.81	51	81-07	0.5	0	0	-	-	-	-
		-08	5	0	0	-	-	-	-
		-09	10	1	1	27.5	-	27.5	27.5
		-10	22	1	1	31.8	-	31.8	31.8
		-11	36	1	1	21.1	-	21.1	21.1
		-12	62	15	15	26.2	3.4	20.1	33.8
		-13	83	30	28	28.1	2.8	23.3	36.6
		-14	118	128	123	27.6	3.4	20.7	37.8
		-15	135	149	142	27.5	3.2	19.9	38.7
		Σ		325	311	27.5	3.3	19.9	38.7
10.8.81	5	81-16	0.5	0	0	-	-	-	-
		-17	5	0	0	-	-	-	-
		-18	9	21	19	25.8	2.8	18.7	30.8
		-19	13	61	60	26.8	2.7	20.2	32.8
		-20	26	188	90	28.4	3.2	21.6	39.0
		-21	28	184	91	27.4	3.8	19.5	38.7
		-22	47	116	106	28.2	3.5	17.8	38.8
		Σ		570	366	27.7	3.4	17.8	39.0
21.8.81	5	81-23	0.5	0	0	-	-	-	-
		-24	2	2	2	26.4	4.4	23.3	29.5
		-25	6	3	3	30.4	1.2	29.7	31.8
		-26	13	52	52	27.7	3.0	22.5	34.8
		-27	23	137	133	29.3	3.3	19.8	41.4
		-28	33	192	97	30.3	3.9	19.1	41.5
		Σ		386	287	29.6	3.6	19.1	41.5

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
24.8.81	51	81-29	0.5	0	0	-	-	-	-
		-30	5	0	0	-	-	-	-
		-31	9	0	0	-	-	-	-
		-32	18	0	0	-	-	-	-
		-33	44	6	6	25.5	5.1	17.8	31.4
		-34	59	18	18	27.2	4.2	13.3	33.4
		-35	87	84	83	28.6	3.6	19.8	39.9
		-36	115	310	152	30.7	3.9	22.1	41.4
		-37	144	582	121	30.6	3.6	22.3	43.3
		Σ		1000	380	30.4	3.8	13.3	43.3
2.9.81	5	81-38	0.5	0	0	-	-	-	-
		-39	6	2	2	30.9	1.1	30.1	31.7
		-40	10	14	14	28.4	5.3	13.9	35.3
		-41	21	72	72	29.4	4.1	22.3	38.6
		-42	29	104	104	30.4	3.9	18.0	41.1
		-43	37	77	75	29.8	3.6	21.2	39.0
		Σ		269	267	29.9	4.0	13.9	41.1
7.9.81	5	81-44	0.5	0	0	-	-	-	-
		-45	6	2	0	-	-	-	-
		-46	9	1	1	33.2	-	33.2	33.2
		-47	19	8	8	26.2	7.5	11.6	34.9
		-48	33	6	6	28.5	1.5	26.6	30.9
		-49	38	10	10	29.2	4.3	21.6	36.7
		-50	50	43	43	30.5	4.4	15.0	44.4
		Σ		70	68	29.7	4.9	11.6	44.4

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
10.9.81	51	81-51	0.5	0	0	-	-	-	-
		-52	6	0	0	-	-	-	-
		-53	10	0	0	-	-	-	-
		-54	23	8	7	28.4	2.7	23.6	31.5
		-55	44	34	32	30.2	3.4	24.7	41.5
		-56	59	204	101	29.9	3.0	21.7	40.7
		-57	86	116	115	30.1	3.1	21.9	37.5
		-58	120	266	130	32.4	3.5	24.9	44.0
		-59	164	328	164	32.8	3.6	24.6	46.2
		Σ		956	549	31.6	3.6	21.7	46.2
13.9.81	5	81-60	0.5	0	0	-	-	-	-
		-61	5	0	0	-	-	-	-
		-62	10	0	0	-	-	-	-
		-63	21	2	2	13.6	0.8	13.0	14.1
		-64	28	26	25	28.6	7.6	11.0	40.7
		-65	47	34	32	30.8	4.4	16.1	38.8
		-66	62	156	156	31.7	3.8	14.2	41.1
		Σ		218	215	31.0	4.9	11.0	41.1
8.8.82	5	82-01	0.5	0	0	-	-	-	-
		-02	5	15	15	28.2	3.2	22.1	33.4
		-03	11	37	37	27.9	5.0	19.7	41.5
		-04	16	63	63	27.7	4.3	19.9	41.8
		-05	21	101	101	27.9	4.0	18.2	38.4
		-06	28	201	102	29.3	4.4	19.6	43.8
		-07	41	165	165	27.7	4.4	16.7	46.0
		-08	48	197	103	27.8	4.8	14.7	44.5
		Σ		779	586	28.2	4.5	14.7	46.0

Table 5. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
13.8.82	51	82-09	0.5	0	0	-	-	-	-
		-10	8	3	3	23.1	3.5	19.6	26.6
		-11	11	2	2	27.1	0.6	26.7	27.5
		-12	19	13	13	23.0	3.3	18.2	31.1
		-13	48	28	28	25.0	3.8	17.0	32.3
		-14	56	42	42	24.8	3.6	18.5	35.6
		-15	77	144	144	27.7	3.5	19.1	40.7
		-16	88	73	73	28.1	4.1	20.1	39.9
		-17	170	130	130	28.6	5.5	16.4	41.3
		Σ		435	435	27.4	4.6	16.4	41.3
14.8.82	327	82-18	0.5	1	0	-	-	-	-
		-19	1	0	0	-	-	-	-
		-20	4	0	0	-	-	-	-
		-21	10	0	0	-	-	-	-
		-22	21	33	33	25.9	3.1	16.7	31.2
		-23	49	7	7	26.6	3.5	19.5	30.3
		-24	101	119	119	29.5	3.8	20.5	40.5
		-25	244	85	85	30.0	4.5	18.9	40.5
		Σ		245	244	29.1	4.2	16.7	40.5
24.8.82	5	82-29	0.5	0	0	-	-	-	-
		-30	5	5	5	28.2	5.2	22.6	35.5
		-31	12	28	28	28.5	3.7	21.5	38.6
		-32	27	46	46	28.0	3.5	21.2	36.4
		-33	48	217	101	30.3	4.0	21.1	40.7
		Σ		296	180	29.7	4.0	21.1	40.7

Table 5. Continued.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
2.9.82	5	82-34	0.5	0	0	-	-	-	-
		-35	5	1	1	35.7	-	35.7	35.7
		-36	8	2	2	27.5	0.9	26.8	28.1
		-37	18	65	65	31.0	4.5	23.9	42.0
		-38	27	72	72	28.9	4.1	12.5	39.8
		-39	36	143	141	29.3	3.7	19.7	39.4
		Σ		283	281	29.6	4.1	12.5	42.0
3.9.82	51	82-40	0.5	1	0	-	-	-	-
		-41	6	0	0	-	-	-	-
		-42	11	0	0	-	-	-	-
		-43	20	19	19	27.4	3.6	21.2	36.7
		-44	41	29	29	29.4	2.7	24.7	35.6
		-45	64	44	44	30.1	3.1	20.5	36.2
		-46	82	39	39	31.2	4.2	20.5	40.6
		-47	92	61	61	29.4	4.3	12.8	40.5
		-48	165	349	149	32.6	4.2	24.4	42.3
		Σ		542	341	31.5	4.3	12.8	42.3
5.9.82	327	82-49	0.5	1	1	19.2	-	19.2	19.2
		-50	9	0	0	-	-	-	-
		-51	24	4	4	34.8	4.8	28.7	40.3
		-52	50	59	59	31.3	3.8	23.6	41.5
		-54	99	36	36	32.3	4.0	25.1	41.4
		-55	198	80	80	32.3	4.2	22.5	42.7
		-56	294	32	32	32.3	3.7	25.7	38.4
		-58	486	54	54	30.5	4.7	15.7	40.7
		Σ		266	266	31.7	4.2	15.7	42.7

Table 5. Continued.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
7.9.82	313a	82-59	6	0	0	-	-	-	-
		-60	22	0	0	-	-	-	-
		-64	120	45	45	32.6	3.7	26.9	41.7
		-62	323	35	35	32.9	4.3	24.4	44.4
		-63	484	52	52	32.2	3.2	25.5	41.0
		Σ		132	132	32.5	3.7	24.4	41.7
18.8.83	5	83-01	0.5	0	0	-	-	-	-
		-02	5	3	3	22.5	1.3	21.3	23.8
		-03	12	41	41	25.8	3.0	17.7	30.9
		-04	21	220	111	27.2	4.7	15.5	39.6
		-05	31	473	124	30.9	5.0	20.0	43.9
		-06	45	862	111	32.7	3.7	21.9	41.3
		Σ		1599	390	31.2	5.1	15.5	43.9
25.8.83	5	83-07	0.5	0	0	-	-	-	-
		-08	5	6	6	28.1	4.9	23.9	36.4
		-09	10	158	155	29.8	3.8	21.9	42.6
		-10	19	287	147	29.9	4.4	20.9	41.9
		-11	27	87	84	28.6	4.4	20.1	40.6
		Σ		538	392	29.6	4.2	20.1	42.6

Table 6. Mean lengths of Thysanoessa inermis at different depths (m) and for all depths combined (Σ) at various stations in Frobisher Bay from 1978 to 1983. N is the total number of animals in the sample and n the number measured.

						Body Length (mm)			
Date	Station	Collection	Depth	N	n	Mean	S.D.	Min.	Max.
30.7.78	5	78(02-06)*	<70	0	0	-	-	-	-
30.7.78	51	78-07	0.5	0	0	-	-	-	-
		-08	10	3	3	18.4	1.8	16.5	20.0
		-09	20	0	0	-	-	-	-
		-10	40	8	8	20.9	2.9	17.7	26.6
		-11	60	7	7	23.8	2.7	19.0	27.3
		-12	100	10	9	27.1	3.6	18.4	30.8
		Σ		28	27	23.4	4.3	16.5	30.8
26.8.78	5	78-13	0.5	0	0	-	-	-	-
		-14	10	0	0	-	-	-	-
		-15	20	0	0	-	-	-	-
		-16	30	0	0	-	-	-	-
		-17	40	1	1	19.6	-	19.6	19.6
		-18	60	10	10	22.3	3.5	17.7	27.5
		Σ		11	11				
26.8.78	51	78-19	0.5	0	0	-	-	-	-
		-20	10	0	0	-	-	-	-
		-21	20	0	0	-	-	-	-
		-22	40	204	204	26.9	3.0	17.5	33.8
		-23	60	297	297	27.3	2.7	11.9	33.2
		Σ		501	501	27.1	2.8	11.9	33.8

* Where few or no animals were collected at a given station the data is presented in a compressed format that includes all depths sampled.

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
19.9.78	5	78-25	0.5	0	0	-	-	-	-
		-26	10	1	1	30.1	-	30.1	30.1
		-27	20	0	0	-	-	-	-
		-28	30	0	0	-	-	-	-
		-29	40	0	0	-	-	-	-
		-30	50	0	0	-	-	-	-
		Σ		1	1	30.1	-	30.1	30.1
20.9.78	51	78-31	0.5	0	0	-	-	-	-
		-32	10	0	0	-	-	-	-
		-33	20	0	0	-	-	-	-
		-34	40	0	0	-	-	-	-
		-35	60	2	2	28.4	2.2	26.8	29.9
		-36	80	3	3	24.3	0.6	23.7	24.8
		-37	100	7	7	26.0	2.5	22.2	28.8
		-38	150	7	7	28.5	4.5	21.3	35.5
		Σ		19	19	26.9	3.4	21.3	35.5
28.7.79	5	79(01-07)	<52	1	0	-	-	-	-
29.7.79	51	79-08	0.5	0	0	-	-	-	-
		-09	11	0	0	-	-	-	-
		-10	19	2	0	-	-	-	-
		-11	30	1	0	-	-	-	-
		-12	40	3	3	13.9	3.1	11.3	17.3
		-13	54	15	15	15.5	4.4	8.8	25.2
		-14	82	26	26	20.2	5.7	8.7	29.3
		-15	106	92	92	26.4	4.8	11.6	33.6
		-16	146	7	6	24.5	6.2	17.9	33.0
		Σ		146	142	23.8	6.3	8.7	33.6

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
16.8.79	51	79-17	0.5	0	0	-	-	-	-
		-18	7	0	0	-	-	-	-
		-19	19	0	0	-	-	-	-
		-20	29	0	0	-	-	-	-
		-21	34	0	0	-	-	-	-
		-22	48	2	2	22.3	5.2	18.6	26.0
		-23	75	12	12	20.7	3.0	17.1	26.2
		-24	96	40	40	18.6	3.5	13.1	29.3
		-25	123	460	230	23.4	4.2	12.2	31.4
		Σ		514	284	23.0	4.4	12.2	31.4
17.8.79	5	79-26	0.5	0	0	-	-	-	-
		-27	5	0	0	-	-	-	-
		-28	10	5	5	17.8	2.4	14.3	21.1
		-29	22	14	14	17.2	2.7	11.7	21.0
		-30	33	47	47	19.0	4.6	11.6	29.8
		-31	40	67	65	21.8	4.6	14.8	33.6
		-32	52	53	53	19.7	4.3	11.4	33.0
		Σ		186	184	20.0	4.6	11.4	33.6
11.9.79	5	79-33	0.5	0	0	-	-	-	-
		-34	4	0	0	-	-	-	-
		-35	10	0	0	-	-	-	-
		-36	23	1	1	21.3	-	21.3	21.3
		-37	34	3	3	19.1	3.9	14.6	21.4
		Σ		4	4	19.6	3.4	14.6	21.4

