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Length frequency of party- and charter-boat catch of
summer flounder (Paralichthys dentatus), 1975-1978

by

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Report No. SHL 79-25 (June 1979)

INTRODUCTION

Samples were collected from angler catches made aboard party- and charter-boats fishing along the New Jersey coastline. Collection and analysis were made as previously described in Christensen et al. (1976) and Christensen et al. (1978).

This report was prepared in response to a request made by the Summer Flounder State/Federal Management Program's S&S Committee.

S. FLOUNDER ALL 1975 DATA

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.38115E 02	0.49828E 02	0.70589E 01	0.17447E 00	0.16370E 04
OBSERVED DATA	0.38115E 02	0.49828E 02	0.70589E 01	0.17447E 00	0.16370E 04

LENGTH INTERVAL	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	2.0	0.0	1.0	3.0	5.0	5.0	11.0	16.0	15.0

LENGTH INTERVAL	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
OBSERVED FREQUENCY	47.0	79.0	108.0	108.0	159.0	117.0	138.0	101.0	111.0	99.0	63.0	48.0	48.0	64.0	48.0	31.0	29.0	23.0	9.0	16.0

LENGTH INTERVAL	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
OBSERVED FREQUENCY	18.0	7.0	9.0	15.0	16.0	17.0	12.0	7.0	3.0	7.0	8.0	0.0	0.0	1.0	0.0	3.0	3.0	1.0	3.0	0.0

LENGTH INTERVAL	70.0	71.0	72.0	73.0	74.0	75.0	76.0
OBSERVED FREQUENCY	0.0	1.0	0.0	0.0	0.0	0.0	0.0

S, FLOUNDER ALL 1975 DATA

FREQUENCY
EACH * EQUALS 4 POINTS

156	1	*
152	1	*
148	1	*
144	1	*
140	1	*
136	1	**
132	1	**
128	1	**
124	1	**
120	1	**
116	1	***
112	1	***
108	1	**** *
104	1	***** *
100	1	*****
96	1	*****
92	1	*****
88	1	*****
84	1	*****
80	1	*****
76	1	*****
72	1	*****
68	1	*****
64	1	***** *
60	1	***** *
56	1	***** *
52	1	***** *
48	1	*****
44	1	*****
40	1	*****
36	1	*****
32	1	*****
28	1	*****
24	1	*****
20	1	*****
16	1	* ***** ** **
12	1	***** ** **
8	1	***** ** *
4	1	***** **

111111112222222233333333444444445555555566666666777777
012345678901234567890123456789012345678901234567890123456

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 07-13-75 07-19-75

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0,35635E 02	0,28354E 02	0,53249E 01	0,57756E 00	0,85000E 02
OBSERVED DATA	0,35635E 02	0,28354E 02	0,53249E 01	0,57756E 00	0,85000E 02

LENGTH INTERVAL	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	7.0	12.0	12.0	6.0	9.0	8.0	2.0	3.0	5.0	1.0	2.0	2.0	2.0	6.0	1.0
--------------------	-----	-----	-----	-----	-----	-----	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	3.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

```
12 1 **
11 1 **
10 1 **
9 1 ** *
8 1 ** **
7 1 ** **
6 1 ** **
5 1 ** ** * *
4 1 ** ** * *
3 1 ** ** **
2 1 ** ** ** **
```

22223333333333444444444455555555
5678901234567890123456789012345678

LENGTH INTERVAL
DATA NOT SMOOTHED

S.FLOUNDER 07-20-75 07-26-75

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.33409E 02	0.14691E 02	0.38329E 01	0.11557E 01	0.11000E 02
OBSERVED DATA	0.33909E 02	0.14691E 02	0.38329E 01	0.11557E 01	0.11000E 02

LENGTH INTERVAL	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	2.0	3.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0

LENGTH INTERVAL	44.0	45.0	46.0	47.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0

FREQUENCY

3
2
1
1
*
*
*
*
*
*

222223333333334444444
456789012345678901234567

LENGTH INTERVAL
DATA NOT SMOOTHED

S, FLOUNDER 07-27-75 08-02-75

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.48333E 02	0.44334E 02	0.66584E 01	0.38442E 01	0.30000E 01
OBSERVED DATA	0.48333E 02	0.44334E 02	0.66584E 01	0.38442E 01	0.30000E 01
LENGTH INTERVAL	40.0 41.0 42.0 43.0 44.0 45.0 46.0 47.0 48.0 49.0 50.0 51.0 52.0 53.0 54.0 55.0 56.0 57.0 58.0 59.0				
OBSERVED FREQUENCY	0.0 0.0 0.0 0.0 1.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0				
LENGTH INTERVAL	60.0 61.0				
OBSERVED FREQUENCY	0.0 0.0				

S, FLOUNDER 07-27-75 08-02-75

FREQUENCY

4444444444555555555566
0123456789012345678901

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 08-03-75 08-09-75

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.35253E 02	0.24833E 02	0.49832E 01	0.56066E 00	0.79000E 02
OBSERVED DATA	0.35253E 02	0.24833E 02	0.49832E 01	0.56066E 00	0.79000E 02

LENGTH INTERVAL	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	2.0	1.0	4.0	5.0	5.0	7.0	10.0	5.0	8.0	6.0	3.0	7.0	4.0	4.0	1.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	1.0	1.0	0.0	1.0	1.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

```

10 1      *
9   1      *
8   1      * *
7   1      * * *
6   1      * * * *
5   1      * * * * *
4   1      * * * * * *
3   1      * * * * * * *
2   1      * * * * * * * *
1   1      * * * * * * * * *

```

```

22222233333333334444444444555555
345678901234567890123456789012345

```

LENGTH INTERVAL

DATA NOT SMOOTHED

FREQUENCY



22222333333333344444444445555555555666666666677
 45678901234567890123456789012345678901

LENGTH INTERVAL

DATA NOT SMOOTHED

FREQUENCY
EACH * EQUALS 3 POINTS

```

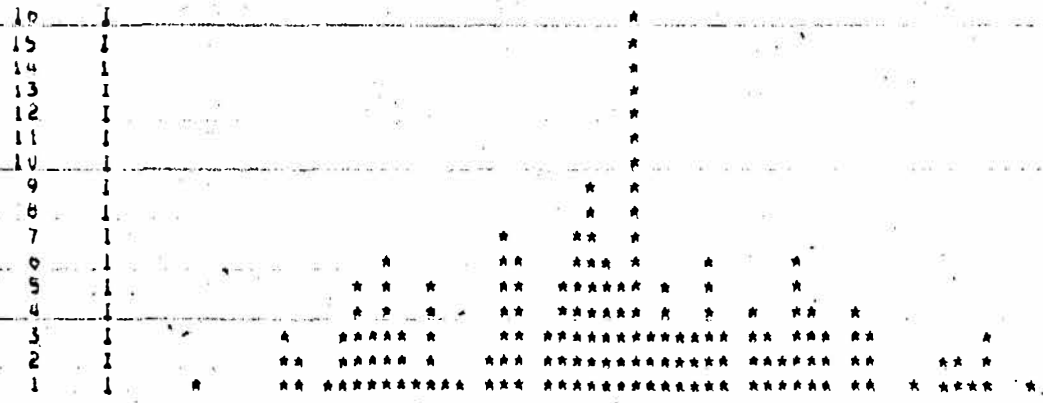
108 | 1 | *
105 | 1 | *
102 | 1 | *
99  | 1 | *
96  | 1 | *
93  | 1 | *
90  | 1 | *
87  | 1 | *
84  | 1 | *
81  | 1 | *
78  | 1 | * *
75  | 1 | * *
72  | 1 | * *
69  | 1 | * *
66  | 1 | * *
63  | 1 | * *
60  | 1 | * * * *
57  | 1 | * * * * *
54  | 1 | * * * * *
51  | 1 | * * * * *
48  | 1 | * * * * *
45  | 1 | * * * * *
42  | 1 | * * * * *
39  | 1 | * * * * * *
36  | 1 | * * * * * *
33  | 1 | * * * * * *
30  | 1 | * * * * * *
27  | 1 | * * * * * *
24  | 1 | * * * * * *
21  | 1 | * * * * * * *
18  | 1 | * * * * * * *
15  | 1 | * * * * * * *
12  | 1 | * * * * * * *
9   | 1 | * * * * * * * *
6   | 1 | * * * * * * * *
3   | 1 | * * * * * * * *

