

**SUMMARY OF TAGGING OPERATIONS**

**July 1, 1962 through June 30, 1964**

**Bureau of Commercial Fisheries Biological Laboratory**

**U.S. Fish and Wildlife Service, Woods Hole, Mass.**

**Prepared by:**

**Sterling L. Cogswell, Fishery Technician (Research)**

**Woods Hole Laboratory  
Reference Number 64-3  
20 October 1964**

A summary of fish tagged by the Woods Hole, Massachusetts Laboratory of the U.S. Bureau of Commercial Fisheries, and the State of Massachusetts Division of Marine Fisheries, in cooperation with this Laboratory.

Shown here are: type of tag, location on fish, number series, area where tagged, date of tagging, number of fish tagged, and gear used in collecting fish for tagging; followed by a detailed description of these tags and how they were applied to the fish.

CONTENTS

| <u>Species</u>          | <u>Number Tagged</u> | <u>Pages</u> |
|-------------------------|----------------------|--------------|
| Dogfish - - - - -       | 57                   |              |
| Fluke - - - - -         | 1,005                |              |
| Halibut - - - - -       | 30                   |              |
| Redfish - - - - -       | 759                  |              |
| Winter Flounder - - - - | 9,307                |              |
| Yellowtail - - - - -    | 411                  |              |
| Miscellaneous - - - - - | 14                   |              |
|                         | <hr/>                |              |
| TOTAL                   | 11,583               |              |

A description of the types of tags used, and  
methods of applying them to the species listed.

DOGFISH

| <u>Type of tag</u>                | <u>Number series</u> | <u>Location</u>                       | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>                      |
|-----------------------------------|----------------------|---------------------------------------|---------------------------------|--------------------|---------------------------|-------------------------------------|
| Petersen<br>discs through<br>nose | D6602-D6628          | East side of Cape Cod,<br>off Chatham | 5Z                              | August 16, 1962    | 27                        | Laboratory<br>M. V. "Blue-<br>back" |
| do                                | D6629, D6630         | Georges Bank,<br>S. E. part           | do                              | Oct. 28, 1962      | 2                         | R. V.<br>"Delaware"                 |
| do                                | D6649-D6676          | Buzzards Bay, S. W.<br>side Cape Cod  | do                              | Oct. 17, 1963      | 28                        | Laboratory<br>M. V. "Blue-<br>back" |
| <u>Total</u>                      |                      |                                       |                                 |                    | <u>57</u>                 |                                     |

FLUKE

|                                   |                                |                               |    |                |              |                   |
|-----------------------------------|--------------------------------|-------------------------------|----|----------------|--------------|-------------------|
| Petersen<br>discs through<br>nape | D35208-D35513<br>D37301-D37399 | Point Judith, Rhode<br>Island | 5Z | Sept. 7, 1962  | 405          | Charter<br>vessel |
| do                                | D36806-D37202                  | Nantucket Sound               | do | Sept. 7, 1962  | 397          | do                |
| do                                | D35514-D35716                  | do                            | do | Sept. 21, 1962 | 203          | do                |
| <u>Total</u>                      |                                |                               |    |                | <u>1,005</u> |                   |

HALIBUT

|                                     |                            |                                |    |                  |   |                         |
|-------------------------------------|----------------------------|--------------------------------|----|------------------|---|-------------------------|
| Petersen<br>discs through<br>dorsum | D6631-D6632                | Georges Bank,<br>northern edge | 5Z | Oct. 29, 1962    | 2 | R. V.<br>"Delaware"     |
| do                                  | D6677-D6679<br>D6681-D6684 | Gulf of Maine                  | 5Y | Nov. 13-20, 1963 | 7 | R. V.<br>"Albatross IV" |

HALIBUT  
(Cont.)

| <u>Type of tag</u>                  | <u>Number Series</u> | <u>Location</u>                      | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date Tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>          |
|-------------------------------------|----------------------|--------------------------------------|---------------------------------|--------------------|---------------------------|-------------------------|
| Petersen<br>discs through<br>dorsum | D6685-D6702          | Browns Bank, south<br>of Nova Scotia | 4X                              | Nov. 21-23, 1963   | 18                        | R. V.<br>"Albatross IV" |
| do                                  | D6706-D6708          | Georges Bank<br>Cultivator Shoal     | 5Z                              | May 2, 1964        | 3                         | R. V.<br>"Albatross IV" |
| <u>Total</u>                        |                      |                                      |                                 |                    | <u>30</u>                 |                         |