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
12.9.79	51	79-38	0.5	0	0	-	-	-	-
		-39	8	0	0	-	-	-	-
		-40	23	0	0	-	-	-	-
		-41	46	1	1	22.0	-	22.0	22.0
		-42	62	2	2	26.4	5.0	22.9	29.9
		-43	81	2	2	18.2	1.2	17.3	19.0
		-44	113	108	98	25.4	3.4	18.2	32.4
		Σ		113	103	25.3	3.5	17.3	32.4
24.9.79	5	79(45-50)	<41	1	1	20.0	-	20.0	20.0
25.9.79	51	79-51	0.5	0	0	-	-	-	-
		-52	10	0	0	-	-	-	-
		-53	19	0	0	-	-	-	-
		-54	43	0	0	-	-	-	-
		-56	48	0	0	-	-	-	-
		-55	68	0	0	-	-	-	-
		-57	98	4	3	21.9	1.9	20.1	23.8
		-58	145	6	6	28.6	3.7	22.7	34.3
		Σ		10	9	26.4	4.5	20.1	34.3
21.8.80	5	80-01	0.5	0	0	-	-	-	-
		-02	3	0	0	-	-	-	-
		-03	10	2	2	17.2	1.3	16.2	18.1
		-04	18	0	0	-	-	-	-
		-05	30	3	3	15.7	3.0	12.8	18.8
		-06	34	15	15	17.4	2.4	12.2	20.5
		Σ		20	20	17.1	2.4	12.2	20.5

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
28.8.80	5	80(07-12)	<43	0	0	-	-	-	-
31.8.80	51	80-13	0.5	0	0	-	-	-	-
		-14	5	0	0	-	-	-	-
		-15	11	1	1	20.4	-	20.4	20.4
		-16	20	1	1	18.5	-	18.5	18.5
		-17	26	3	3	16.4	3.0	13.4	19.3
		-18	63	0	0	-	-	-	-
		-19	70	1	0	-	-	-	-
		-20	132	160	157	22.0	3.6	14.5	31.9
		Σ		166	162	21.9	3.7	13.4	31.9
2.9.80	5	80-21	0.5	0	0	-	-	-	-
		-22	6	0	0	-	-	-	-
		-23	12	0	0	-	-	-	-
		-24	24	1	1	19.1	-	19.1	19.1
		-25	40	8	7	19.4	1.7	16.3	21.3
		-26	45	9	9	19.5	2.5	14.0	21.8
		Σ		18	17	19.4	2.1	14.0	21.8
5.9.80	5	80-28	0.5	2	0	-	-	-	-
		-29	6	0	0	-	-	-	-
		-30	12	3	3	18.8	2.6	16.8	21.7
		-31	23	11	11	20.0	2.2	15.4	23.0
		-32	38	14	13	18.8	3.2	13.3	23.6
		-33	44	68	64	20.6	2.5	12.6	27.7
		Σ		98	91	20.3	2.6	12.6	27.7

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
10.9.80	5	80-34	0.5	0	0	-	-	-	-
		-35	5	0	0	-	-	-	-
		-36	11	0	0	-	-	-	-
		-37	21	1	1	19.9	-	19.9	19.9
		-38	33	4	4	19.1	1.9	16.8	20.7
		-39	49	2	2	16.0	0.9	15.3	16.6
		Σ		7	7	18.3	2.2	15.3	20.7
12.9.80	5	80-40	0.5	0	0	-	-	-	-
		-41	5	1	1	15.1	-	15.1	15.1
		-42	12	0	0	-	-	-	-
		-43	26	4	4	18.7	2.5	15.8	21.8
		-44	35	7	7	20.3	1.9	18.7	24.1
		-45	55	4	4	24.0	3.2	21.8	28.8
		Σ		16	16	20.5	3.3	15.1	28.8
3.8.81	5	81(01-06)	<40	0	0	-	-	-	-
4.8.81	51	81-07	0.5	0	0	-	-	-	-
		-08	5	0	0	-	-	-	-
		-09	10	1	1	21.8	-	21.8	21.8
		-10	22	18	18	21.2	2.2	16.7	25.2
		-11	36	34	34	21.6	2.5	16.3	26.5
		-12	62	42	42	22.7	1.9	17.0	25.6
		-13	83	175	175	24.6	2.0	19.3	30.0
		-14	118	544	116	26.1	2.5	22.2	34.5
		-15	135	267	136	25.8	2.4	11.5	33.2
		Σ		1081	522	25.4	2.7	11.5	34.5

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
10.8.81	5	81(16-22)	<47	2	2	18.3	1.3	17.5	19.1
21.8.81	5	81(23-28)	<33	2	2	26.0	1.9	24.6	27.3
24.8.81	51	81-29	0.5	0	0	-	-	-	-
		-30	5	0	0	-	-	-	-
		-31	9	18	16	21.5	2.6	17.5	24.9
		-32	18	3	3	21.5	1.0	20.6	22.5
		-33	44	12	12	24.9	1.4	22.9	28.1
		-34	59	6	6	22.6	3.4	18.9	28.4
		-35	87	215	215	25.5	1.8	20.4	31.3
		-36	115	604	151	26.4	2.1	21.3	33.9
		-37	144	355	186	26.8	2.8	21.6	33.1
		Σ		1213	589	26.2	2.4	18.9	38.7
2.9.81	5	81(38-43)	<37	0	0	-	-	-	-
7.9.81	5	81-44	0.5	0	0	-	-	-	-
		-45	6	0	0	-	-	-	-
		-46	9	0	0	-	-	-	-
		-47	19	0	0	-	-	-	-
		-48	33	4	4	24.2	3.4	19.2	27.4
		-49	38	1	1	27.8	-	27.8	27.8
		-50	50	0	0	-	-	-	-
		Σ		5	5	24.9	3.7	19.2	27.8

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
10.9.81	51	81-51	0.5	0	0	-	-	-	-
		-52	6	0	0	-	-	-	-
		-53	10	0	0	-	-	-	-
		-54	23	2	2	23.3	4.2	20.3	26.2
		-55	44	5	5	26.1	2.1	22.7	27.7
		-56	59	3	3	20.1	0.1	20.0	20.1
		-57	86	18	18	22.0	3.3	15.0	26.6
		-58	120	106	105	26.7	2.2	22.9	34.4
		-59	164	155	152	27.0	1.9	22.3	33.8
		Σ		289	285	26.5	2.5	15.0	34.4
13.9.81	5	81-60	0.5	0	0	-	-	-	-
		-61	5	0	0	-	-	-	-
		-62	10	0	0	-	-	-	-
		-63	21	0	0	-	-	-	-
		-64	28	0	0	-	-	-	-
		-65	47	2	2	25.7	1.0	25.0	26.4
		-66	62	2	2	24.9	1.2	24.0	25.7
		Σ		4	4	25.3	1.0	24.0	26.4
8.8.82	5	82-01	0.5	0	0	-	-	-	-
		-02	5	0	0	-	-	-	-
		-03	11	0	0	-	-	-	-
		-04	16	0	0	-	-	-	-
		-05	21	0	0	-	-	-	-
		-06	28	7	7	17.5	2.2	13.8	20.2
		-07	41	2	2	17.7	1.0	17.0	18.4
		-08	48	15	15	19.7	1.6	17.5	22.7
		Σ		24	24	18.9	2.0	13.8	22.7

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
13.8.82	51	82-09	0.5	0	0	-	-	-	-
		-10	8	135	135	18.9	1.1	16.4	22.8
		-11	11	136	136	18.2	1.2	15.1	22.3
		-12	19	148	148	18.1	1.5	13.5	21.5
		-13	48	29	29	19.3	2.3	14.7	27.7
		-14	56	54	54	19.5	1.9	14.7	25.6
		-15	77	139	139	25.8	3.4	15.4	33.1
		-16	88	560	140	27.6	2.4	19.1	34.0
		-17	170	22	22	27.5	3.2	20.5	33.3
		Σ		1223	803	23.7	4.9	13.5	34.0
14.8.82	327	82-18	0.5	0	0	-	-	-	-
		-19	1	0	0	-	-	-	-
		-20	4	0	0	-	-	-	-
		-21	10	0	0	-	-	-	-
		-22	21	21	21	17.6	1.9	15.0	23.2
		-23	49	0	0	-	-	-	-
		-24	101	11	11	20.4	2.3	17.5	26.0
		-25	244	10	10	27.8	3.8	17.8	32.1
		Σ		42	42	20.8	4.8	15.0	32.1
24.8.82	5	82(29-33)	<48	1	1	18.8	-	18.8	18.8
2.9.82	5	82-34	0.5	0	0	-	-	-	-
		-35	5	0	0	-	-	-	-
		-36	8	0	0	-	-	-	-
		-37	18	0	0	-	-	-	-
		-38	27	0	0	-	-	-	-
		-39	36	6	6	19.0	2.0	15.8	20.9
		Σ		6	6	19.0	2.0	15.8	20.9

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
3.9.82	51	82-40	0.5	0	0	-	-	-	-
		-41	6	0	0	-	-	-	-
		-42	11	5	5	19.3	1.0	18.1	20.8
		-43	20	4	4	19.3	0.5	18.8	19.8
		-44	41	5	5	17.8	1.6	15.7	19.4
		-45	64	8	8	19.1	1.9	16.2	21.7
		-46	82	15	15	19.6	1.4	17.3	22.4
		-47	92	44	44	24.3	3.6	19.5	32.2
		-48	165	19	19	25.1	4.6	18.5	30.7
		Σ		100	100	22.5	4.1	15.7	32.2
5.9.82	327	82-49	0.5	0	0	-	-	-	-
		-50	9	0	0	-	-	-	-
		-51	24	0	0	-	-	-	-
		-52	50	0	0	-	-	-	-
		-54	99	4	4	22.4	4.4	17.7	28.3
		-55	198	13	13	27.1	4.0	18.2	31.9
		-56	294	6	6	26.8	3.0	23.2	31.0
		-58	486	10	10	24.5	4.3	17.3	28.7
		Σ		33	33	25.7	4.1	17.3	31.9
7.9.82	313a	82-59	6	0	0	-	-	-	-
		-60	22	0	0	-	-	-	-
		-64	120	1	1	17.4	-	17.4	17.4
		-62	323	2	2	25.4	4.7	22.1	28.7
		-63	484	2	2	23.0	6.7	18.2	27.7
		Σ		5	5	22.8	5.2	17.4	28.7

Table 6. Continued.

Date	Station	Collection	Depth	N	n	Body Length (mm) Mean	S.D.	Min.	Max.
18.8.83	5	83-01	0.5	0	0	-	-	-	-
		-02	5	0	0	-	-	-	-
		-03	12	0	0	-	-	-	-
		-04	21	1	1	17.6	-	17.6	17.6
		-05	31	2	2	21.6	4.6	18.3	24.8
		-06	45	1	1	17.6	-	17.6	17.6
		Σ		4	4	19.6	3.5	17.6	24.8
25.8.83	5	83(07-11)	<27	0	0	-	-	-	-

RESULTS

LIST OF FIGURES

Figure 1. Length frequency histograms for Mertensia ovum collected during the 1981 to 1983 open water seasons at various stations in Frobisher Bay. The code number in each chart title indicates the species (M), the year of collection (81) and the numbers of the collections from which length data were combined in preparing the histogram (e.g. M8101.06 indicates that length measurements for Mertensia from the 1981 collections numbered 01 to 06 inclusive were pooled). The date of collection and the station number can be obtained by referring to collection numbers listed in Table 1. The histograms are presented in chronological order.