```

2222223333333333444444444455555555666666
345678901234567890123456789012345

LENGTH INTERVAL
DATA NOT SMOOTHED

FREQUENCY



1111111112222222223333333334444444445555555556666666667777777
 012345678901234567890123456789012345678901234567890123456

LENGTH INTERVAL
 DATA NOT SMOOTHED

FREQUENCY

```

9 1      *
8 1      *
7 1      ****
6 1      ****
5 1      *****
4 1      ***** *
3 1      ***** ** * *
2 1      ***** ** * * *
1 1      * *****

```

222333333333334444444444555
678901234567890123456789012

LENGTH INTERVAL
DATA NOT SMOOTHED

S.FLOUNDER 09-21-75 09-27-75

STATISTICAL SUMMARY

37

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.35529E 02	0.52649E 01	0.22945E 01	0.55651E 00	0.17000E 02
OBSERVED DATA	0.35529E 02	0.52649E 01	0.22945E 01	0.55651E 00	0.17000E 02

LENGTH INTERVAL	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	3.0	0.0	2.0	2.0	6.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

FREQUENCY

```

0 1 *
5 1 *
4 1 *
3 1 *
2 1 * **
1 1 * **

```

```

223333333333444444
890123456789012345

```

LENGTH INTERVAL
DATA NOT SMOOTHED

S. FLOUNDER 09-28-75 10-04-75

STATISTICAL SUMMARY

41

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0,37727E 02	0,14080E 02	0,37523E 01	0,65319E 00	0,33000E 02
OBSERVED DATA	0,37727E 02	0,14080E 02	0,37523E 01	0,65319E 00	0,33000E 02

LENGTH INTERVAL	27,0	28,0	29,0	30,0	31,0	32,0	33,0	34,0	35,0	36,0	37,0	38,0	39,0	40,0	41,0	42,0	43,0	44,0	45,0	46,0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	1,0	1,0	1,0	2,0	3,0	3,0	8,0	4,0	3,0	1,0	1,0	2,0	0,0	2,0	0,0	0,0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	47,0	48,0	49,0	50,0	51,0	52,0	53,0	54,0	55,0
-----------------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY



22233333333334444444444555555
 78901234567890123456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

S. FLOUNDER 10-05-75 10-11-75

STATISTICAL SUMMARY

45.

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0,36833E 02	0,43335E 01	0,20817E 01	0,60093E 00	0,12000E 02
OBSERVED DATA	0,36833E 02	0,43335E 01	0,20817E 01	0,60093E 00	0,12000E 02

LENGTH INTERVAL	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	5.0	2.0	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0

FREQUENCY

5	1	*
4	1	*
3	1	*
2	1	** *
1	1	* ****

223333333333444444
890123456789012345

LENGTH INTERVAL
DATA NOT SMOOTHED

S, FLOUNDER 10-12-75 10-18-75

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.38000E 02	0.80000E 01	0.28284E 01	0.20000E 01	0.20000E 01
OBSERVED DATA	0.38000E 02	0.80000E 01	0.28284E 01	0.20000E 01	0.20000E 01

LENGTH INTERVAL	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0

S. FLOUNDER 10-12-75 10-18-75

FREQUENCY

333333344444
23456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

S. FLOUNDER 10-19-75 10-25-75

STATISTICAL SUMMARY

DATA NOT SMOOTHED

GROUPED DATA	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
OBSERVED DATA	0.35200E 02	0.32891E 01	0.18136E 01	0.57350E 00	0.10000E 02
	0.35200E 02	0.32891E 01	0.18136E 01	0.57350E 00	0.10000E 02

LENGTH	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0
INTERVAL																
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

S, FLOUNDER 10-19-75 10-25-75

FREQUENCY

3 1 *
2 1 **
1 1 *****

223333333334444
8901234567890123

LENGTH INTERVAL

DATA NOT SMOOTHED

FREQUENCY

```

15 1
14 1
13 1
12 1
11 1
10 1
9 1
8 1
7 1
6 1
5 1
4 1
3 1
2 1
1 1

```

```

2222333333333344444444445555555555666
56789012345678901234567890123456789012

```

LENGTH INTERVAL

DATA NOT SMOOTHED

FREQUENCY

00000000000000000000111111111222222222555555
0 012345678901234567890123456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

8. FLOUNDER 1976 ALL DATA

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO.	LENGTHS														
GROUPED DATA	0.30254E 02	0.27674E 02	0.52606E 01	0.96077E-01	0.29980E 04															
OBSERVED DATA	0.30254E 02	0.27674E 02	0.52606E 01	0.96077E-01	0.29980E 04															
LENGTH INTERVAL	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	1.0	7.0	26.0	45.0	74.0	158.0	167.0	215.0	239.0	294.0	276.0	256.0	262.0	193.0
LENGTH INTERVAL	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0
OBSERVED FREQUENCY	145.0	137.0	88.0	89.0	72.0	46.0	39.0	32.0	22.0	14.0	20.0	20.0	9.0	12.0	8.0	7.0	5.0	2.0	3.0	3.0
LENGTH INTERVAL	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0	75.0			
OBSERVED FREQUENCY	1.0	1.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0			

FREQUENCY
EACH * EQUALS 6 POINTS

294	I	*
288	I	*
282	I	*
276	I	**
270	I	**
264	I	**
258	I	** *
252	I	****
246	I	****
240	I	****
234	I	****
228	I	****
222	I	****
216	I	****
210	I	*****
204	I	*****
198	I	*****
192	I	*****
186	I	*****
180	I	*****
174	I	*****
168	I	*****
162	I	*****
156	I	*****
150	I	*****
144	I	*****
138	I	*****
132	I	*****
126	I	*****
120	I	*****
114	I	*****
108	I	*****
102	I	*****
96	I	*****
90	I	*****
84	I	*****
78	I	*****
72	I	*****
66	I	*****
60	I	*****
54	I	*****
48	I	*****
42	I	*****
36	I	*****
30	I	*****
24	I	*****
18	I	*****
12	I	*****
6	I	*****