REDFISH

|   |   |                        |          |                        |            |              |
|---|---|------------------------|----------|------------------------|------------|--------------|
| Dart-spaghetti<br>in dorsum               | K1637-K1714   | Eastport Harbor, Maine | 5Y       | July 1962              | 78         | Rod and reel |
| do  | K1717-K1868   | do                     | do       | April 1963             | 152        | do           |
| Experimental<br>tag "A" through<br>dorsum | 0023, 0043  | do                     | do       | do                     | 2          |              |
| Experimental<br>tag "B" through<br>dorsum | 0047, 0062, 0063,<br>0065, 0067, 0070,<br>0071, 0072, 0079,<br>0081, 0083, 245612 | do                     | do       | do                     | 12         | do           |
| Watson-Larsen<br>through dorsum           | H3000-H3245<br>H3247-H3515  | do<br>do               | do<br>do | June 1963<br>June 1964 | 246<br>269 | do<br>do     |
| <u>Total</u>                              |   |                        |          |                        | <u>759</u> |              |

WINTER FLOUNDER

| <u>Type of tag</u>          | <u>Number Series</u> | <u>Location</u> | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date Tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>  |
|-----------------------------|----------------------|-----------------|---------------------------------|--------------------|---------------------------|---|
|                             |                      |                 |                                 |                    |                           | The winter flounder represent a cooperative program of tagging by this Laboratory and the State of Massachusetts Division of Marine Fisheries |
| Petersen discs through nape | D10001-D10175        | Merrimack River | 5Z                              | March-April 1964   | 175                       | By State of Massachusetts (Charter vessels)   |
| do                          | D10176-D10187        | do              | do                              | May 1964           | 12                        | do  |
| do                          | D10205-D10222        | do              | do                              | do                 | 18                        | do  |
| do                          | D10255-D10306        | do              | do                              | June 1964          | 52                        | do  |
| do                          | D10400-D10406        | do              | do                              | do                 | 7                         | do  |
| do                          | D10499               | do              | do                              | do                 | 1                         | do  |
|                             |                      |                 |                                 | <u>Total</u>       | <u>265</u>                |   |
| do                          | D10188-D10204        | Ipswich Bay     | do                              | May 1964           | 17                        | do  |
| do                          | D10223-D10254        | do              | do                              | June 1964          | 32                        | do  |
| do                          | D10307-D10399        | do              | do                              | do                 | 93                        | do  |
| do                          | D10407-D10498        | do              | do                              | do                 | 92                        | do  |
|                             |                      |                 |                                 | <u>Total</u>       | <u>234</u>                |   |

WINTER FLOUNDER

(Cont.)

| <u>Type of tag</u>                | <u>Number Series</u> | <u>Location</u>                                | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date Tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>                                       |
|-----------------------------------|----------------------|--|---------------------------------|--------------------|---------------------------|--|
| Petersen<br>discs through<br>nape | D10500-D10630        | Beverly Harbor                                 | 5Z                              | March-April 1964   | 131                       | By State of<br>Massachusetts<br>(Charter<br>vessels) |
| do                                | D10631-D10999        | Salem Harbor                                   | do                              | do                 | 369                       | do   |
| do                                | D11000-D11499        | Boston Harbor                                  | do                              | do                 | 500                       | do   |
| do                                | D11500-D11940        | South side, Nantucket                          | do                              | do                 | 441                       | do   |
| do                                | D12000-D12455        | Great Point, Nantucket                         | do                              | do                 | 456                       | do   |
| do                                | D12500-D12999        | Quahog Ground,<br>Nantucket                    | do                              | do                 | 500                       | do   |
| do                                | D13000-D13499        | Hedgefence Shoal,<br>Vineyard Sound            | do                              | do                 | 500                       | do   |
| do                                | D13500-D13638        | Buzzards Bay,<br>Cleveland Ledge to Canal      | do                              | do                 | 139                       | do   |
| do                                | D13639-D13707        | Buzzards Bay, Cleveland<br>Ledge to Woods Hole | do                              | do                 | 69                        | do   |
| do                                | D13708-D13790        | Buzzards Bay, main<br>channel, Buoy #6         | do                              | do                 | 83                        | do   |
| do                                | D13791-D13975        | Buzzards Bay, off<br>Woods Hole                | do                              | do                 | 185                       | do   |

