

# RESEARCH REPORTS

## DOGFISH COLLECTION AT MOUNT DESERT ISLAND BIOLOGICAL LABORATORY DURING THE SUMMER SEASONS OF 1973 THROUGH 1982

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Tables I and II summarize dogfish collection data from 1973 to 1982. Of the 910 dogfish that were collected in 1982, 371 were females. The total number of fish that were caught represents 69% of the total number of fish that were ordered by investigators. There was no correlation between the number of fish caught and the tidal flow. Five areas

TABLE I  
Dogfish Collection Data at MDIBL for the Summer Seasons 1973-1982

Year	Number of Collecting Trips	Date of First Trip	Date of Last Trip	Dogfish Collected	Dogfish Delivered to Common Pool	Dogfish/Trip Collected	Dogfish/Trip Delivered to Investigator Live Cars
1973	30	6/27	8/29	1608	452*	53 ± 32	39 ± 19
1974	38	6/19	9/16	1619	148*	43 ± 30	39 ± 30
1975	28	6/26	8/28	1353	366	48 ± 26	35 ± 20
1976	47	6/24	8/28	1258**	-	-	27 ± 18
1977	28	6/21	9/9	988	466	35 ± 22	17 ± 7
1978	23	6/20	9/8	726	155	32 ± 21	22 ± 12
1979***	34	6/14	9/11	884	62	26 ± 20	24 ± 16
1980	31	6/19	9/12	1258	585	42 ± 20	22 ± 13
1981	45 <sup>+</sup>	6/15	9/10	1026 <sup>++</sup>	225 <sup>+++</sup>	23 ± 18 <sup>++</sup>	18 ± 15 <sup>++++</sup>
1982	79 <sup>o</sup>	6/10	9/17	910 <sup>oo</sup>	167	12 ± 10	12 ± 7

\*Minimum number. On many occasions the records show only a plus (+) sign for dogfish delivered to the common pool. On other occasions the number delivered to the common pool is not stated.

\*\*In the year 1976 the number of dogfish delivered to the common pool was not stated so the number stated here only depicts those dogfish delivered to individual investigator live cars.

\*\*\*In July 1979 an unusual migration of large numbers of squid into Frenchman Bay disrupted trawl fishing and gill nets were substituted.

+Includes 7 deliveries by Gordon King and 1 delivery by Bud Hodgkins; ++Includes 70 fish delivered by Gordon King and 50 fish by Bud Hodgkins; +++Includes 50 fish delivered by Bud Hodgkins, and ++++Includes 7 deliveries by Gordon King.

<sup>o</sup>Includes 3 deliveries by Bud Hodgkins and 4 deliveries by Gordon King.

<sup>oo</sup>Includes 46 fish delivered by Bud Hodgkins and 20 fish delivered by Gordon King.

were fished regularly; Tidal Falls, Calf and Preble Islands, Skillings River, Ironbound Island, and Stave and Yellow Islands. In addition, 22 areas were fished 1 - 10 times, usually on the same trip as one of the five regularly fished areas. In the tables, averages represent arithmetical means plus or minus standard deviation.

TABLE II

Number of Dogfish Collected per Fishing Trip for each Week of the Summer Season

Week	1973	1974	1975	1976 <sup>+</sup>	1977	1978	1979	1980	1981 <sup>o</sup>	1982 <sup>oo</sup>	Average 1973-82 <sup>++</sup>
1 <sup>*</sup>	8	13	13	13	23	16	8	26	16	1	14 ± 8
2	18	31	9	17	32	7	14	10	20	10	17 ± 9
3	42	41	86	24	21	25	28	48	28	12	37 ± 22
4	69	48	31	29	48	25	39	31	50	11	39 ± 17
5	84	52	62	39	52	41	31	43	21	7	44 ± 23
6	50	55	53	30	33	26	10	41	43	21	37 ± 16
7	98	87	72	27	61	53	46	39	10	21	54 ± 29
8	65	62	54	38	37	75	27	52	19	15	45 ± 21
9	61	50	61	24	36	32	43	85	27	17	46 ± 21
10	53	29	35	6	41	25	32	60	50	18	38 ± 14
11 <sup>**</sup>	-	8	-	-	6	40	12	31	44	11	22 ± 16

<sup>\*</sup>Week number 1 includes all the collecting trips during the month of June.

<sup>\*\*</sup>Week number 11 includes all the collecting trips during the month of September.

<sup>+</sup>The number shown for the year 1976 depicts only those fish delivered to individual investigator live cars. The total number collected was not available.

<sup>++</sup>Does not include the 1976 numbers.

<sup>o</sup>Includes two deliveries by Gordon King on week 2 and 5 and three deliveries on week 7; one delivery by Bud Hodgkins on week 10.

<sup>oo</sup>Includes one delivery by Gordon King on weeks 1 and 4, and two deliveries on week 5; and three deliveries by Bud Hodgkins on week 3.

#### SUMMARY OF THE "GORDON KING" SPECIAL FISH COLLECTION AT MOUNT DESERT ISLAND BIOLOGICAL LABORATORY FROM 1979 THROUGH 1982

William R. Driedziec and the 1982 Collection Committee, Biology Department, Mount Allison University, Sackville, N.B., Canada and The Mount Desert Island Biological Laboratory, Salsbury Cove, Maine.

Animal supply at the Mount Desert Island Biological Laboratory can be broadly classified into three major components: the Squalus operation, collection by investigators personally or contracted personally, and the Gordon King special fish collection. The Squalus operation focuses upon meeting the demand for dogfish; however, there is a small incidental capture of sea raven, lumpfish, skate and other species. The second major category of collection involves numerous invertebrates such as echinoderms, molluscs and crustaceans as well as many fish species notably Fundulus, eels, ocean pout, and cod. The contribution of this aspect of collection in terms of numbers of specimens and numbers of groups supported has yet to be quantitated but may be quite significant. Finally, the "Gordon King" operation refers to an individual whom the laboratory has contracted since 1970 to collect specimens not readily obtainable by either the Squalus or individual effort. This operation is based in Seal Harbor and involves capture of specimens with an otter trawl and subsequent trucking of animals in aerated tanks to the laboratory for an approximate duration of 30 min.