MERTENSIA OVUM LENGTH FREQUENCY M8101.06

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                          FREQ  PERCENT
      0  |                                                         0     0.00
      5  |*                                                        1     0.96
     10  |**********                                               8     7.69
     15  |*****************************************               33    31.73
     20  |*********************************************          35    33.65
     25  |*****************                                       13    12.50
     30  |*********                                                7     6.73
     35  |*****                                                    4     3.85
     40  |*                                                        1     0.96
     45  |*                                                        1     0.96
     50  |*                                                        1     0.96
     55  |                                                         0     0.00
     60  |                                                         0     0.00
     65  |                                                         0     0.00
     70  |                                                         0     0.00
         ----+---+---+---+---+---+---+---+---+---+---+-
             3   6   9  12  15  18  21  24  27  30  33
                          PERCENTAGE
```

MERTENSIA OVUM LENGTH FREQUENCY M8107.15

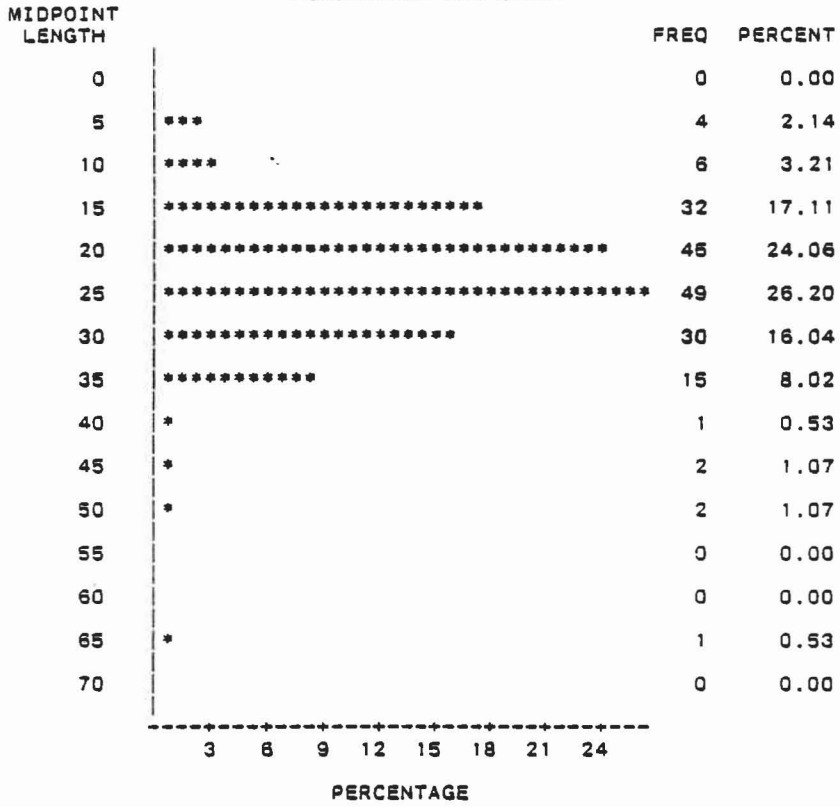
PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                  FREQ  PERCENT
      0  |                                                 0     0.00
      5  |                                                 0     0.00
     10  |*****                                            8     3.56
     15  |****************************                    47    20.89
     20  |************************************            61    27.11
     25  |************************************            62    27.56
     30  |***************                                 25    11.11
     35  |*****                                            8     3.56
     40  |*****                                            9     4.00
     45  |*                                                1     0.44
     50  |**                                               4     1.78
     55  |                                                 0     0.00
     60  |                                                 0     0.00
     65  |                                                 0     0.00
     70  |                                                 0     0.00
         ----+---+---+---+---+---+---+---+---+-
             3   6   9  12  15  18  21  24  27
                          PERCENTAGE
```

Fig. 1

MERTENSIA OVUM LENGTH FREQUENCY M8116.22

PERCENTAGE BAR CHART



MERTENSIA OVUM LENGTH FREQUENCY M8123.28

PERCENTAGE BAR CHART

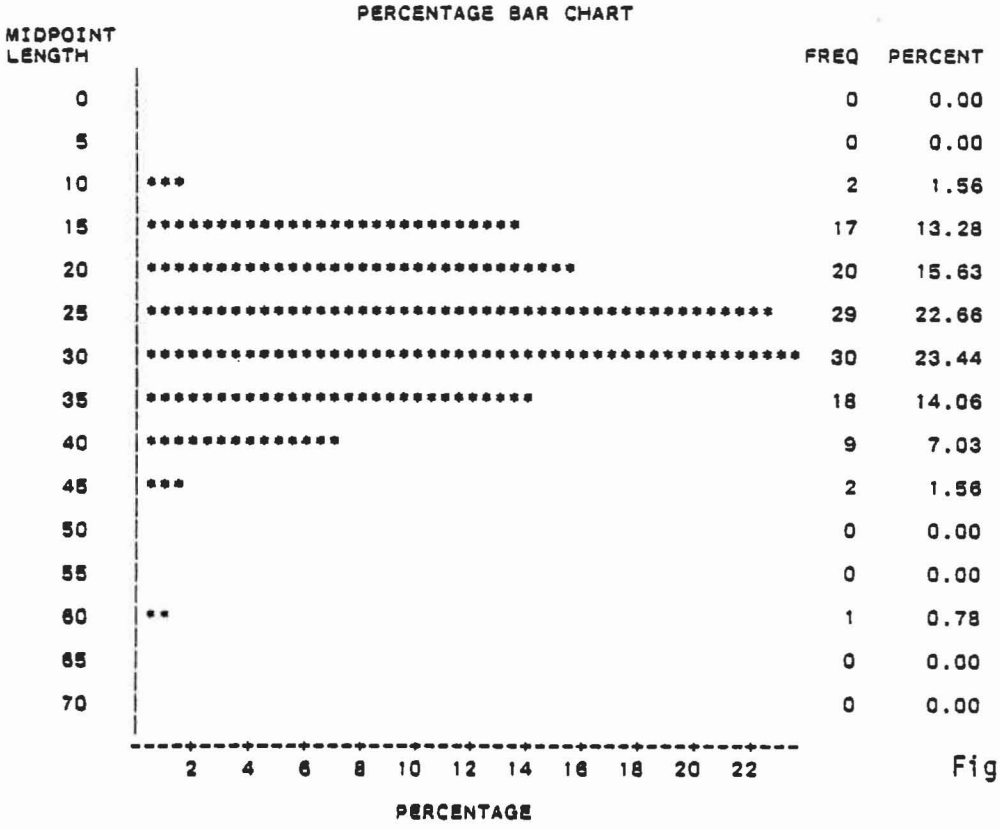


Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8129.37

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
      0  |                                                   0     0.00
      5  |                                                   0     0.00
     10  |*                                                  3     0.92
     15  |*********                                         23     7.06
     20  |************************                          58    17.79
     25  |************************************************  93    28.53
     30  |*********************************                 84    25.77
     35  |*************                                     32     9.82
     40  |******                                            15     4.60
     45  |****                                               9     2.76
     50  |**                                                 4     1.23
     55  |*                                                  3     0.92
     60  |                                                   1     0.31
     65  |                                                   0     0.00
     70  |                                                   1     0.31
         ----+---+---+---+---+---+---+---+---+--
             3   6   9  12  15  18  21  24  27
                        PERCENTAGE
```

MERTENSIA OVUM LENGTH FREQUENCY M8138.43

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
      0  |                                                   0     0.00
      5  |                                                   0     0.00
     10  |***                                                3     2.11
     15  |********                                           8     5.63
     20  |*********************                             22    15.49
     25  |******************************                    31    21.83
     30  |*********************************                 35    24.65
     35  |************************                          25    17.61
     40  |***********                                       12     8.45
     45  |*****                                              5     3.52
     50  |*                                                  1     0.70
     55  |                                                   0     0.00
     60  |                                                   0     0.00
     65  |                                                   0     0.00
     70  |                                                   0     0.00
         ----+---+---+---+---+---+---+---+--
             3   6   9  12  15  18  21  24
                        PERCENTAGE
```

Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8144.50

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0 |                                          0     0.00
      5 |*                                         1     0.52
     10 |*                                         1     0.52
     15 |******                                    9     4.64
     20 |*********************                    31    15.98
     25 |*******************                      28    14.43
     30 |*********************************        49    25.26
     35 |***********************                  33    17.01
     40 |******************                       26    13.40
     45 |*****                                     8     4.12
     50 |**                                        3     1.55
     55 |***                                       5     2.58
     60 |                                          0     0.00
     65 |                                          0     0.00
     70 |                                          0     0.00
        ----+---+---+---+---+---+---+---+--
            3   6   9  12  15  18  21  24
                PERCENTAGE
```

MERTENSIA OVUM LENGTH FREQUENCY M8151.59

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0 |                                          0     0.00
      5 |                                          0     0.00
     10 |                                          1     0.25
     15 |****                                     11     2.71
     20 |***********                              33     8.13
     25 |**********************                   68    16.75
     30 |*****************************            88    21.67
     35 |*********************************       99    24.38
     40 |*********************                    64    15.76
     45 |*********                                28     6.90
     50 |**                                        7     1.72
     55 |*                                         4     0.99
     60 |*                                         2     0.49
     65 |                                          1     0.25
     70 |                                          0     0.00
        ----+---+---+---+---+---+---+---+--
            3   6   9  12  15  18  21  24
                PERCENTAGE
```

Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8160.66

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                         0     0.00
      5  |                                         0     0.00
     10  |                                         0     0.00
     15  |*****                                    2     3.45
     20  |****************                         7    12.07
     25  |***********************                 10    17.24
     30  |******************                       8    13.79
     35  |********************************        14    24.14
     40  |*************************               11    18.97
     45  |*********                                4     6.90
     50  |*****                                    2     3.45
     55  |                                         0     0.00
     60  |                                         0     0.00
     65  |                                         0     0.00
     70  |                                         0     0.00
         ----+----+----+----+----+----+----+----+
             3    6    9   12   15   18   21   24
                       PERCENTAGE
```

MERTENSIA OVUM LENGTH FREQUENCY M8209.17

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                         0     0.00
      5  |*                                        1     0.50
     10  |                                         0     0.00
     15  |***                                      3     1.49
     20  |*****************                       17     8.42
     25  |***********************************     35    17.33
     30  |*************************************   37    18.32
     35  |***********************************     35    17.33
     40  |*****************************************41    20.30
     45  |******************                      18     8.91
     50  |**********                              10     4.95
     55  |****                                     4     1.98
     60  |                                         0     0.00
     65  |                                         0     0.00
     70  |*                                        1     0.50
         ----+----+----+----+----+----+----+----+----+----+-
             2    4    6    8   10   12   14   16   18   20
                       PERCENTAGE
```

Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8218.28

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                   FREQ  PERCENT
        |
      0 |                                   5     0.48
        |
      5 |                                   5     0.48
        |
     10 |*******                          148    14.35
        |
     15 |************************         487    47.24
        |
     20 |********                         160    15.52
        |
     25 |**                                49     4.75
        |
     30 |**                                50     4.85
        |
     35 |**                                38     3.69
        |
     40 |**                                45     4.36
        |
     45 |*                                 23     2.23
        |
     50 |*                                 12     1.16
        |
     55 |                                   6     0.58
        |
     60 |                                   1     0.10
        |
     65 |                                   2     0.19
        |
     70 |                                   0     0.00
        |
        -----+----+----+----+----
            10   20   30   40
                PERCENTAGE
```

MERTENSIA OVUM LENGTH FREQUENCY M8229.33

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                       FREQ  PERCENT
        |
      0 |**                                     2     1.45
        |
      5 |*******************                   20    14.49
        |
     10 |******************************        30    21.74
        |
     15 |*********************************     33    23.91
        |
     20 |***********                           11     7.97
        |
     25 |*****                                  5     3.62
        |
     30 |******                                 6     4.35
        |
     35 |*******                                7     5.07
        |
     40 |*******                                7     5.07
        |
     45 |*******                                7     5.07
        |
     50 |********                               8     5.80
        |
     55 |**                                     2     1.45
        |
     60 |                                       0     0.00
        |
     65 |                                       0     0.00
        |
     70 |                                       0     0.00
        |
        ----+----+----+----+----+----+----+----+
            3    6    9   12   15   18   21   24
                PERCENTAGE
```

Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8234.39

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
5	*******	16	5.35
10	**********	82	27.42
15	**********	89	29.77
20	**********	49	16.39
25	**********	22	7.36
30	*****	11	3.68
35	*******	16	5.35
40	**	5	1.67
45	**	4	1.34
50	**	4	1.34
55		1	0.33
60		0	0.00
65		0	0.00
70		0	0.00

3 6 9 12 15 18 21 24 27 30

PERCENTAGE

MERTENSIA OVUM LENGTH FREQUENCY M8240.48

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
5	*******	15	3.32
10	**********	81	17.92
15	**********	95	21.02
20	**********	95	21.02
25	**********	42	9.29
30	**********	33	7.30
35	**********	27	5.97
40	**********	32	7.08
45	******	13	2.88
50	******	13	2.88
55	**	5	1.11
60		1	0.22
65		0	0.00
70		0	0.00

2 4 6 8 10 12 14 16 18 20

PERCENTAGE

Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8249.58

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                        FREQ  PERCENT
     0  |                                                       0     0.00
     5  |****                                                   24     2.85
    10  |****************************                          174    20.67
    15  |*********************************************         288    34.20
    20  |****************************                          182    21.62
    25  |**********                                             60     7.13
    30  |*******                                                42     4.99
    35  |****                                                   28     3.33
    40  |***                                                    16     1.90
    45  |***                                                    20     2.38
    50  |*                                                       5     0.59
    55  |                                                        3     0.36
    60  |                                                        0     0.00
    65  |                                                        0     0.00
    70  |                                                        0     0.00
        ----+---+---+---+---+---+---+---+---+---+---+--
            3   6   9  12  15  18  21  24  27  30  33
                        PERCENTAGE
```

MERTENSIA OVUM LENGTH FREQUENCY M8259.64

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                        FREQ  PERCENT
     0  |                                                       0     0.00
     5  |******                                                  8     4.60
    10  |*********************************                     43    24.71
    15  |*********************************************         57    32.76
    20  |**********************                                29    16.67
    25  |************                                          16     9.20
    30  |*******                                                 9     5.17
    35  |**                                                      3     1.72
    40  |**                                                      3     1.72
    45  |***                                                     4     2.30
    50  |*                                                       1     0.57
    55  |*                                                       1     0.57
    60  |                                                        0     0.00
    65  |                                                        0     0.00
    70  |                                                        0     0.00
        ----+---+---+---+---+---+---+---+---+---+---+
            3   6   9  12  15  18  21  24  27  30  33
                        PERCENTAGE
```

Fig. 1 (cont'd.)

MERTENSIA OVUM LENGTH FREQUENCY M8301.06

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
5	**********	27	6.19
10	**********	30	6.88
15	**********	33	7.57
20	**********	73	16.74
25	**********	92	21.10
30	**********	83	19.04
35	**********	53	12.16
40	**********	27	6.19
45	*****	11	2.52
50	**	4	0.92
55		1	0.23
60	*	2	0.46
65		0	0.00
70		0	0.00

2 4 6 8 10 12 14 16 18 20

PERCENTAGE

MERTENSIA OVUM LENGTH FREQUENCY M8307.11

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
5	********	9	6.25
10	**********	11	7.64
15	**********	13	9.03
20	**********	31	21.53
25	**********	42	29.17
30	**********	17	11.81
35	**********	13	9.03
40	***	3	2.08
45	****	4	2.78
50		0	0.00
55	*	1	0.69
60		0	0.00
65		0	0.00
70		0	0.00

3 6 9 12 15 18 21 24 27

PERCENTAGE

Fig. 1 (cont'd.)