12222222223333333333444444444455555555556666666666777777
901234567890123456789012345678901234567890123456789012345

LENGTH INTERVAL

S.FLOUNDER 05-02-76 05-08-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN		VARIANCE		ST. DEV.		STANDARD ERROR OF MEAN		TOTAL NO. LENGTHS											
GROUPED DATA	0.59000E 02		0.29714E 02		0.54511E 01		0.19272E 01		0.80000E 01											
OBSERVED DATA	0.59000E 02		0.29714E 02		0.54511E 01		0.19272E 01		0.80000E 01											
LENGTH INTERVAL	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	2.0	1.0	0.0
LENGTH INTERVAL	46.0	47.0	48.0	49.0																
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0																

FREQUENCY

2 1 * *
1 1 ** **

2223333333334444444444
678901234567890123456789

LENGTH INTERVAL
DATA NOT SMOOTHED

S. FLOUNDER 05-23-76 05-29-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.36077E 02	0.14077E 02	0.37520E 01	0.10406E 01	0.13000E 02
OBSERVED DATA	0.36077E 02	0.14077E 02	0.37520E 01	0.10406E 01	0.13000E 02

LENGTH INTERVAL	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	2.0	2.0	0.0	1.0	0.0	3.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0

LENGTH INTERVAL 47.0

OBSERVED FREQUENCY 0.0

S. FLOUNDER 05-23-76 05-29-76

FREQUENCY

3 1 *
2 1 ** * * *
1 1 *** * * *

22233333333344444444
709012345678901234567

LENGTH INTERVAL

DATA NOT SMOOTHED

8, FLOUNDER 05-30-76 06-05-76

STATISTICAL SUMMARY

53

DATA NOT SMOOTHED

GROUPED DATA	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
0,34286E 02	0,34286E 02	0,15262E 02	0,39067E 01	0,52206E 00	0,56000E 02
OBSERVED DATA	0,34286E 02	0,15262E 02	0,39067E 01	0,52206E 00	0,56000E 02

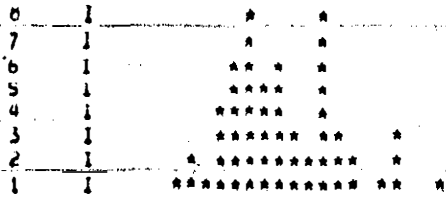
LENGTH INTERVAL	23,0	24,0	25,0	26,0	27,0	28,0	29,0	30,0	31,0	32,0	33,0	34,0	35,0	36,0	37,0	38,0	39,0	40,0	41,0	42,0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	1,0	2,0	1,0	4,0	6,0	8,0	5,0	6,0	3,0	2,0	8,0	3,0	2,0	0,0	1,0	3,0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	43,0	44,0	45,0	46,0	47,0	48,0	49,0	50,0
-----------------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY



22222233333333344444444445
 3456789012345678901234567890

LENGTH INTERVAL

DATA NOT SMOOTHED

ORDER 06-06-70 06-12-70

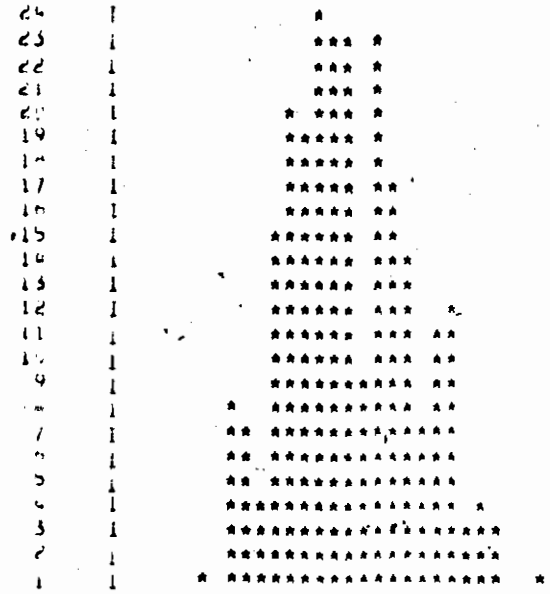
STATISTICAL SUMMARY

DATA OUT STRUCTURE

56

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS															
GRIPPED DATA	0.35157E 02	0.20407E 02	0.45174E 01	0.28022E 00	0.20407E 03															
OBSERVED DATA	0.35157E 02	0.20407E 02	0.45174E 01	0.28022E 00	0.20407E 03															
LENGTH INTERVAL	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	7.0	4.0	15.0	20.0	19.0	24.0	23.0	23.0	9.0	23.0	17.0	14.0	7.0
LENGTH INTERVAL	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	
OBSERVED FREQUENCY	11.0	12.0	3.0	4.0	3.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	

FREQUENCY



2222222233333333444444445555555555
 123456789012345678901234567890123456789

LENGTH INTERVAL
 DATA NOT SMOOTHED

S, FLOUNDER 06-13-76 06-19-76

60.

STATISTICAL SUMMARY

DATA NOT SMOOTHED

GROUPED DATA	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
0.31625E 02	0.31625E 02	0.13850E 02	0.37216E 01	0.93039E 00	0.16000E 02
OBSERVED DATA	0.31625E 02	0.13850E 02	0.37216E 01	0.93039E 00	0.16000E 02

LENGTH INTERVAL	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	3.0	0.0	4.0	3.0	0.0	1.0	0.0	0.0	2.0	0.0	1.0	1.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	43.0	44.0
-----------------	------	------

OBSERVED FREQUENCY	0.0	0.0
--------------------	-----	-----

FREQUENCY

4	1			*			
3	1		*	**			
2	1		*	**		*	
1	1	**	**	*	*	**	

22222233333333334444
3456789012345678901234

LENGTH INTERVAL
DATA NOT SMOOTHED

S.FLOUNDER 06-20-76 06-26-76

STATISTICAL SUMMARY

63.

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS															
GROUPED DATA	0.35539E 02	0.25559E 02	0.50556E 01	0.57992E 00	0.76000E 02															
OBSERVED DATA	0.35539E 02	0.25559E 02	0.50556E 01	0.57992E 00	0.76000E 02															
LENGTH INTERVAL	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	4.0	3.0	1.0	3.0	2.0	10.0	5.0	4.0	5.0	9.0	10.0	1.0	5.0	3.0	4.0	0.0
LENGTH INTERVAL	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0				
OBSERVED FREQUENCY	3.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0				

FREQUENCY

```

10 1 * *
9 1 * **
8 1 * **
7 1 * **
6 1 * **
5 1 ** *** *
4 1 * * * * * * * *
3 1 ** * * * * * * * *
2 1 ** * * * * * * * *
1 1 * * * * * * * * * *

```

```

22222233333333334444444444555555555
345678901234567890123456789012345678

```

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 06-27-76 07-03-76

STATISTICAL SUMMARY

67

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.35011E 02	0.20940E 02	0.45760E 01	0.27106E 00	0.28500E 03
OBSERVED DATA	0.35011E 02	0.20940E 02	0.45760E 01	0.27106E 00	0.28500E 03