WINTER FLOUNDER

(Cont. )

| <u>Type of tag</u>                | <u>Number Series</u> | <u>Location</u>                      | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date Tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>                                       |
|-----------------------------------|----------------------|--------------------------------------|---------------------------------|--------------------|---------------------------|--|
| Petersen<br>discs through<br>nape | D13976-D13999        | Buzzards Bay, off<br>Wings Cove      | 5Z                              | March-April 1964   | 24                        | By State of<br>Massachusetts<br>(Charter<br>vessels) |
| do                                | D14000-D14099        | Manomet, Cape Cod<br>Bay             | do                              | do                 | 100                       | do   |
| do                                | D14100-D14499        | Plymouth Harbor                      | do                              | do                 | 400                       | do   |
| do                                | D14500-D14999        | Billingsgate Shoal,<br>Cape Cod Bay  | do                              | do                 | 500                       | do   |
| do                                | D15000-D15102        | Vineyard Sound,<br>Tarpaulin Cove    | do                              | do                 | 102                       | do   |
| do                                | D15103-D15499        | Vineyard Sound,<br>Menemsha Bight    | do                              | do                 | 397                       | do   |
| do                                | D15500-D15999        | Nantucket Sound,<br>Rodgers Shoal    | do                              | do                 | 500                       | do   |
| do                                | D18000-D18003        | Stellwagen Bank, off<br>Provincetown | do                              | do                 | 4                         | do   |
| do                                | D18004-D18005        | Peaked Hill Bar, off<br>Truro        | do                              | do                 | 2                         | do   |
| do                                | D18006-D18452        | Highland Light, east<br>of Truro     | do                              | do                 | 447                       | do   |

WINTER FLOUNDER

(Cont.)

| <u>Type of tag</u>   | <u>Number Series</u> | <u>Location</u>                                | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date Tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>   |
|--|----------------------|--|---------------------------------|--------------------|---------------------------|--|
| Petersen<br>discs through<br>nape                              | D18453-D18463        | Camp Wellfleet, east<br>of Wellfleet           | 5Z                              | March-April 1964   | 11                        | By State of<br>Massachusetts<br>(Charter<br>vessels)                         |
| do   | D18464-D18699        | South of Chatham Inlet                         | do                              | do                 | 236                       | do   |
| do   | D18700-D18999        | Provincetown, between<br>Wood End and Race Pt. | do                              | do                 | 300                       | do   |
| Total tagged by the Massachusetts Division of Marine Fisheries |                      |  |                                 |                    | <u>6,895</u>              |  |
| Petersen<br>discs through<br>nape                              | D16000-D17215        | Nantucket Shoals and<br>vicinity               | 5Z                              | April 1964         | 1,215                     | By U. S. B.<br>C. F. Labor-<br>atory, Woods<br>Hole, R. V.<br>"Albatross IV" |
| do   | D17700-D17799        | do   | do                              | do                 | 100                       |  |
|  |                      |  |                                 |                    | <u>Total</u>              | <u>1,315</u>   |
| do   | D17216-D17699        | Georges Bank                                   | do                              | April 1964         | 484                       | do   |
| do   | D17800-D17866        | do   | do                              | do                 | 67                        | do   |
| do   | D19000-D19529        | do   | do                              | do                 | 530                       | do   |
|  |                      |  |                                 |                    | <u>Total</u>              | <u>1,081</u>   |

WINTER FLOUNDER

(Cont.)

| <u>Type of tag</u>  | <u>Number Series</u> | <u>Location</u>             | <u>ICNAF<br/>Conv.<br/>Area</u> | <u>Date Tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>  |
|---|----------------------|-----------------------------|---------------------------------|--------------------|---------------------------|---|
| Petersen<br>discs through<br>nape                         | D17900-D17915        | Off Race Point, Cape<br>Cod | 5Z                              | April 1964         | 16                        | By U. S. B. C.<br>F. Laboratory<br>Woods Hole,<br>R. V.<br>"Albatross IV" |
| Total tagged by the U. S. B. C. F. Laboratory, Woods Hole |                      |                             |                                 |                    | <u>2,412</u>              |   |
| Total Winter Flounder Tagged                              |                      |                             |                                 |                    | <u>9,307</u>              |   |