Figure 2. Length frequency histograms for Parathemisto libellula collected during the 1978 to 1983 open water seasons at various stations in Frobisher Bay. The code number in each chart title indicates the species (P), the year of collection (78) and the number of collections from which data were combined in preparing the histogram (e.g. P7802.06 indicates that length measurements for Parathemisto from the 1978 collections numbered 02 to 06 inclusive were pooled). The date of collection and the station number can be obtained by referring to the collection numbers listed in Table 1. The histograms are presented in chronological order.

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7801.06

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                          0     0.00
      3  |*************                            51    25.76
      6  |******************************          124    62.63
      9  |****                                     14     7.07
     12  |**                                        8     4.04
     15  |                                          1     0.51
     18  |                                          0     0.00
     21  |                                          0     0.00
     24  |                                          0     0.00
     27  |                                          0     0.00
     30  |                                          0     0.00
     33  |                                          0     0.00
     36  |                                          0     0.00
     39  |                                          0     0.00
         -----+----+----+----+----+----+--
             10   20   30   40   50   60
                   PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7807.12

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                   FREQ  PERCENT
      0  |                                                    0     0.00
      3  |*************************                          14    13.08
      6  |*********************************************      25    23.36
      9  |***************                                     8     7.48
     12  |********************                                11    10.28
     15  |*********************************************      25    23.36
     18  |************************************               20    18.69
     21  |****                                                2     1.87
     24  |****                                                2     1.87
     27  |                                                    0     0.00
     30  |                                                    0     0.00
     33  |                                                    0     0.00
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         ----+---+---+---+---+---+---+---+---+---+---
             2   4   6   8  10  12  14  16  18  20  22
                       PERCENTAGE
```

Fig. 2

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7813.18

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3	**	5	1.46
6	**********	91	26.53
9	**********	68	19.83
12	*********	22	6.41
15	**********	47	13.70
18	**********	56	16.33
21	**********	46	13.41
24	**	4	1.17
27	*	2	0.58
30	*	2	0.58
33		0	0.00
36		0	0.00
39		0	0.00

3 6 9 12 15 18 21 24

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7819.24

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		1	0.12
6	**********	192	22.48
9	**********	93	10.89
12	******	37	4.33
15	**********	81	9.48
18	**********	215	25.18
21	**********	197	23.07
24	****	28	3.28
27	*	6	0.70
30		3	0.35
33		1	0.12
36		0	0.00
39		0	0.00

3 6 9 12 15 18 21 24

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7825.30

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	*	1	1.01
12	*	2	2.02
15		0	0.00
18	*****	10	10.10
21	**********	51	51.52
24	**********	30	30.30
27	***	5	5.05
30		0	0.00
33		0	0.00
36		0	0.00
39		0	0.00

10 20 30 40 50

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7831.38

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	*	16	2.81
12	*	16	2.81
15	*	11	1.93
18	******	65	11.42
21	**********	313	55.01
24	**********	137	24.08
27	*	11	1.93
30		0	0.00
33		0	0.00
36		0	0.00
39		0	0.00

10 20 30 40 50

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7901.07

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |****                                               16     2.85
      6  |*********************************************     185    32.92
      9  |****************************                     118    21.00
     12  |*************************************            166    29.54
     15  |****************                                  68    12.10
     18  |**                                                  9     1.60
     21  |                                                    0     0.00
     24  |                                                    0     0.00
     27  |                                                    0     0.00
     30  |                                                    0     0.00
     33  |                                                    0     0.00
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         ----+---+---+---+---+---+---+---+---+---+---+
             3   6   9  12  15  18  21  24  27  30  33
                          PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7908.16

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                   FREQ  PERCENT
      0  |                                    0     0.00
      3  |**                                  22     3.46
      6  |***************************        351    55.28
      9  |******                              72    11.34
     12  |********                           103    16.22
     15  |******                              78    12.28
     18  |*                                    9     1.42
     21  |                                     0     0.00
     24  |                                     0     0.00
     27  |                                     0     0.00
     30  |                                     0     0.00
     33  |                                     0     0.00
     36  |                                     0     0.00
     39  |                                     0     0.00
         ----+----+----+----+----+---
             10  20  30  40  50
                 PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7917.25

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
        |
      0 |                                          0     0.00
        |
      3 |                                          0     0.00
        |
      6 |**********************                   99    16.56
        |
      9 |********************************       146    24.41
        |
     12 |***************                          69    11.54
        |
     15 |**********************                  100    16.72
        |
     18 |***************************             123    20.57
        |
     21 |***********                              49     8.19
        |
     24 |**                                       10     1.67
        |
     27 |                                          2     0.33
        |
     30 |                                          0     0.00
        |
     33 |                                          0     0.00
        |
     36 |                                          0     0.00
        |
     39 |                                          0     0.00
        |
        ----+---+---+---+---+---+---+---+--
            3   6   9  12  15  18  21  24
                    PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7926.32

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                   FREQ  PERCENT
        |
      0 |                                    0     0.00
        |
      3 |                                    0     0.00
        |
      6 |**********                        164    19.00
        |
      9 |************************         408    47.28
        |
     12 |**********                        170    19.70
        |
     15 |****                               68     7.88
        |
     18 |**                                 42     4.87
        |
     21 |*                                  10     1.16
        |
     24 |                                    1     0.12
        |
     27 |                                    0     0.00
        |
     30 |                                    0     0.00
        |
     33 |                                    0     0.00
        |
     36 |                                    0     0.00
        |
     39 |                                    0     0.00
        |
        ----+---+---+---+---
            10  20  30  40
                PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7933.37

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	*******	4	5.00
12	**********	17	21.25
15	**********	19	23.75
18	**********	16	20.00
21	**********	16	20.00
24	********	5	6.25
27	**	1	1.25
30	***	2	2.50
33		0	0.00
36		0	0.00
39		0	0.00

3 6 9 12 15 18 21 24

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7938.44

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	*	2	0.82
12	**	6	2.47
15	**********	24	9.88
18	**********	79	32.51
21	**********	99	40.74
24	**********	27	11.11
27	**	4	1.65
30	*	2	0.82
33		0	0.00
36		0	0.00
39		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7945.50

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                          FREQ  PERCENT
     0  |                                                         0     0.00
     3  |                                                         0     0.00
     6  |                                                         0     0.00
     9  |                                                         0     0.00
    12  |                                                         0     0.00
    15  |***                                                      2     3.33
    18  |*************************                               15    25.00
    21  |*********************************************           28    46.67
    24  |****************                                        10    16.67
    27  |*****                                                    3     5.00
    30  |***                                                      2     3.33
    33  |                                                         0     0.00
    36  |                                                         0     0.00
    39  |                                                         0     0.00
        |
        -----+----+----+----+----+----+----+----+----+--
             5   10   15   20   25   30   35   40   45
                          PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P7951.58

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                          FREQ  PERCENT
     0  |                                                         0     0.00
     3  |                                                         0     0.00
     6  |                                                         0     0.00
     9  |*                                                        1     0.50
    12  |*******                                                 11     5.50
    15  |****************                                        25    12.50
    18  |***********************                                 35    17.50
    21  |****************************************               61    30.50
    24  |****************************                            44    22.00
    27  |*********                                               13     6.50
    30  |******                                                   9     4.50
    33  |*                                                        1     0.50
    36  |                                                         0     0.00
    39  |                                                         0     0.00
        |
        ----+---+---+---+---+---+---+---+---+--
            3   6   9  12  15  18  21  24  27  30
                          PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8001.06

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	***	4	6.90
12	**********	29	50.00
15	*********	11	18.97
18	*****	6	10.34
21	***	3	5.17
24	**	2	3.45
27		0	0.00
30	**	2	3.45
33	*	1	1.72
36		0	0.00
39		0	0.00

10 20 30 40 50

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8007.12

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	***	1	3.23
12	******	2	6.45
15	**********	13	41.94
18	**********	7	22.58
21	**********	7	22.58
24	***	1	3.23
27		0	0.00
30		0	0.00
33		0	0.00
36		0	0.00
39		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8013.20

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	**********	12	7.41
12	**********	34	20.99
15	**********	22	13.58
18	**********	39	24.07
21	**********	39	24.07
24	**********	16	9.88
27		0	0.00
30		0	0.00
33		0	0.00
36		0	0.00
39		0	0.00

3 6 9 12 15 18 21 24

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8021.27

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9	*********	2	6.90
12	**********	8	27.59
15	**********	7	24.14
18	**********	4	13.79
21	**********	4	13.79
24	**********	3	10.34
27		0	0.00
30	*****	1	3.45
33		0	0.00
36		0	0.00
39		0	0.00

3 6 9 12 15 18 21 24 27

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8028.33

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                      FREQ  PERCENT
      0  |                                                     0     0.00
      3  |                                                     0     0.00
      6  |**                                                   1     2.44
      9  |                                                     0     0.00
     12  |************************                            10    24.39
     15  |*********************************************       18    43.90
     18  |************                                        5    12.20
     21  |*****************                                   7    17.07
     24  |                                                     0     0.00
     27  |                                                     0     0.00
     30  |                                                     0     0.00
     33  |                                                     0     0.00
     36  |                                                     0     0.00
     39  |                                                     0     0.00
         |
         -----+----+----+----+----+----+----+----+----
              5   10   15   20   25   30   35   40
                          PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8034.40

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                  FREQ  PERCENT
      0  |                                 0     0.00
      3  |                                 0     0.00
      6  |                                 0     0.00
      9  |****                             2     7.41
     12  |****                             2     7.41
     15  |*******                          4    14.81
     18  |*********                        5    18.52
     21  |************************        13    48.15
     24  |**                               1     3.70
     27  |                                 0     0.00
     30  |                                 0     0.00
     33  |                                 0     0.00
     36  |                                 0     0.00
     39  |                                 0     0.00
         |
         -----+----+----+----+----
              10   20   30   40
                PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8101.06

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3	*******	53	13.70
6	**********	267	68.99
9	*******	51	13.18
12	*	7	1.81
15	*	5	1.29
18		0	0.00
21		0	0.00
24		3	0.78
27		0	0.00
30		1	0.26
33		0	0.00
36		0	0.00
39		0	0.00

10 20 30 40 50 60

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8107.15

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3	***	29	6.47
6	**********	309	68.97
9	*********	81	18.08
12	*	7	1.56
15		4	0.89
18		0	0.00
21	*	6	1.34
24	*	6	1.34
27		4	0.89
30		1	0.22
33		1	0.22
36		0	0.00
39		0	0.00

10 20 30 40 50 60

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8116.22

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |**                                                  3     3.49
      6  |************************************              64    74.42
      9  |*******                                            12    13.95
     12  |*                                                   1     1.16
     15  |*                                                   1     1.16
     18  |                                                    0     0.00
     21  |*                                                   1     1.16
     24  |*                                                   1     1.16
     27  |*                                                   2     2.33
     30  |*                                                   1     1.16
     33  |                                                    0     0.00
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         |
         -----+----+----+----+----+----+----+--
              10   20   30   40   50   60   70
                       PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8123.28

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                  FREQ  PERCENT
      0  |                                  0     0.00
      3  |                                  0     0.00
      6  |***************                   7    30.43
      9  |************************         11    47.83
     12  |****                              2     8.70
     15  |****                              2     8.70
     18  |                                  0     0.00
     21  |                                  0     0.00
     24  |                                  0     0.00
     27  |                                  0     0.00
     30  |**                                1     4.35
     33  |                                  0     0.00
     36  |                                  0     0.00
     39  |                                  0     0.00
         |
         -----+----+----+----+----
              10   20   30   40
                       PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8129.37

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6	******	88	12.54
9	**********	358	51.00
12	********	115	16.38
15	**	30	4.27
18	*	13	1.85
21		4	0.57
24	**	35	4.99
27	**	35	4.99
30	*	15	2.14
33	*	8	1.14
36		1	0.14
39		0	0.00

10 20 30 40 50

PERCENTAGE

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8138.43

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3	*	1	1.22
6	*	1	1.22
9	**********	20	24.39
12	**********	30	36.59
15	**********	11	13.41
18	**********	17	20.73
21	*	1	1.22
24		0	0.00
27	*	1	1.22
30		0	0.00
33		0	0.00
36		0	0.00
39		0	0.00

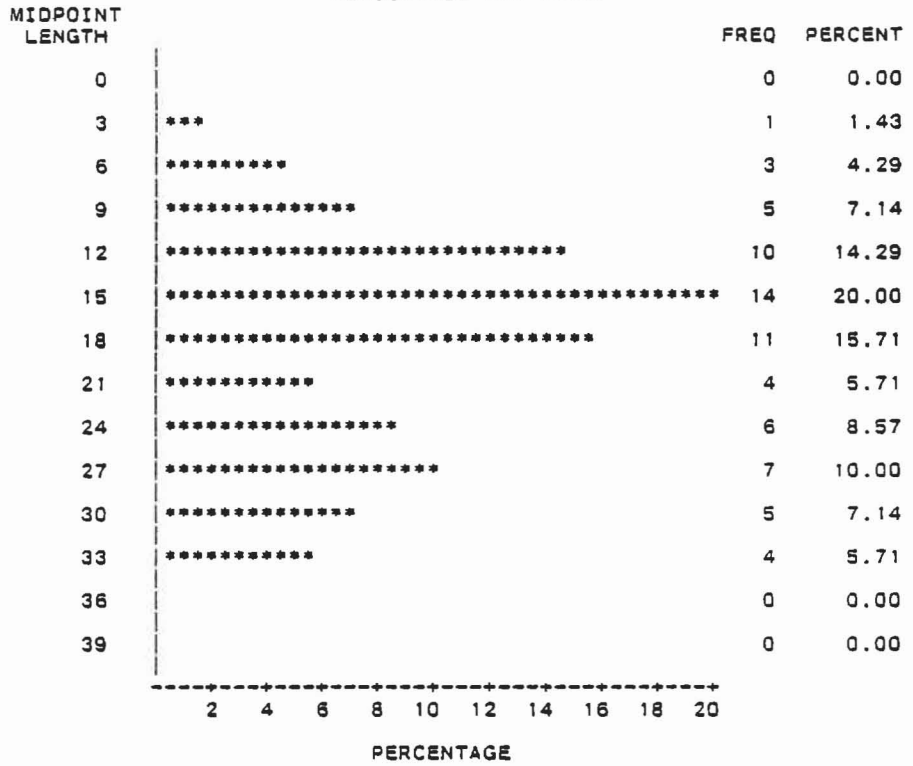
5 10 15 20 25 30 35

PERCENTAGE

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8144.50

PERCENTAGE BAR CHART



PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8151.59

PERCENTAGE BAR CHART

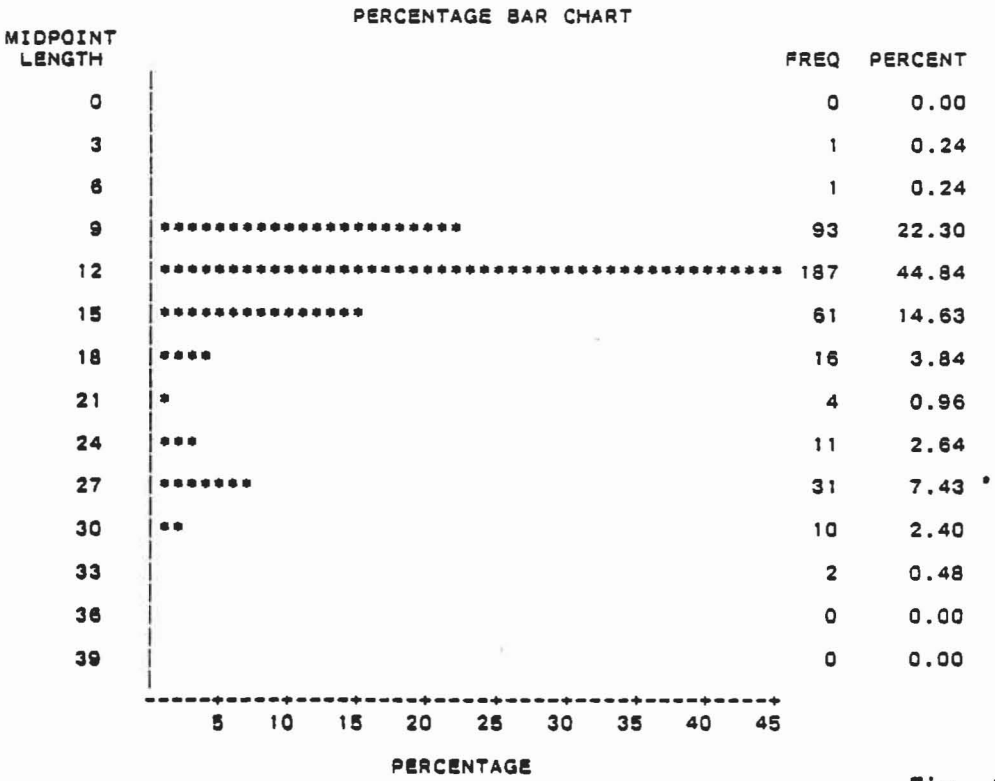


Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8160.66

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                          FREQ  PERCENT
      0  |                                                         0     0.00
      3  |                                                         0     0.00
      6  |                                                         0     0.00
      9  |***                                                      3     2.07
     12  |************************************                    39    26.90
     15  |*********************************************** 49    33.79
     18  |******************************                          33    22.76
     21  |*********                                                10     6.90
     24  |*****                                                     5     3.45
     27  |***                                                       3     2.07
     30  |***                                                       3     2.07
     33  |                                                         0     0.00
     36  |                                                         0     0.00
     39  |                                                         0     0.00
         |----+---+---+---+---+---+---+---+---+---+---+-
             3   6   9  12  15  18  21  24  27  30  33
                          PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8201.08

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                         0     0.00
      3  |*                                        9     1.79
      6  |****************************** 299    59.56
      9  |*****************                     172    34.26
     12  |**                                      18     3.59
     15  |                                         2     0.40
     18  |                                         1     0.20
     21  |                                         0     0.00
     24  |                                         1     0.20
     27  |                                         0     0.00
     30  |                                         0     0.00
     33  |                                         0     0.00
     36  |                                         0     0.00
     39  |                                         0     0.00
         |-----+-----+-----+-----+-----+-----+
             10   20   30   40   50   60
                     PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8209.17

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                   FREQ  PERCENT
      0  |                                   0     0.00
      3  |                                   0     0.00
      6  |*************                     55    26.57
      9  |***************************      111    53.62
     12  |******                            26    12.56
     15  |***                               12     5.80
     18  |                                   2     0.97
     21  |                                   1     0.48
     24  |                                   0     0.00
     27  |                                   0     0.00
     30  |                                   0     0.00
     33  |                                   0     0.00
     36  |                                   0     0.00
     39  |                                   0     0.00
         -----+----+----+----+----+--
              10   20   30   40   50
                   PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8218.25

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                   FREQ  PERCENT
      0  |                                   0     0.00
      3  |                                   2     0.43
      6  |*****************                158    33.98
      9  |************************         224    48.17
     12  |******                            58    12.47
     15  |**                                19     4.09
     18  |                                   3     0.65
     21  |                                   1     0.22
     24  |                                   0     0.00
     27  |                                   0     0.00
     30  |                                   0     0.00
     33  |                                   0     0.00
     36  |                                   0     0.00
     39  |                                   0     0.00
         -----+----+----+----+----
              10   20   30   40
                   PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8229.33

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |*********************                               8    21.05
      9  |*****************************************          16    42.11
     12  |************************                            9    23.68
     15  |*****                                               2     5.26
     18  |***                                                 1     2.63
     21  |***                                                 1     2.63
     24  |                                                    0     0.00
     27  |***                                                 1     2.63
     30  |                                                    0     0.00
     33  |                                                    0     0.00
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         |
         -----+----+----+----+----+----+----+----+--
              5   10   15   20   25   30   35   40
                        PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8234.39

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |**********                                          5     9.62
      9  |********************                                10    19.23
     12  |****************************************           21    40.38
     15  |***************                                     8    15.38
     18  |************                                        6    11.54
     21  |**                                                  1     1.92
     24  |                                                    0     0.00
     27  |**                                                  1     1.92
     30  |                                                    0     0.00
     33  |                                                    0     0.00
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         |
         -----+----+----+----+----+----+----+----+
              5   10   15   20   25   30   35   40
                        PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8240.48

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                          FREQ  PERCENT
      0  |                                                        0     0.00
      3  |                                                        0     0.00
      6  |*******************                                     3     9.68
      9  |*************************                               4    12.90
     12  |*******************************************             7    22.58
     15  |*******************************************             7    22.58
     18  |***************************************                 6    19.35
     21  |*************************                               4    12.90
     24  |                                                        0     0.00
     27  |                                                        0     0.00
     30  |                                                        0     0.00
     33  |                                                        0     0.00
     36  |                                                        0     0.00
     39  |                                                        0     0.00
         |----+----+----+----+----+----+----+----+----+----+-
              2    4    6    8   10   12   14   16   18   20   22
                                PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8249.58

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                  FREQ  PERCENT
      0  |                                 0     0.00
      3  |                                 1     0.87
      6  |                                 1     0.87
      9  |*************                   31    26.96
     12  |************************        56    48.70
     15  |*********                       21    18.26
     18  |*                                2     1.74
     21  |*                                3     2.61
     24  |                                 0     0.00
     27  |                                 0     0.00
     30  |                                 0     0.00
     33  |                                 0     0.00
     36  |                                 0     0.00
     39  |                                 0     0.00
         |-----+----+----+----+----
              10   20   30   40
                PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8259.64

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
        |
      0 |                                                    0     0.00
        |
      3 |                                                    0     0.00
        |
      6 |*                                                   2     1.25
        |
      9 |****************************************          66    41.25
        |
     12 |*********************************                 55    34.38
        |
     15 |********                                           12     7.50
        |
     18 |*********                                          15     9.38
        |
     21 |******                                             10     6.25
        |
     24 |                                                    0     0.00
        |
     27 |                                                    0     0.00
        |
     30 |                                                    0     0.00
        |
     33 |                                                    0     0.00
        |
     36 |                                                    0     0.00
        |
     39 |                                                    0     0.00
        |
        -----+----+----+----+----+----+----+----+--
             5   10   15   20   25   30   35   40

                        PERCENTAGE
```