LENGTH INTERVAL	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	3.0	4.0	7.0	8.0	24.0	22.0	22.0	28.0	30.0	20.0	21.0	23.0	13.0	10.0	11.0	13.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------

LENGTH INTERVAL	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	4.0	11.0	5.0	1.0	2.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

```

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

```

22222223333333334444444455555555
2345678901234567890123456789012345678

LENGTH INTERVAL
DATA NOT SMOOTHED

S. FLOUNDER - 07-04-76 07-10-76

STATISTICAL SUMMARY

71

DATA NOT SMOOTHED

	MEAN		VARIANCE		ST. DEV.		STANDARD ERROR OF MEAN		TOTAL NO. LENGTHS											
GROUPED DATA	0.35821E 02		0.35084E 02		0.59232E 01		0.67067E 00		0.78000E 02											
OBSERVED DATA	0.35821E 02		0.35084E 02		0.59232E 01		0.67067E 00		0.78000E 02											
LENGTH INTERVAL	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	1.0	3.0	8.0	7.0	6.0	6.0	6.0	6.0	5.0	4.0	2.0	3.0	4.0	3.0
LENGTH INTERVAL	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0					
OBSERVED FREQUENCY	1.0	1.0	2.0	1.0	0.0	1.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0					

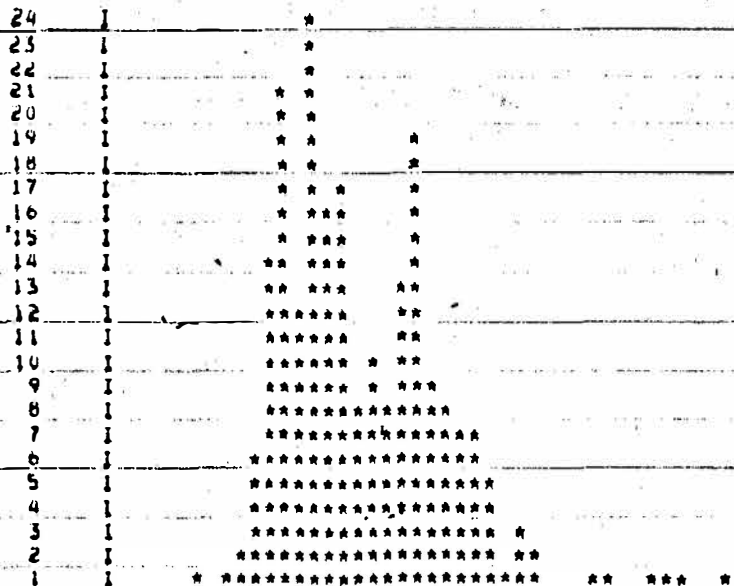
FREQUENCY

8	I	*
7	I	**
6	I	*****
5	I	*****
4	I	***** *
3	I	***** ***
2	I	***** * ** *
1	I	***** ** *

22222233333333334444444444555555
 23456789012345678901234567890123456

LENGTH INTERVAL
 DATA NOT SMOOTHED

FREQUENCY



2222222233333333334444444455555555666666
 0123456789012345678901234567890123456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

FREQUENCY

```

34 | I | *
33 | I | *
32 | I | *
31 | I | *
30 | I | *
29 | I | *
28 | I | *
27 | I | *
26 | I | *
25 | I | **
24 | I | ***
23 | I | ****
22 | I | *****
21 | I | *****
20 | I | *****
19 | I | *****
18 | I | *****
17 | I | *****
16 | I | *****
15 | I | *****
14 | I | *****
13 | I | *****
12 | I | *****
11 | I | *****
10 | I | *****
9 | I | *****
8 | I | *****
7 | I | *****
6 | I | *****
5 | I | *****
4 | I | *****
3 | I | *****
2 | I | *****
1 | I | *****

```

```

2222223333333333444444444455555555556
34567890123456789012345678901234567890

```

LENGTH INTERVAL
DATA NOT SMOOTHED

S, FLOUNDER 07-25-76 07-31-76

STATISTICAL SUMMARY

83

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.33744E 02	0.12878E 02	0.35886E 01	0.22003E 00	0.26600E 03
OBSERVED DATA	0.33744E 02	0.12878E 02	0.35886E 01	0.22003E 00	0.26600E 03

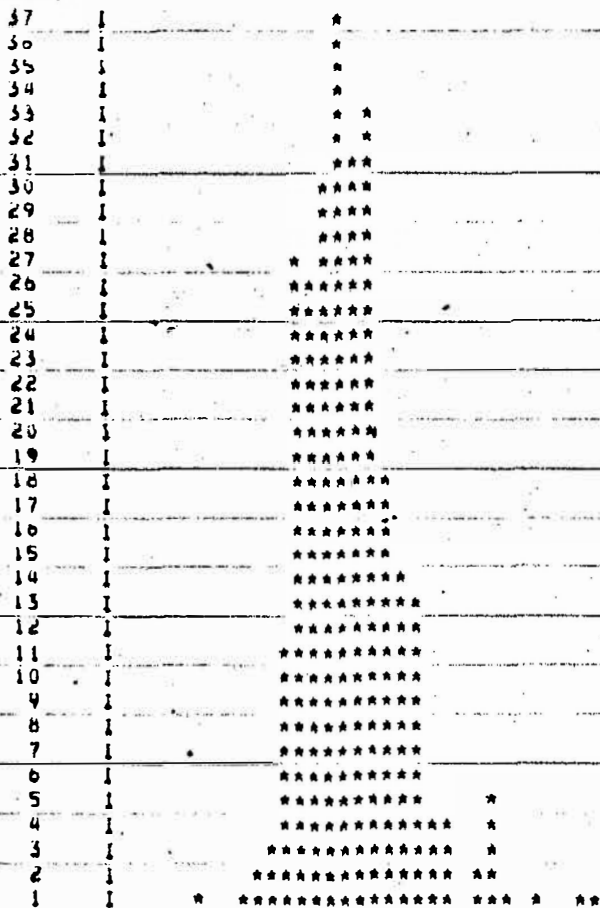
LENGTH INTERVAL	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	2.0	3.0	11.0	27.0	26.0	30.0	37.0	31.0	33.0	18.0	14.0	13.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------

LENGTH INTERVAL	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	4.0	4.0	0.0	2.0	5.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY



122222222233333333334444444444555555
 9012345678901234567890123456789012345

LENGTH INTERVAL
 DATA NOT SMOOTHED

S. FLOUNDER 08-01-76 08-07-76

STATISTICAL SUMMARY

87

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0,35136E 02	0,18819E 02	0,43381E 01	0,28299E 00	0,23500E 03
OBSERVED DATA	0,35136E 02	0,18819E 02	0,43381E 01	0,28299E 00	0,23500E 03

LENGTH INTERVAL	23,0	24,0	25,0	26,0	27,0	28,0	29,0	30,0	31,0	32,0	33,0	34,0	35,0	36,0	37,0	38,0	39,0	40,0	41,0	42,0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	1,0	1,0	12,0	18,0	13,0	28,0	17,0	22,0	30,0	16,0	15,0	22,0	7,0	11,0	6,0	3,0
--------------------	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	-----	------	-----	-----