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8301.06

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
        |
      0 |                                                    0     0.00
        |
      3 |******                                             28    11.29
        |
      6 |************************************             184    74.19
        |
      9 |*****                                              27    10.89
        |
     12 |*                                                   3     1.21
        |
     15 |                                                    1     0.40
        |
     18 |                                                    0     0.00
        |
     21 |                                                    0     0.00
        |
     24 |                                                    1     0.40
        |
     27 |                                                    2     0.81
        |
     30 |                                                    1     0.40
        |
     33 |                                                    1     0.40
        |
     36 |                                                    0     0.00
        |
     39 |                                                    0     0.00
        |
        -----+----+----+----+----+----+----+--
             10   20   30   40   50   60   70

                        PERCENTAGE
```

Fig. 2 (cont'd.)

PARATHEMISTO LIBELLULA LENGTH FREQUENCY P8307.11

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                FREQ  PERCENT
      0  |                                                 0     0.00
      3  |**********                                       4    10.26
      6  |************************************            15    38.46
      9  |*********************************               14    35.90
     12  |***                                              1     2.56
     15  |*****                                            2     5.13
     18  |                                                 0     0.00
     21  |                                                 0     0.00
     24  |********                                         3     7.69
     27  |                                                 0     0.00
     30  |                                                 0     0.00
     33  |                                                 0     0.00
     36  |                                                 0     0.00
     39  |                                                 0     0.00
         |
         -----+----+----+----+----+----+----+---
              5   10   15   20   25   30   35
                      PERCENTAGE
```

Fig. 2 (cont'd.)

Figure 3. Length frequency histograms for *Sagitta elegans* collected during the 1978 to 1983 open water seasons at various stations in Frobisher Bay. The code number in each chart title indicates the species (S), the year of collection (78) and the numbers of the collections from which length data were combined in preparing the histogram (e.g. S7802.06 indicates that length measurements for *Sagitta* from the 1978 collections numbered 02 to 06 inclusive were pooled). The date of collection and the station number can be obtained by referring to the collection numbers listed in Table 1. The histograms are presented in chronological order.

SAGITTA ELEGANS LENGTH FREQUENCY S7801.06

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15	*	8	0.99
18	*	5	0.62
21	******	45	5.58
24	**********	149	18.49
27	**********	322	39.95
30	**********	223	27.67
33	******	46	5.71
36	*	6	0.74
39		2	0.25
42		0	0.00
45		0	0.00
48		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

SAGITTA ELEGANS LENGTH FREQUENCY S7807.12

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18	**	1	1.92
21	********	4	7.69
24	**********	10	19.23
27	**********	16	30.77
30	**********	19	36.54
33	****	2	3.85
36		0	0.00
39		0	0.00
42		0	0.00
45		0	0.00
48		0	0.00

5 10 15 20 25 30 35

PERCENTAGE

Fig. 3

SAGITTA ELEGANS LENGTH FREQUENCY S7813.18

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |                                                    0     0.00
     15  |                                                    2     0.12
     18  |*                                                  13     0.76
     21  |*                                                   9     0.53
     24  |********                                          130     7.58
     27  |************************                          389    22.70
     30  |****************************************         673    39.26
     33  |*********************                             367    21.41
     36  |********                                          131     7.64
     39  |                                                    0     0.00
     42  |                                                    0     0.00
     45  |                                                    0     0.00
     48  |                                                    0     0.00
         |
         -----+----+----+----+----+----+----+----
              5   10   15   20   25   30   35
                        PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S7819.24

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |                                                    0     0.00
     15  |                                                    0     0.00
     18  |                                                    0     0.00
     21  |*                                                   5     1.11
     24  |******                                             25     5.57
     27  |***************************                       118    26.28
     30  |****************************************         181    40.31
     33  |********************                               90    20.04
     36  |******                                             26     5.79
     39  |*                                                   4     0.89
     42  |                                                    0     0.00
     45  |                                                    0     0.00
     48  |                                                    0     0.00
         |
         -----+----+----+----+----+----+----+----+
              5   10   15   20   25   30   35   40
                        PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S7825.30

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                          FREQ  PERCENT
      |
    0 |                                                            0     0.00
      |
    3 |                                                            0     0.00
      |
    6 |                                                            0     0.00
      |
    9 |                                                            0     0.00
      |
   12 |**                                                         18     1.13
      |
   15 |                                                            0     0.00
      |
   18 |                                                            4     0.25
      |
   21 |                                                            2     0.13
      |
   24 |****                                                       49     3.07
      |
   27 |*********                                                 108     6.76
      |
   30 |****************************************                 489    30.62
      |
   33 |*********************************************** 533    33.38
      |
   36 |****************************                             330    20.66
      |
   39 |****                                                       44     2.76
      |
   42 |*                                                          16     1.00
      |
   45 |                                                            4     0.25
      |
   48 |                                                            0     0.00
      |
     ----+---+--------+---+---+---+---+---+---+--
         3   6   9  12  15  18  21  24  27  30  33

                    PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S7831.38

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                  FREQ  PERCENT
      |
    0 |                                     0     0.00
      |
    3 |                                     0     0.00
      |
    6 |                                     0     0.00
      |
    9 |                                     0     0.00
      |
   12 |                                     0     0.00
      |
   15 |                                     0     0.00
      |
   18 |                                     0     0.00
      |
   21 |                                     0     0.00
      |
   24 |                                     6     0.67
      |
   27 |*                                   25     2.77
      |
   30 |*************                      247    27.38
      |
   33 |************************ 428    47.45
      |
   36 |*********                         167    18.51
      |
   39 |*                                   24     2.66
      |
   42 |                                     5     0.55
      |
   45 |                                     0     0.00
      |
   48 |                                     0     0.00
      |
     ----+---+---+---+----
         10  20  30  40

          PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S7901.07

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                          FREQ  PERCENT
     0  |                                                         0     0.00
     3  |                                                         0     0.00
     6  |                                                         0     0.00
     9  |                                                         0     0.00
    12  |                                                         0     0.00
    15  |**                                                       2     1.23
    18  |**********                                              12     7.41
    21  |*************************                              30    18.52
    24  |************************************************       57    35.19
    27  |***********************************                    44    27.16
    30  |***********                                             13     8.02
    33  |***                                                      4     2.47
    36  |                                                         0     0.00
    39  |                                                         0     0.00
    42  |                                                         0     0.00
    45  |                                                         0     0.00
    48  |                                                         0     0.00
        |
        ----+---+---+---+---+---+---+---+---+---+---
            3   6   9  12  15  18  21  24  27  30  33

                        PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S7908.16

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                          FREQ  PERCENT
     0  |                                                         0     0.00
     3  |                                                         0     0.00
     6  |                                                         1     0.35
     9  |                                                         0     0.00
    12  |                                                         1     0.35
    15  |***                                                      6     2.12
    18  |*************                                          27     9.54
    21  |***********************************                    76    26.86
    24  |****************************************               82    28.98
    27  |*******************************                         66    23.32
    30  |********                                                17     6.01
    33  |**                                                       5     1.77
    36  |                                                         1     0.35
    39  |                                                         1     0.35
    42  |                                                         0     0.00
    45  |                                                         0     0.00
    48  |                                                         0     0.00
        |
        ----+---+---+---+---+---+---+---+---+---
            3   6   9  12  15  18  21  24  27

                        PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S7917.25

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                          0     0.00
      3  |                                          0     0.00
      6  |                                          0     0.00
      9  |*                                         1     1.05
     12  |                                          0     0.00
     15  |****                                      3     3.16
     18  |******                                    4     4.21
     21  |********************************        22    23.16
     24  |************************************    25    26.32
     27  |************************                18    18.95
     30  |**********************                  16    16.84
     33  |****                                      3     3.16
     36  |*                                         1     1.05
     39  |                                          0     0.00
     42  |*                                         1     1.05
     45  |*                                         1     1.05
     48  |                                          0     0.00
         |
         ----+---+---+---+---+---+---+---+---
             3   6   9  12  15  18  21  24
                       PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S7926.32

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                  FREQ  PERCENT
      0  |                                                  0     0.00
      3  |                                                  0     0.00
      6  |                                                  0     0.00
      9  |                                                  0     0.00
     12  |                                                  0     0.00
     15  |                                                  0     0.00
     18  |**                                               44     1.14
     21  |*******                                         189     4.91
     24  |*******************                             544    14.13
     27  |*****************************************      1258    32.68
     30  |*********************************              952    24.73
     33  |******************                              531    13.79
     36  |**********                                      284     7.38
     39  |*                                                36     0.94
     42  |                                                 12     0.31
     45  |                                                  0     0.00
     48  |                                                  0     0.00
         |
         ----+---+---+---+---+---+---+---+---+---+---+
             3   6   9  12  15  18  21  24  27  30  33
                       PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S7933.37

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12	*	1	0.97
15		0	0.00
18		0	0.00
21	***	2	1.94
24	******	5	4.85
27	**********	14	13.59
30	**********	34	33.01
33	**********	27	26.21
36	**********	19	18.45
39	*	1	0.97
42		0	0.00
45		0	0.00
48		0	0.00

3 6 9 12 15 18 21 24 27 30 33

PERCENTAGE

SAGITTA ELEGANS LENGTH FREQUENCY S7938.44

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12	*	1	0.53
15		0	0.00
18	*	1	0.53
21	*	1	0.53
24	****	7	3.72
27	**********	35	18.62
30	**********	83	44.15
33	**********	46	24.47
36	*****	10	5.32
39	**	3	1.60
42	*	1	0.53
45		0	0.00
48		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S7945.50

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                  FREQ  PERCENT
     0  |                                                  1     0.29
     3  |                                                  0     0.00
     6  |                                                  0     0.00
     9  |                                                  0     0.00
    12  |                                                  1     0.29
    15  |                                                  0     0.00
    18  |                                                  0     0.00
    21  |                                                  0     0.00
    24  |****                                             14     4.11
    27  |***********                                      38    11.14
    30  |*********************                            71    20.82
    33  |************************************            122    35.78
    36  |************************                         80    23.46
    39  |****                                             12     3.52
    42  |*                                                 2     0.59
    45  |                                                  0     0.00
    48  |                                                  0     0.00
        |
        -----+----+----+----+----+----+-----+-
             5   10   15   20   25   30   35
                        PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S7951.58

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                  FREQ  PERCENT
     0  |                                                  0     0.00
     3  |                                                  0     0.00
     6  |                                                  0     0.00
     9  |                                                  0     0.00
    12  |                                                  0     0.00
    15  |                                                  1     0.09
    18  |                                                  0     0.00
    21  |                                                  1     0.09
    24  |*                                                 7     0.66
    27  |*********                                        91     8.57
    30  |************************                        257    24.20
    33  |****************************************        420    39.55
    36  |******************                              189    17.80
    39  |********                                         88     8.29
    42  |*                                                 8     0.75
    45  |                                                  0     0.00
    48  |                                                  0     0.00
        |
        -----+----+----+----+----+----+----+----+
             5   10   15   20   25   30   35   40
                        PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8001.06

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18		3	0.21
21	*********	94	6.62
24	**********	263	18.51
27	**********	334	23.50
30	**********	398	28.01
33	**********	228	16.05
36	*********	93	6.54
39	*	8	0.56
42		0	0.00
45		0	0.00
48		0	0.00

3 6 9 12 15 18 21 24 27

PERCENTAGE

SAGITTA ELEGANS LENGTH FREQUENCY S8007.12

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18		0	0.00
21	*	4	1.08
24	******	21	5.69
27	**********	47	12.74
30	**********	149	40.38
33	**********	92	24.93
36	**********	41	11.11
39	****	13	3.52
42	*	2	0.54
45		0	0.00
48		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8013.20

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |                                                    0     0.00
     15  |                                                    0     0.00
     18  |                                                    1     0.24
     21  |**                                                  5     1.18
     24  |********                                           25     5.88
     27  |*****************************                     93    21.88
     30  |********************************************** 141    33.18
     33  |************************************             116    27.29
     36  |***********                                        34     8.00
     39  |***                                                 8     1.88
     42  |*                                                   2     0.47
     45  |                                                    0     0.00
     48  |                                                    0     0.00
         |
         ----+---+---+---+---+---+---+---+---+---+
             3   6   9  12  15  18  21  24  27  30  33
                          PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8021.27

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                FREQ  PERCENT
      0  |                                                0     0.00
      3  |                                                0     0.00
      6  |                                                0     0.00
      9  |                                                0     0.00
     12  |*                                               3     1.32
     15  |                                                0     0.00
     18  |                                                0     0.00
     21  |*                                               2     0.88
     24  |****                                            9     3.96
     27  |**************                                 31.   13.66
     30  |*************************                     60    26.43
     33  |************************************          84    37.00
     36  |*************                                  30    13.22
     39  |***                                             7     3.08
     42  |                                                1     0.44
     45  |                                                0     0.00
     48  |                                                0     0.00
         |
         -----+---+---+---+---+---+---+---
              5  10  15  20  25  30  35
                      PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8028.33

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18		6	0.50
21	**	30	2.50
24	********	97	8.07
27	**********	183	15.22
30	**********	479	39.85
33	**********	268	22.30
36	*********	114	9.48
39	**	25	2.08
42		0	0.00
45		0	0.00
48		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

SAGITTA ELEGANS LENGTH FREQUENCY S8034.40

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		1	0.09
12		4	0.35
15		1	0.09
18		0	0.00
21		0	0.00
24	*	16	1.42
27	*******	75	6.65
30	**********	330	29.26
33	**********	436	38.65
36	**********	220	19.50
39	****	45	3.99
42		0	0.00
45		0	0.00
48		0	0.00

5 10 15 20 25 30 35

PERCENTAGE

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8041.45

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
     0  |                                                    0     0.00
     3  |                                                    0     0.00
     6  |                                                    0     0.00
     9  |                                                    2     0.35
    12  |*                                                   6     1.04
    15  |*                                                   6     1.04
    18  |                                                    0     0.00
    21  |                                                    0     0.00
    24  |****                                               17     2.94
    27  |**************                                     61    10.55
    30  |*****************************************        188    32.53
    33  |*********************************************** 201    34.78
    36  |********************                               86    14.88
    39  |**                                                  9     1.56
    42  |                                                    2     0.35
    45  |                                                    0     0.00
    48  |                                                    0     0.00
        |----+----+----+----+----+----+----+----+----+----+----+--
             3    6    9   12   15   18   21   24   27   30   33
                                PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8101.06

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                          FREQ  PERCENT
     0  |                                          0     0.00
     3  |                                          0     0.00
     6  |                                          0     0.00
     9  |                                          0     0.00
    12  |                                          0     0.00
    15  |                                          0     0.00
    18  |*                                         3     1.12
    21  |***                                       9     3.36
    24  |****************                         42    15.67
    27  |************************************     96    35.82
    30  |****************************             76    28.36
    33  |**********                               27    10.07
    36  |***                                       8     2.99
    39  |***                                       7     2.61
    42  |                                          0     0.00
    45  |                                          0     0.00
    48  |                                          0     0.00
        |----+----+----+----+----+----+----+
             5   10   15   20   25   30   35
                      PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8107.15

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                   FREQ  PERCENT
      0  |                                                   0     0.00
      3  |                                                   0     0.00
      6  |                                                   0     0.00
      9  |                                                   0     0.00
     12  |                                                   0     0.00
     15  |                                                   0     0.00
     18  |                                                   0     0.00
     21  |*******                                           22     7.07
     24  |*******************                               60    19.29
     27  |************************************             119    38.26
     30  |*************************                         79    25.40
     33  |*******                                           23     7.40
     36  |**                                                 5     1.61
     39  |*                                                  3     0.96
     42  |                                                   0     0.00
     45  |                                                   0     0.00
     48  |                                                   0     0.00
         |
         -----+----+----+----+----+----+----+---
              5   10   15   20   25   30   35
                       PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8116.22

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                   FREQ  PERCENT
      0  |                                                   0     0.00
      3  |                                                   0     0.00
      6  |                                                   0     0.00
      9  |                                                   0     0.00
     12  |                                                   0     0.00
     15  |                                                   0     0.00
     18  |*                                                  3     0.82
     21  |*******                                           19     5.19
     24  |***************************                       75    20.49
     27  |*********************************************     128    34.97
     30  |***********************************               99    27.05
     33  |************                                      32     8.74
     36  |**                                                 5     1.37
     39  |**                                                 5     1.37
     42  |                                                   0     0.00
     45  |                                                   0     0.00
     48  |                                                   0     0.00
         |
         ----+----+----+----+----+----+----+----+----+----+----+---
             3   6   9  12  15  18  21  24  27  30  33
                       PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8123.28

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
      0  |                                                   0     0.00
      3  |                                                   0     0.00
      6  |                                                   0     0.00
      9  |                                                   0     0.00
     12  |                                                   0     0.00
     15  |                                                   0     0.00
     18  |                                                   1     0.35
     21  |**                                                 6     2.09
     24  |**********                                        30    10.45
     27  |***************************                       77    26.83
     30  |************************************** 105    36.59
     33  |****************                                  47    16.38
     36  |******                                             16     5.57
     39  |*                                                   3     1.05
     42  |*                                                   2     0.70
     45  |                                                   0     0.00
     48  |                                                   0     0.00
         |-----+----+----+----+----+----+----+--
              5   10   15   20   25   30   35
                      PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8129.37

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
      0  |                                                   0     0.00
      3  |                                                   0     0.00
      6  |                                                   0     0.00
      9  |                                                   0     0.00
     12  |                                                   1     0.11
     15  |                                                   0     0.00
     18  |                                                   1     0.11
     21  |*                                                 11     1.23
     24  |*******                                           66     7.37
     27  |************************                         211    23.58
     30  |************************************** 321    35.87
     33  |********************                             175    19.55
     36  |*******                                           67     7.49
     39  |****                                              36     4.02
     42  |*                                                  6     0.67
     45  |                                                   0     0.00
     48  |                                                   0     0.00
         |-----+----+----+----+----+----+----+-
              5   10   15   20   25   30   35
                      PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8138.43