LENGTH INTERVAL	43,0	44,0	45,0	46,0	47,0	48,0	49,0	50,0	51,0	52,0	53,0	54,0	55,0	56,0	57,0	58,0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	2,0	2,0	3,0	2,0	0,0	1,0	0,0	1,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

```

30 | 1 | *
29 | 1 | *
28 | 1 | * *
27 | 1 | * *
26 | 1 | * *
25 | 1 | * *
24 | 1 | * *
23 | 1 | * *
22 | 1 | * * *
21 | 1 | * * *
20 | 1 | * * *
19 | 1 | * * *
18 | 1 | * * * *
17 | 1 | * * * * *
16 | 1 | * * * * *
15 | 1 | * * * * *
14 | 1 | * * * * *
13 | 1 | * * * * *
12 | 1 | * * * * *
11 | 1 | * * * * *
10 | 1 | * * * * *
9 | 1 | * * * * *
8 | 1 | * * * * *
7 | 1 | * * * * *
6 | 1 | * * * * *
5 | 1 | * * * * *
4 | 1 | * * * * *
3 | 1 | * * * * *
2 | 1 | * * * * *
1 | 1 | * * * * *
    
```

2222223333333333444444444455555555
345678901234567890123456789012345678

LENGTH INTERVAL
DATA NOT SMOOTHED

STATISTICAL SUMMARY

91

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.34408E 02	0.14416E 02	0.37968E 01	0.30796E 00	0.15200E 03
OBSERVED DATA	0.34408E 02	0.14416E 02	0.37968E 01	0.30796E 00	0.15200E 03

LENGTH INTERVAL	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	4.0	6.0	9.0	13.0	14.0	17.0	24.0	14.0	13.0	10.0	9.0	4.0	5.0	3.0	2.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	-----	-----	-----	-----	-----

LENGTH INTERVAL	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

24	1	*
23	1	*
22	1	*
21	1	*
20	1	*
19	1	*
18	1	*
17	1	**
16	1	**
15	1	**
14	1	****
13	1	*****
12	1	*****
11	1	*****
10	1	*****
9	1	*****
8	1	*****
7	1	*****
6	1	*****
5	1	*****
4	1	*****
3	1	*****
2	1	*****
1	1	*****

2222223333333333444444444455555555
 34567890123456789012345678901234567

LENGTH INTERVAL

DATA NOT SMOOTHED

S. FLOUNDER 08-22-76 08-28-76

STATISTICAL SUMMARY

99

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.37575E 02	0.22476E 02	0.47408E 01	0.46047E 00	0.10600E 03
OBSERVED DATA	0.37575E 02	0.22476E 02	0.47408E 01	0.46047E 00	0.10600E 03

LENGTH INTERVAL	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	1.0	3.0	7.0	5.0	15.0	11.0	10.0	11.0	8.0	1.0	5.0	4.0	6.0	5.0

LENGTH INTERVAL	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0
OBSERVED FREQUENCY	1.0	4.0	1.0	3.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0

FREQUENCY

```

15 | I | *
14 | I | *
13 | I | *
12 | I | *
11 | I | ***
10 | I | ****
9  | I | *****
8  | I | *****
7  | I | * *****
6  | I | * ***** *
5  | I | * ***** * *
4  | I | * ***** * * *
3  | I | * ***** * * *
2  | I | * ***** * * *
1  | I | * ***** * * *

```

```

222223333333333444444444455555
4567890123456789012345678901234

```

LENGTH INTERVAL

DATA NOT SMOOTHED

S, FLOUNDER 08-29-76 09-04-76

STATISTICAL SUMMARY

103

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.37150E 02	0.19961E 02	0.44678E 01	0.40785E 00	0.12000E 03
OBSERVED DATA	0.37150E 02	0.19961E 02	0.44678E 01	0.40785E 00	0.12000E 03

LENGTH INTERVAL	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	4.0	2.0	11.0	16.0	13.0	18.0	16.0	5.0	3.0	3.0	4.0	9.0	3.0	4.0	1.0
--------------------	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	1.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	66.0
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OBSERVED FREQUENCY	0.0
--------------------	-----

FREQUENCY

```

18 | | * *
17 | | * *
16 | | * *
15 | | * *
14 | | * *
13 | | * *
12 | | * *
11 | | * *
10 | | * *
9 | | * * *
8 | | * * *
7 | | * * *
6 | | * * *
5 | | * * *
4 | | * * * *
3 | | * * * * *
2 | | * * * * *
1 | | * * * * *

```

```

222333333333444444444555555555666666
6789012345678901234567890123456

```

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 09-05-76 09-11-76

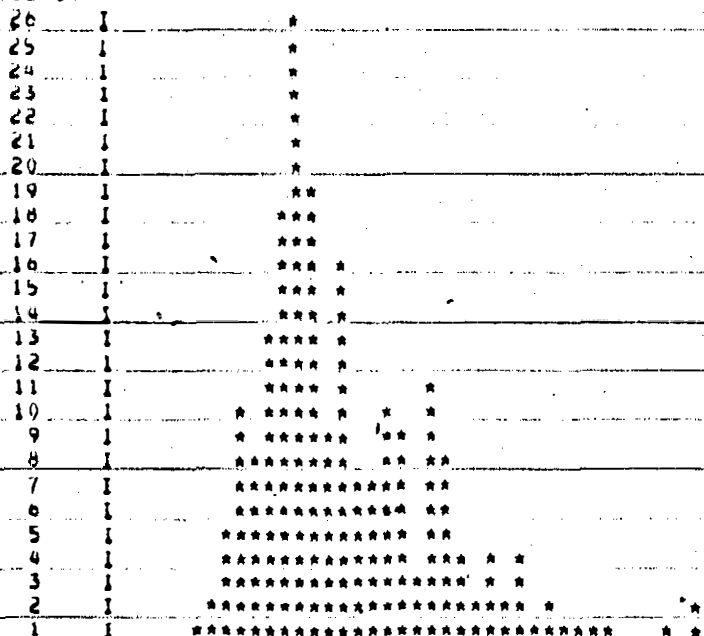
STATISTICAL SUMMARY

107.