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |                                                    0     0.00
     15  |                                                    1     0.37
     18  |                                                    1     0.37
     21  |***                                                 7     2.62
     24  |**************                                     29    10.86
     27  |************************                           51    19.10
     30  |*****************************************          86    32.21
     33  |********************************                   66    24.72
     36  |*********                                          18     6.74
     39  |***                                                 7     2.62
     42  |                                                    1     0.37
     45  |                                                    0     0.00
     48  |                                                    0     0.00
         ----+---+---+---+---+---+---+---+---+---+---
             3   6   9  12  15  18  21  24  27  30
                       PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8144.50

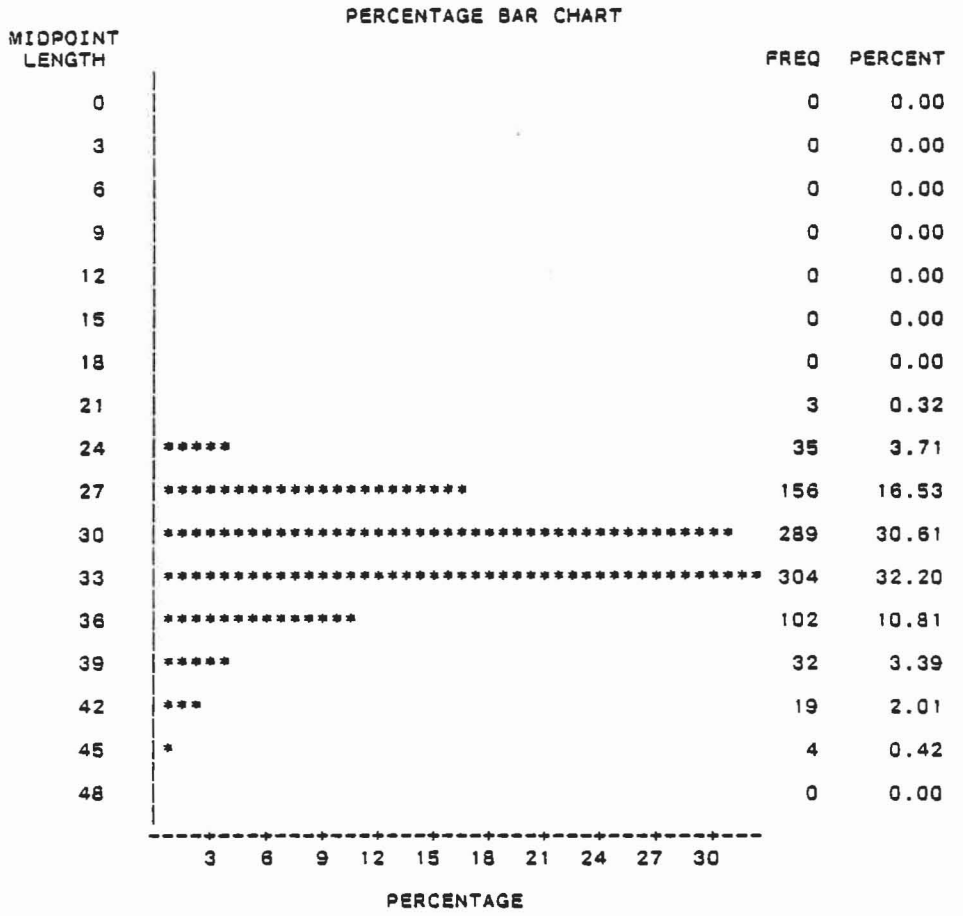
PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |**                                                  1     1.47
     15  |**                                                  1     1.47
     18  |                                                    0     0.00
     21  |****                                                2     2.94
     24  |********                                            4     5.88
     27  |*****************************                      15    22.06
     30  |*****************************************          22    32.35
     33  |*******************************                    16    23.53
     36  |**********                                          5     7.35
     39  |**                                                  1     1.47
     42  |                                                    0     0.00
     45  |**                                                  1     1.47
     48  |                                                    0     0.00
         ----+---+---+---+---+---+---+---+---+---+---
             3   6   9  12  15  18  21  24  27  30
                       PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8151.59

PERCENTAGE BAR CHART



SAGITTA ELEGANS LENGTH FREQUENCY S8160.66

PERCENTAGE BAR CHART

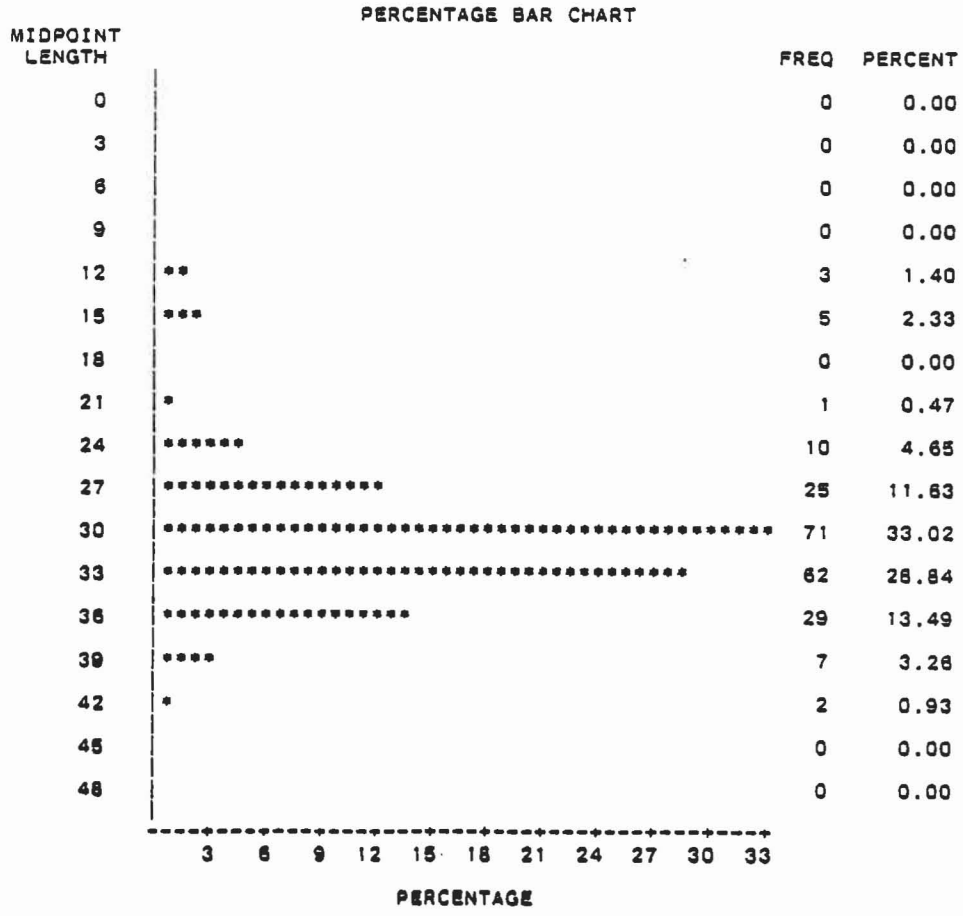


Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8201.08

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
     0  |                                                    0     0.00
     3  |                                                    0     0.00
     6  |                                                    0     0.00
     9  |                                                    0     0.00
    12  |                                                    0     0.00
    15  |                                                    2     0.34
    18  |*                                                   6     1.02
    21  |***********                                        49     8.36
    24  |***************************                       117    19.97
    27  |*********************************                 147    25.09
    30  |************************************** 160    27.30
    33  |**************                                     62    10.58
    36  |*****                                              24     4.10
    39  |***                                                12     2.05
    42  |*                                                   4     0.68
    45  |*                                                   3     0.51
    48  |                                                    0     0.00
        ----+---+---+---+---+---+---+---+---+
            3   6   9  12  15  18  21  24  27
                      PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8209.17

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
     0  |                                                    0     0.00
     3  |                                                    0     0.00
     6  |                                                    0     0.00
     9  |                                                    0     0.00
    12  |                                                    0     0.00
    15  |                                                    1     0.23
    18  |*****                                              17     3.91
    21  |**********                                         33     7.59
    24  |*********************************                 109    25.06
    27  |************************************** 116    26.67
    30  |***************************                       84    19.31
    33  |***************                                    49    11.26
    36  |****                                               12     2.76
    39  |***                                                11     2.53
    42  |*                                                   3     0.69
    45  |                                                    0     0.00
    48  |                                                    0     0.00
        ----+---+---+---+---+---+---+---+---+
            3   6   9  12  15  18  21  24  27
                      PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8218.25

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |                                                    0     0.00
     15  |                                                    0     0.00
     18  |**                                                  3     1.23
     21  |*****                                               9     3.69
     24  |***************                                    27    11.07
     27  |************************************              72    29.51
     30  |************************************              71    29.10
     33  |*******************                                37    15.16
     36  |*********                                          17     6.97
     39  |****                                                8     3.28
     42  |                                                    0     0.00
     45  |                                                    0     0.00
     48  |                                                    0     0.00
         |
         ----+---+---+---+---+---+---+---+---+---
             3   6   9  12  15  18  21  24  27
                       PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8229.33

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |                                                    0     0.00
     15  |                                                    0     0.00
     18  |                                                    0     0.00
     21  |****                                                5     2.78
     24  |****************                                   23    12.78
     27  |************************************              52    28.89
     30  |***********************************               51    28.33
     33  |************************                          34    18.89
     36  |*****                                               7     3.89
     39  |*****                                               7     3.89
     42  |*                                                   1     0.56
     45  |                                                    0     0.00
     48  |                                                    0     0.00
         |
         ----+---+---+---+---+---+---+---+---+---
             3   6   9  12  15  18  21  24  27
                       PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8234.39

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0 |                                                     0     0.00
      3 |                                                     0     0.00
      6 |                                                     0     0.00
      9 |                                                     0     0.00
     12 |                                                     1     0.36
     15 |                                                     0     0.00
     18 |                                                     0     0.00
     21 |*                                                    3     1.07
     24 |****************                                    34    12.10
     27 |************************************                79    28.11
     30 |*********************************************       94    33.45
     33 |********************                                42    14.95
     36 |*******                                             15     5.34
     39 |*****                                               11     3.91
     42 |*                                                    2     0.71
     45 |                                                     0     0.00
     48 |                                                     0     0.00
        |
   ----+---+---+---+---+---+---+---+---+---+---+--
       3   6   9  12  15  18  21  24  27  30  33
                     PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8240.48

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0 |                                                     0     0.00
      3 |                                                     0     0.00
      6 |                                                     0     0.00
      9 |                                                     0     0.00
     12 |                                                     1     0.29
     15 |                                                     0     0.00
     18 |                                                     0     0.00
     21 |**                                                   5     1.47
     24 |*******                                             19     5.57
     27 |*************************                          67    19.65
     30 |*********************************************     111    32.55
     33 |****************************                       72    21.11
     36 |***************                                    38    11.14
     39 |********                                           21     6.16
     42 |***                                                 7     2.05
     45 |                                                     0     0.00
     48 |                                                     0     0.00
        |
   ----+---+---+---+---+---+---+---+---+---+---
       3   6   9  12  15  18  21  24  27  30
                     PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8249.58

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
     0  |                                                    0     0.00
     3  |                                                    0     0.00
     6  |                                                    0     0.00
     9  |                                                    0     0.00
    12  |                                                    0     0.00
    15  |*                                                   1     0.38
    18  |*                                                   1     0.38
    21  |*                                                   2     0.75
    24  |******                                             12     4.51
    27  |*********************                              41    15.41
    30  |****************************************          75    28.20
    33  |************************************              71    26.69
    36  |*********************                              42    15.79
    39  |********                                           15     5.64
    42  |***                                                 6     2.26
    45  |                                                    0     0.00
    48  |                                                    0     0.00
        ----+----+----+----+----+----+----+----+--
            3    6    9   12   15   18   21   24   27
                        PERCENTAGE
```

SAGITTA ELEGANS LENGTH FREQUENCY S8259.64

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                    FREQ  PERCENT
     0  |                                                    0     0.00
     3  |                                                    0     0.00
     6  |                                                    0     0.00
     9  |                                                    0     0.00
    12  |                                                    0     0.00
    15  |                                                    0     0.00
    18  |                                                    0     0.00
    21  |                                                    0     0.00
    24  |***                                                 3     2.27
    27  |*****************                                  17    12.88
    30  |*************************************             37    28.03
    33  |*************************************             37    28.03
    36  |************************                           24    18.18
    39  |**********                                         10     7.58
    42  |****                                                4     3.03
    45  |                                                    0     0.00
    48  |                                                    0     0.00
        ----+----+----+----+----+----+----+----+-
            3    6    9   12   15   18   21   24   27
                        PERCENTAGE
```

Fig. 3 (cont'd.)

SAGITTA ELEGANS LENGTH FREQUENCY S8301.06

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		1	0.26
18	*	2	0.51
21	*******	21	5.38
24	**********	59	15.13
27	**********	94	24.10
30	**********	73	18.72
33	**********	63	16.15
36	**********	48	12.31
39	********	23	5.90
42	**	5	1.28
45		1	0.26
48		0	0.00

3 6 9 12 15 18 21 24

PERCENTAGE

SAGITTA ELEGANS LENGTH FREQUENCY S8307.11

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18		0	0.00
21	****	11	2.81
24	**********	56	14.29
27	**********	112	28.57
30	**********	103	26.28
33	**********	55	14.03
36	**********	38	9.69
39	*****	14	3.57
42	*	3	0.77
45		0	0.00
48		0	0.00

3 6 9 12 15 18 21 24 27

PERCENTAGE

Fig. 3 (cont'd.)