DATA NOT SMOOTHED

	MEAN		VARIANCE		ST. DEV.		STANDARD ERROR OF MEAN		TOTAL NO. LENGTHS											
GROUPED DATA	0.40543E 02		0.40046E 02		0.63282E 01		0.43678E 00		0.20800E 03											
OBSERVED DATA	0.40543E 02		0.40046E 02		0.63282E 01		0.43678E 00		0.20800E 03											
LENGTH INTERVAL	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	2.0	5.0	10.0	8.0	13.0	18.0	26.0	19.0	9.0	16.0	7.0	7.0	10.0	9.0	3.0
LENGTH INTERVAL	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0
OBSERVED FREQUENCY	11.0	8.0	4.0	2.0	4.0	2.0	4.0	1.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	1.0	0.0	2.0	0.0
LENGTH INTERVAL	66.0	67.0	68.0	69.0																
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0																

FREQUENCY



222233333333333444444444455555555556666666666
 67890123456789012345678901234567890123456789

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 09-12-76 09-18-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.38557E 02	0.26544E 02	0.51521E 01	0.30202E 00	0.29100E 03
OBSERVED DATA	0.38557E 02	0.26544E 02	0.51521E 01	0.30202E 00	0.29100E 03

LENGTH INTERVAL	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	3.0	4.0	15.0	26.0	33.0	47.0	28.0	24.0	24.0	21.0	7.0	9.0	8.0	3.0	7.0
--------------------	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	-----	-----	-----	-----	-----

LENGTH INTERVAL	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	6.0	1.0	3.0	4.0	4.0	3.0	1.0	2.0	4.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

```

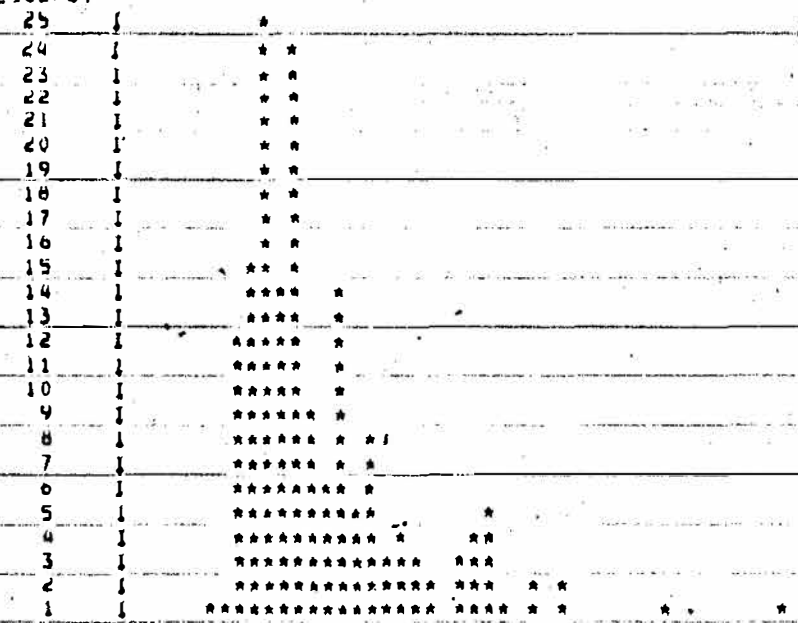
47 | *
46 | *
45 | *
44 | *
43 | *
42 | *
41 | *
40 | *
39 | *
38 | *
37 | *
36 | *
35 | *
34 | *
33 | **
32 | **
31 | **
30 | **
29 | **
28 | ***
27 | ****
26 | *****
25 | *****
24 | *****
23 | *****
22 | *****
21 | *****
20 | *****
19 | *****
18 | *****
17 | *****
16 | *****
15 | *****
14 | *****
13 | *****
12 | *****
11 | *****
10 | *****
9 | ***** *
8 | ***** **
7 | ***** *
6 | ***** **
5 | ***** **
4 | ***** ** ** *
3 | ***** ** *
2 | ***** ** *
1 | ***** **
    
```

22233333333334444444455555556666
 07890123456789012345678901234567890123

LENGTH INTERVAL

DATA NOT SMOOTHED

FREQUENCY



22233333333334444444455555555666666666777777
 789012345678901234567890123456789012345

LENGTH INTERVAL
 DATA NOT SMOOTHED

S.FLOUNDER 09-26-76 10-02-76

STATISTICAL SUMMARY

119

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.39204E 02	0.22083E 02	0.46993E 01	0.67133E 00	0.49000E 02
OBSERVED DATA	0.39204E 02	0.22083E 02	0.46993E 01	0.67133E 00	0.49000E 02

LENGTH INTERVAL	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	2.0	3.0	7.0	6.0	9.0	3.0	4.0	5.0	1.0	4.0	0.0	1.0	1.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

B.FLOUNDER 10-03-76 10-09-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

GROUPED DATA	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
0.41500E 02	0.41500E 02	0.18000E 02	0.42426E 01	0.15000E 01	0.80000E 01
OBSERVED DATA		0.18000E 02	0.42426E 01	0.15000E 01	0.80000E 01

LENGTH INTERVAL	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	53.0	54.0	55.0
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OBSERVED FREQUENCY	0.0	0.0	0.0
--------------------	-----	-----	-----

9, FLOUNDER 10-03-76 10-09-76

FREQUENCY

I I ***** *

333333344444444455555
34567890123456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 10-10-76 10-16-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN		VARIANCE										ST. DEV.					STANDARD ERROR OF MEAN					TOTAL NO. LENGTHS				
GROUPED DATA	0,34000E 02		0,0										0,0					0,0					0,10000E 01				
OBSERVED DATA	0,34000E 02		0,0										0,0					0,0					0,10000E 01				
LENGTH INTERVAL	-13,0	-12,0	-11,0	-10,0	-9,0	-8,0	-7,0	-6,0	-5,0	-4,0	-3,0	-2,0	-1,0	0,0	1,0	2,0	3,0	4,0	5,0	6,0							
OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0							
LENGTH INTERVAL	7,0	8,0	9,0	10,0	11,0	12,0	13,0	14,0	15,0	16,0	17,0	18,0	19,0	20,0	21,0	22,0	23,0	24,0	25,0	26,0							
OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0							
LENGTH INTERVAL	27,0	28,0	29,0	30,0	31,0	32,0	33,0	34,0	35,0	36,0	37,0	38,0	39,0														
OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0														

S.FLOUNDER 10-10-76 10-16-76

FREQUENCY

0000000000000000001111111122222222223333333333
0 0123456789012345678901234567890123456789

LENGTH INTERVAL

DATA NOT SMOOTHED

S, FLOUNDER 10-17-76 10-23-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS										
GROUPED DATA	0,37500E 02	0,12500E 02	0,35355E 01	0,25000E 01	0,20000E 01										
OBSERVED DATA	0,37500E 02	0,12500E 02	0,35355E 01	0,25000E 01	0,20000E 01										
LENGTH INTERVAL	31,0	32,0	33,0	34,0	35,0	36,0	37,0	38,0	39,0	40,0	41,0	42,0	43,0	44,0	45,0
OBSERVED FREQUENCY	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0

8, FLOUNDER 10-17-76 10-23-76

FREQUENCY

1 1 * *

3333333344444
123456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 10-24-76 10-30-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN		VARIANCE										ST. DEV.					STANDARD ERROR OF MEAN					TOTAL NO. LENGTHS	
GROUPED DATA	0.40000E 02		0.0										0.0					0.10000E 01						
OBSERVED DATA	0.40000E 02		0.0										0.0					0.10000E 01						
LENGTH INTERVAL	-13.0	-12.0	-11.0	-10.0	-9.0	-8.0	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0				
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
LENGTH INTERVAL	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0				
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
LENGTH INTERVAL	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0					
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0				

S. FLUUNDER 10-24-76 10-30-76

FREQUENCY

00000000000000000001111111222222222333333333444444
0 0123456789012345678901234567890123456789012345