Figure 4. Length frequency histograms for Thysanoessa Inermis collected during the 1978 to 1982 open water seasons at various stations in Frobisher Bay. The code number in each chart title indicates the species (T), the year of collection (e.g. 78) and the numbers of the collections from which length data were combined in preparing the histogram (e.g. T7807.12 indicates that length measurements for Thysanoessa from the 1978 collections numbered 07 to 12 inclusive were pooled). The date of collection and the station number can be obtained by referring to the collection numbers listed in Table 1. The histograms are presented in chronological order.

THYSANOESSA INERMIS LENGTH FREQUENCY T7807.12

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                  FREQ  PERCENT
      0  |                                                  0     0.00
      3  |                                                  0     0.00
      6  |                                                  0     0.00
      9  |                                                  0     0.00
     12  |                                                  0     0.00
     15  |*****                                             1     3.70
     18  |******************************                    6    22.22
     21  |************************                          5    18.52
     24  |*******************                               4    14.81
     27  |*********************************                 7    25.93
     30  |*******************                               4    14.81
     33  |                                                  0     0.00
     36  |                                                  0     0.00
     39  |                                                  0     0.00
         ----+----+----+----+----+----+----+----
             3    6    9   12   15   18   21   24
                        PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T7813.18

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                  FREQ  PERCENT
      0  |                                                  0     0.00
      3  |                                                  0     0.00
      6  |                                                  0     0.00
      9  |                                                  0     0.00
     12  |*********                                         1     9.09
     15  |                                                  0     0.00
     18  |*********                                         1     9.09
     21  |*******************************************       5    45.45
     24  |*********                                         1     9.09
     27  |***************************                       3    27.27
     30  |                                                  0     0.00
     33  |                                                  0     0.00
     36  |                                                  0     0.00
     39  |                                                  0     0.00
         -----+----+----+----+----+----+----+----+
              5   10   15   20   25   30   35   40   45
                        PERCENTAGE
```

Fig. 4

THYSANOESSA INERMIS LENGTH FREQUENCY T7819.24

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		1	0.20
15		0	0.00
18	*	11	2.20
21	***	29	5.79
24	*******	66	13.17
27	**********	244	48.70
30	**********	143	28.54
33	*	7	1.40
36		0	0.00
39		0	0.00

```
-----+----+----+----+----
     10   20   30   40
```

PERCENTAGE

THYSANOESSA INERMIS LENGTH FREQUENCY T7831.38

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18		0	0.00
21	**********	2	10.53
24	**********	5	26.32
27	**********	7	36.84
30	**********	4	21.05
33		0	0.00
36	*****	1	5.26
39		0	0.00

```
-----+----+----+----+----+----+----+--
     5   10   15   20   25   30   35
```

PERCENTAGE

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T7908.16

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                         0     0.00
      3  |                                         0     0.00
      6  |                                         0     0.00
      9  |***                                      3     2.11
     12  |********                                 9     6.34
     15  |******                                   6     4.23
     18  |***********************                 25    17.61
     21  |**********                              11     7.75
     24  |***********                             12     8.45
     27  |************************************    38    26.76
     30  |******************************          32    22.54
     33  |******                                   6     4.23
     36  |                                         0     0.00
     39  |                                         0     0.00
         ----+---+---+---+---+---+---+---+---+
             3   6   9  12  15  18  21  24  27
                       PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T7917.25

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                          FREQ  PERCENT
      0  |                                         0     0.00
      3  |                                         0     0.00
      6  |                                         0     0.00
      9  |                                         0     0.00
     12  |**                                       6     1.17
     15  |****                                    16     3.11
     18  |******************************        120    23.35
     21  |******************************        116    22.57
     24  |*****************                       64    12.45
     27  |************************************    137    26.65
     30  |**************                          55    10.70
     33  |                                         0     0.00
     36  |                                         0     0.00
     39  |                                         0     0.00
         ----+---+---+---+---+---+---+---+---+
             3   6   9  12  15  18  21  24  27
                       PERCENTAGE
```

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T7926.32

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                   FREQ  PERCENT
      0  |                                                   0     0.00
      3  |                                                   0     0.00
      6  |                                                   0     0.00
      9  |                                                   0     0.00
     12  |*****                                             10     5.43
     15  |*************                                     24    13.04
     18  |************************************             65    35.33
     21  |************************                          43    23.37
     24  |*********                                         17     9.24
     27  |********                                          15     8.15
     30  |***                                                6     3.26
     33  |**                                                 4     2.17
     36  |                                                   0     0.00
     39  |                                                   0     0.00
         -----+----+----+----+----+----+-----+
              5   10   15   20   25   30   35
                      PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T7938.44

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                   FREQ  PERCENT
      0  |                                                   0     0.00
      3  |                                                   0     0.00
      6  |                                                   0     0.00
      9  |                                                   0     0.00
     12  |                                                   0     0.00
     15  |                                                   0     0.00
     18  |*****                                              5     4.85
     21  |**************************                        27    26.21
     24  |**************                                    14    13.59
     27  |************************************             38    36.89
     30  |*****************                                 18    17.48
     33  |*                                                  1     0.97
     36  |                                                   0     0.00
     39  |                                                   0     0.00
         -----+----+----+----+----+----+-----+
              5   10   15   20   25   30   35
                      PERCENTAGE
```

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8001.06

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |**********                                          2    10.00
     15  |****************************************           8    40.00
     18  |*************************                          5    25.00
     21  |*************************                          5    25.00
     24  |                                                    0     0.00
     27  |                                                    0     0.00
     30  |                                                    0     0.00
     33  |                                                    0     0.00
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         -----+----+----+----+----+----+----+-----+
              5   10   15   20   25   30   35   40
                        PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T8013.20

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
      0  |                                                    0     0.00
      3  |                                                    0     0.00
      6  |                                                    0     0.00
      9  |                                                    0     0.00
     12  |*                                                   1     0.62
     15  |*****                                               8     4.97
     18  |*******************                                31    19.25
     21  |*****************************************         69    42.86
     24  |************                                       21    13.04
     27  |***************                                    24    14.91
     30  |***                                                 5     3.11
     33  |*                                                   2     1.24
     36  |                                                    0     0.00
     39  |                                                    0     0.00
         -----+----+----+----+----+----+----+-----+---
              5   10   15   20   25   30   35   40
                        PERCENTAGE
```

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8021.27

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                   FREQ  PERCENT
      0  |                                   0     0.00
      3  |                                   0     0.00
      6  |                                   0     0.00
      9  |                                   0     0.00
     12  |                                   0     0.00
     15  |******                             2    11.76
     18  |*********************              7    41.18
     21  |************************           8    47.06
     24  |                                   0     0.00
     27  |                                   0     0.00
     30  |                                   0     0.00
     33  |                                   0     0.00
     36  |                                   0     0.00
     39  |                                   0     0.00
         -----+----+----+----+----
              10   20   30   40
                PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T8028.33

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                       FREQ  PERCENT
      0  |                                       0     0.00
      3  |                                       0     0.00
      6  |                                       0     0.00
      9  |                                       0     0.00
     12  |*                                      2     2.20
     15  |***                                    6     6.59
     18  |*************                         23    25.27
     21  |****************************          51    56.04
     24  |***                                    5     5.49
     27  |**                                     4     4.40
     30  |                                       0     0.00
     33  |                                       0     0.00
     36  |                                       0     0.00
     39  |                                       0     0.00
         -----+----+----+----+----+---
              10   20   30   40   50
                PERCENTAGE
```

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8041.45

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                  FREQ  PERCENT
     0  |                                                  0     0.00
     3  |                                                  0     0.00
     6  |                                                  0     0.00
     9  |                                                  0     0.00
    12  |                                                  0     0.00
    15  |*************                                     2    12.50
    18  |*************************************             6    37.50
    21  |******************************                    5    31.25
    24  |*************                                     2    12.50
    27  |                                                  0     0.00
    30  |******                                            1     6.25
    33  |                                                  0     0.00
    36  |                                                  0     0.00
    39  |                                                  0     0.00
        -----+----+----+----+----+----+----+---
             5   10   15   20   25   30   35
                      PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T8107.15

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                  FREQ  PERCENT
     0  |                                                  0     0.00
     3  |                                                  0     0.00
     6  |                                                  0     0.00
     9  |                                                  0     0.00
    12  |                                                  2     0.20
    15  |                                                  1     0.10
    18  |*                                                12     1.20
    21  |*********                                        87     8.67
    24  |*******************************************     456    45.46
    27  |*********************************              337    33.60
    30  |*******                                          74     7.38
    33  |***                                              34     3.39
    36  |                                                  0     0.00
    39  |                                                  0     0.00
        -----+----+----+----+----+----+----+----+----+
             5   10   15   20   25   30   35   40   45
                      PERCENTAGE
```

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8129.37

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		0	0.00
18		1	0.08
21	*	36	2.98
24	**********	437	36.18
27	**********	570	47.19
30	******	134	11.09
33	*	20	1.66
36		4	0.33
39		6	0.50

10 20 30 40

PERCENTAGE

THYSANOESSA INERMIS LENGTH FREQUENCY T8151.59

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15		2	0.70
18		0	0.00
21	**	13	4.58
24	**********	71	25.00
27	**********	159	55.99
30	*****	30	10.56
33	**	9	3.17
36		0	0.00
39		0	0.00

10 20 30 40 50

PERCENTAGE

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8201.08

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                          FREQ  PERCENT
      |
    0 |                                            0     0.00
      |
    3 |                                            0     0.00
      |
    6 |                                            0     0.00
      |
    9 |                                            0     0.00
      |
   12 |                                            0     0.00
      |
   15 |****                                        2     8.33
      |
   18 |************************                   12    50.00
      |
   21 |******************                          9    37.50
      |
   24 |**                                          1     4.17
      |
   27 |                                            0     0.00
      |
   30 |                                            0     0.00
      |
   33 |                                            0     0.00
      |
   36 |                                            0     0.00
      |
   39 |                                            0     0.00
      |
      -----+----+----+----+----+
           10   20   30   40   50
                PERCENTAGE
```

THYSANOESSA INERMIS LENGTH FREQUENCY T8209.17

PERCENTAGE BAR CHART

```
MIDPOINT
LENGTH                                                  FREQ  PERCENT
      |
    0 |                                                    0     0.00
      |
    3 |                                                    0     0.00
      |
    6 |                                                    0     0.00
      |
    9 |                                                    0     0.00
      |
   12 |                                                    1     0.12
      |
   15 |*****                                              41     5.11
      |
   18 |****************************************         349    43.46
      |
   21 |*****************                                 142    17.68
      |
   24 |***                                                25     3.11
      |
   27 |********************                              168    20.92
      |
   30 |*********                                          69     8.59
      |
   33 |*                                                   8     1.00
      |
   36 |                                                    0     0.00
      |
   39 |                                                    0     0.00
      |
      -----+----+----+----+----+----+----+----+---
           5   10   15   20   25   30   35   40
                PERCENTAGE
```

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8218.25

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15	**********	6	14.29
18	**********	18	42.86
21	**********	7	16.67
24	**	1	2.38
27	**********	4	9.52
30	**********	5	11.90
33	**	1	2.38
36		0	0.00
39		0	0.00

5 10 15 20 25 30 35 40

PERCENTAGE

THYSANOESSA INERMIS LENGTH FREQUENCY T8240.48

PERCENTAGE BAR CHART

MIDPOINT LENGTH		FREQ	PERCENT
0		0	0.00
3		0	0.00
6		0	0.00
9		0	0.00
12		0	0.00
15	***	3	3.00
18	**********	25	25.00
21	**********	36	36.00
24	**********	10	10.00
27	**********	14	14.00
30	**********	11	11.00
33	*	1	1.00
36		0	0.00
39		0	0.00

5 10 15 20 25 30 35

PERCENTAGE

Fig. 4 (cont'd.)

THYSANOESSA INERMIS LENGTH FREQUENCY T8249.58

PERCENTAGE BAR CHART

```
MIDPOINT
 LENGTH                                                    FREQ  PERCENT
        |
      0 |                                                    0     0.00
        |
      3 |                                                    0     0.00
        |
      6 |                                                    0     0.00
        |
      9 |                                                    0     0.00
        |
     12 |                                                    0     0.00
        |
     15 |                                                    0     0.00
        |
     18 |************                                        4    12.12
        |
     21 |*********                                           3     9.09
        |
     24 |***************                                     5    15.15
        |
     27 |****************************************          14    42.42
        |
     30 |******************                                  6    18.18
        |
     33 |***                                                 1     3.03
        |
     36 |                                                    0     0.00
        |
     39 |                                                    0     0.00
        |
        -----+----+----+----+----+----+----+----+--
             5   10   15   20   25   30   35   40
                        PERCENTAGE
```

Fig. 4 (cont'd.)

REFERENCES

Percy, J. A. and F. J. Fife. 1983. Distribution of biomass and caloric energy in the macrozooplankton community of Frobisher Bay, N.W.T. Can. Data Rep. Fish. Aquat. Sci. 387: v + 46 p.

Percy, J.A. and F.J. Fife. 1985. Summertime abundance and depth distribution of macrozooplankton in Frobisher Bay, N.W.T. from 1978 to 1983. Can. Data Rep. Fish Aquat. Sci. 503: v + 63 p.

Steedman, H. F. 1976. General and applied data on formaldehyde fixation and preservation of marine zooplankton, p. 103-154. In Steedman H. F. (ed.) Zooplankton fixation and preservation. The UNESCO Press, Paris.