LENGTH INTERVAL

DATA NOT SMOOTHED

S, FLOUNDER 10-31-76 11-06-76

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN		VARIANCE										ST. DEV.					STANDARD ERROR OF MEAN					TOTAL NO. LENGTHS				
GROUPED DATA	0.36000E 02		0.0										0.0					0.10000E 01									
OBSERVED DATA	0.36000E 02		0.0										0.0					0.10000E 01									
LENGTH INTERVAL	-13.0	-12.0	-11.0	-10.0	-9.0	-8.0	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0							
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
LENGTH INTERVAL	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0							
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
LENGTH INTERVAL	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0												
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0												

S, FLOUNDER ALL 1977 DATA

FREQUENCY

```

6 1      ***
5 1      ****
4 1      *  ****
3 1      *  ***** **
2 1      *  ***** **
1 1      ** ***** **
    
```

22222233333333334444444444555
345678901234567890123456789012

LENGTH INTERVAL

DATA NOT SMOOTHED

S, FLOUNDER 05-01-77 05-07-77

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.36500E 02	0.50000E 00	0.70711E 00	0.50000E 00	0.20000E 01
OBSERVED DATA	0.36500E 02	0.50000E 00	0.70711E 00	0.50000E 00	0.20000E 01

LENGTH INTERVAL	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
-----------------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

S.FLOUNDER 05-01-77 05-07-77

FREQUENCY

3335333444
23456789012

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 05-08-77 05-14-77

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.36000E 02	0.24667E 02	0.49666E 01	0.24853E 01	0.40000E 01
OBSERVED DATA	0.36000E 02	0.24667E 02	0.49666E 01	0.24833E 01	0.40000E 01
LENGTH					
INTERVAL	28.0 29.0 30.0 31.0 32.0 33.0 34.0 35.0 36.0 37.0 38.0 39.0 40.0 41.0 42.0 43.0 44.0 45.0 46.0 47.0				
OBSERVED FREQUENCY	0.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0 0.0 1.0 0.0 1.0 0.0 0.0 0.0 0.0				
LENGTH					
INTERVAL	48.0				
OBSERVED FREQUENCY	0.0				

S. FLOUNDER 05-08-77 05-14-77

FREQUENCY

22333333333344444444
890123456789012345678

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 05-15-77 05-21-77

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.59667E 02	0.24334E 02	0.49329E 01	0.28480E 01	0.30000E 01
OBSERVED DATA	0.59667E 02	0.24334E 02	0.49329E 01	0.28480E 01	0.30000E 01

LENGTH INTERVAL	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

S. FLOUNDER 05-15-77 05-21-77

FREQUENCY

35533333344444444
0123456789012345678

LENGTH INTERVAL
DATA NOT SMOOTHED

S. FLOUNDER 05-22-77 05-28-77

STATISTICAL SUMMARY

127

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.55103E 02	0.16568E 02	0.40704E 01	0.65179E 00	0.34000E 02
OBSERVED DATA	0.55103E 02	0.16568E 02	0.40704E 01	0.65179E 00	0.34000E 02

LENGTH INTERVAL	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
-----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	1.0	0.0	4.0	2.0	1.0	3.0	5.0	6.0	4.0	3.0	3.0	0.0	1.0	2.0	2.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0
-----------------	------	------	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----

FREQUENCY

0	1		*
5	1		**
4	1	*	***
3	1	*	*****
2	1	**	***** **
1	1	**	***** ** *

2222223333333333444444444455
 34567890123456789012345678901

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 05-29-77 06-04-77

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN		VARIANCE		ST. DEV.		STANDARD ERROR OF MEAN		TOTAL NO. LENGTHS											
GROUPED DATA	0.42000E 02		0.50000E 02		0.70711E 01		0.50000E 01		0.20000E 01											
OBSERVED DATA	0.42000E 02		0.50000E 02		0.70711E 01		0.50000E 01		0.20000E 01											
LENGTH INTERVAL	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0

S. FLOUNDER 05-29-77 06-04-77

FREQUENCY

3333333444444444555
34567890123456789012

LENGTH INTERVAL

DATA NOT SMOOTHED

8.FLOUNDER ALL 1978 DATA

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.28706E 01	0.49958E 01	0.22351E 01	0.79222E-01	0.79600E 03
OBSERVED DATA	0.28706E 01	0.49958E 01	0.22351E 01	0.79222E-01	0.79600E 03

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	270.0	176.0	114.0	82.0	73.0	38.0	16.0	6.0	7.0	3.0	2.0	1.0	3.0	2.0	2.0	1.0

LENGTH INTERVAL	17.0	18.0	19.0	20.0	21.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0

8.FLOUNDER ALL 1978 DATA

FREQUENCY
EACH * EQUALS 6 POINTS

270	I	*
264	I	*
258	I	*
252	I	*
246	I	*
240	I	*
234	I	*
228	I	*
222	I	*
216	I	*
210	I	*
204	I	*
198	I	*
192	I	*
186	I	*
180	I	*
174	I	**
168	I	**
162	I	**
156	I	**
150	I	**
144	I	**
138	I	**
132	I	**
126	I	**
120	I	**
114	I	***
108	I	***
102	I	***
96	I	***
90	I	***
84	I	***
78	I	****
72	I	****
66	I	*****
60	I	*****
54	I	*****
48	I	*****
42	I	*****
36	I	*****
30	I	*****
24	I	*****
18	I	*****
12	I	*****
6	I	*****

0000000000001111111122
0123456789012345678901

LENGTH INTERVAL
DATA NOT SMOOTHED

S.FLOUNDER 6/16 6/22

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.40678E 01	0.64781E 01	0.25452E 01	0.33136E 00	0.59000E 02
OBSERVED DATA	0.40678E 01	0.64781E 01	0.25452E 01	0.33136E 00	0.59000E 02

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	7.0	9.0	15.0	10.0	5.0	3.0	3.0	2.0	2.0	2.0	0.0	1.0	0.0	0.0	0.0	0.0

LENGTH INTERVAL 17.0

OBSERVED FREQUENCY 0.0

8.FLGUNDER 6/16 6/22

FREQUENCY

15 I *
14 I *
13 I *
12 I *
11 I *
10 I **
9 I ***
8 I ***
7 I ****
6 I ****
5 I *****
4 I *****
3 I *****
2 I *****
1 I *****

00000000000001111111
012345678901234567

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 6/23 6/29

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.42446E 01	0.82185E 01	0.28668E 01	0.21134E 00	0.18400E 03
OBSERVED DATA	0.42446E 01	0.82185E 01	0.28668E 01	0.21134E 00	0.18400E 03

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	20.0	32.0	34.0	29.0	31.0	14.0	8.0	2.0	4.0	1.0	2.0	0.0	2.0	2.0	2.0	1.0

LENGTH INTERVAL	17.0	18.0	19.0	20.0	21.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	0.0

S.FLOUNDER 6/23 6/29

FREQUENCY

```

34 I *
33 I *
32 I **
31 I ** *
30 I ** *
29 I ***
28 I ****
27 I ****
26 I ****
25 I ****
24 I ****
23 I ****
22 I ****
21 I ****
20 I *****
19 I *****
18 I *****
17 I *****
16 I *****
15 I *****
14 I *****
13 I *****
12 I *****
11 I *****
10 I *****
9 I *****
8 I *****
7 I *****
6 I *****
5 I *****
4 I ***** *
3 I ***** *
2 I ***** * ***
1 I ***** ****

```

00000000000001111111122
0123456789012345678901

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER 6/30 7/06

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.34400E 01	0.34659E 01	0.18617E 01	0.21497E 00	0.75000E 02
OBSERVED DATA	0.34400E 01	0.34659E 01	0.18617E 01	0.21497E 00	0.75000E 02

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	9.0	24.0	10.0	8.0	10.0	10.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0

S.FLOUNDER 6/30 7/06

FREQUENCY

```
24 I *
23 I *
22 I *
21 I *
20 I *
19 I *
18 I *
17 I *
16 I *
15 I *
14 I *
13 I *
12 I *
11 I *
10 I ** **
9 I *** **
8 I *****
7 I *****
6 I *****
5 I *****
4 I *****
3 I *****
2 I *****
1 I *****
```

00000000000001111
01234567890123

LENGTH INTERVAL

DATA NOT SMOOTHED

8.FLOUNDER 7/07 7/13

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.22022E 01	0.19132E 01	0.13832E 01	0.14662E 00	0.89000E 02
OBSERVED DATA	0.22022E 01	0.19132E 01	0.13832E 01	0.14662E 00	0.89000E 02

LENGTH INTERVAL	3.0	2.0	1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	41.0	16.0	13.0	12.0	6.0	1.0	0.0	0.0	0.0	0.0	0.0

S. FLOUNDER 7/07 7/13

FREQUENCY

41	I	*
40	I	*
39	I	*
38	I	*
37	I	*
36	I	*
35	I	*
34	I	*
33	I	*
32	I	*
31	I	*
30	I	*
29	I	*
28	I	*
27	I	*
26	I	*
25	I	*
24	I	*
23	I	*
22	I	*
21	I	*
20	I	*
19	I	*
18	I	*
17	I	*
16	I	**
15	I	**
14	I	**
13	I	***
12	I	****
11	I	****
10	I	****
9	I	****
8	I	****
7	I	****
6	I	*****
5	I	*****
4	I	*****
3	I	*****
2	I	*****
1	I	*****

00000000000011
012345678901

LENGTH INTERVAL
DATA NOT SMOOTHED

S.FLOUNDER 7/14 7/20

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.29492E 01	0.53250E 01	0.23076E 01	0.30042E 00	0.59000E 02
OBSERVED DATA	0.29492E 01	0.53250E 01	0.23076E 01	0.30042E 00	0.59000E 02

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
-----------------	------	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	20.0	12.0	9.0	5.0	6.0	4.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LENGTH INTERVAL	17.0	18.0
-----------------	------	------

OBSERVED FREQUENCY	0.0	0.0
--------------------	-----	-----

S.FLOUNDER 7/14 7/20

FREQUENCY

20 I *

19 I *

18 I *

17 I *

16 I *

15 I *

14 I *

13 I *

12 I **

11 I **

10 I **

9 I ***

8 I ***

7 I ***

6 I *** *

5 I *****

4 I *****

3 I *****

2 I *****

1 I ***** * *

0000000000001111111111
0123456789012345678

LENGTH INTERVAL
DATA NOT SMOOTHED

S.FLOUNDER 7/21 7/27

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.19623E 01	0.14216E 01	0.11923E 01	0.16378E 00	0.53000E 02
OBSERVED DATA	0.19623E 01	0.14216E 01	0.11923E 01	0.16378E 00	0.53000E 02

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	25.0	15.0	6.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0

S. FLOUNDER 7/21 - 7/27

FREQUENCY

25	I	*
24	I	*
23	I	*
22	I	*
21	I	*
20	I	*
19	I	*
18	I	*
17	I	*
16	I	*
15	I	**
14	I	**
13	I	**
12	I	**
11	I	**
10	I	**
9	I	**
8	I	**
7	I	**
6	I	***
5	I	***
4	I	****
3	I	*****
2	I	*****
1	I	*****

000000000000001
01234567890

LENGTH INTERVAL
DATA NOT SMOOTHED

8, FLOUNDER 7/28 8/03

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.10000E 01	0.0	0.0	0.0	0.15000E 02
OBSERVED DATA	0.10000E 01	0.0	0.0	0.0	0.15000E 02

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0
-----------------	------	------	------	-----	-----	-----	-----	-----	-----	-----

OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0
--------------------	-----	-----	-----	-----	------	-----	-----	-----	-----	-----

B.FLOUNDER 7/28 8/03

FREQUENCY

15 I *
14 I *
13 I *
12 I *
11 I *
10 I *
9 I *
8 I *
7 I *
6 I *
5 I *
4 I *
3 I *
2 I *
1 I *

0000000000
0123456

LENGTH INTERVAL

DATA NOT SMOOTHED

S.FLOUNDER - 8/11 8/17

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.21583E 01	0.22067E 01	0.14855E 01	0.12600E 00	0.13900E 03
OBSERVED DATA	0.21583E 01	0.22067E 01	0.14855E 01	0.12600E 00	0.13900E 03

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	64.0	33.0	20.0	9.0	7.0	4.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

8.FLOUNDER 8/11 8/17

FREQUENCY
EACH * EQUALS 2 POINTS

64 I *
62 I *
60 I *
58 I *
56 I *
54 I *
52 I *
50 I *
48 I *
46 I *
44 I *
42 I *
40 I *
38 I *
36 I *
34 I *
32 I **
30 I **
28 I **
26 I **
24 I **
22 I **
20 I ***
18 I ***
16 I ***
14 I ***
12 I ***
10 I ***
8 I ****
6 I *****
4 I *****
2 I *****

0000000000001111
01234567890123

LENGTH INTERVAL

DATA NOT SMOOTHED

S. FLOUNDER 8/18 8/24

STATISTICAL SUMMARY

DATA NOT SMOOTHED

	MEAN	VARIANCE	ST. DEV.	STANDARD ERROR OF MEAN	TOTAL NO. LENGTHS
GROUPED DATA	0.17642E 01	0.13620E 01	0.11670E 01	0.10523E 00	0.12300E 03
OBSERVED DATA	0.17642E 01	0.13620E 01	0.11670E 01	0.10523E 00	0.12300E 03

LENGTH INTERVAL	-3.0	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
OBSERVED FREQUENCY	0.0	0.0	0.0	0.0	69.0	35.0	7.0	5.0	5.0	2.0	0.0	0.0	0.0	0.0	0.0

S.FLOUNDER 8/18 8/24

FREQUENCY
EACH * EQUALS 2 POINTS

68	I	*
66	I	*
64	I	*
62	I	*
60	I	*
58	I	*
56	I	*
54	I	*
52	I	*
50	I	*
48	I	*
46	I	*
44	I	*
42	I	*
40	I	*
38	I	*
36	I	*
34	I	**
32	I	**
30	I	**
28	I	**
26	I	**
24	I	**
22	I	**
20	I	**
18	I	**
16	I	**
14	I	**
12	I	**
10	I	**
8	I	**
6	I	***
4	I	*****
2	I	*****

000000000000011
012345678901

LENGTH INTERVAL

DATA NOT SMOOTHED

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