YELLOWTAIL

|                                   |               |                            |    |           |              |                   |
|-----------------------------------|---------------|----------------------------|----|-----------|--------------|-------------------|
| Petersen<br>discs through<br>nape | D35717-D35800 | Southwest side Cape<br>Ann | 5Z | June 1963 | 84           | Charter<br>vessel |
| do                                | D37214-D37300 | do                         | do | do        | 97           | do                |
| do                                | D37400-D37459 | do                         | do | do        | 60           | do                |
|                                   |               |                            |    |           | <u>Total</u> | <u>241</u>        |
| do                                | D37460-D37499 | Northeast side Cape<br>Ann | do | do        | 40           | do                |
| do                                | D34001-D34130 | do                         | do | do        | 130          | do                |
|                                   |               |                            |    |           | <u>Total</u> | <u>170</u>        |
| <u>Total</u>                      |               |                            |    |           | <u>411</u>   |                   |

MISCELLANEOUS

SEA BASS

| <u>Type of tag</u>                 | <u>Number Series</u> | <u>Location</u> | <u>ICNAF<br/>Conv.<br/>Area.</u> | <u>Date tagged</u> | <u>Number<br/>of fish</u> | <u>Remarks</u>    |
|------------------------------------|----------------------|-----------------|----------------------------------|--------------------|---------------------------|-------------------|
| Petersen<br>disc through<br>dorsum | S4885, S4886         | Nantucket Sound | 5Z                               | June 1963          | 2                         | Charter<br>vessel |

SEA ROBIN

|    |  |    |    |    |   |    |
|----|--|----|----|----|---|----|
| do | D4909, D4910,<br>D4920, D4925,<br>D4975, D5016 | do | do | do | 6 | do |
|----|--|----|----|----|---|----|

STRIPED BASS

|    |               |                             |    |                |   |              |
|----|---------------|-----------------------------|----|----------------|---|--------------|
| do | D36800-D36804 | Great Harbor, Woods<br>Hole | do | September 1962 | 5 | Rod and reel |
|----|---------------|-----------------------------|----|----------------|---|--------------|

BOTTLE NOSE DOLPHIN (TURSIOPS)

|                                    |       |                             |    |                 |   |  |
|------------------------------------|-------|-----------------------------|----|-----------------|---|--|
| Petersen<br>discs on<br>dorsal fin | F2216 | Great Harbor, Woods<br>Hole | do | October 6, 1964 | 1 | Taken by<br>commercial<br>fisherman,<br>Florida, June<br>1964. Owned<br>and trained<br>for exhibition<br>by Robert D.<br>Morehouse,<br>Laconia, New<br>Hampshire |
|------------------------------------|-------|-----------------------------|----|-----------------|---|--|

Total

14

TOTAL -- ALL SPECIES

-11-

11,583

A description of the types of tags used and methods of applying them to the species listed.

| <u>Type</u>    | <u>Attachment</u> | <u>Species</u>                                   | <u>Description</u>   |
|----------------|-------------------|--|--|
| Petersen Disc  | Through nape      | Fluke<br>Winter Flounder<br>Yellowtail           | (1) Two plastic discs, 1/2 inch diameter; serially numbered disc right side of fish, message disc on left side. Attached with stainless steel pin. Length of stainless steel wire used when fish is of large size.   |
|                | Through dorsum    | Halibut<br>Sea Bass<br>Sea Robin<br>Striped Bass | (2) Same as (1).   |
| Petersen Disc  | Through snout     | Dogfish  | (3) Same as (1), except numbered disc ventral, message disc dorsal on snout. Attached with pins.   |
| Dart-Spaghetti | Through dorsum    | Redfish  | (4) Molded nylon double barb dart 3/8" width, shaft .042" diameter x 7/8" in length, tapered at end of shaft. Shaft is inserted in marked vinyl tubing .066" outside diameter x .034" inside diameter x 4-1/4" in length. Perforation is made with tagging needle and barb is inserted until firmly imbedded.  |
| Watson-Larsen* | Through dorsum    | Redfish  | (5) Nylon rod, .045" diameter x 1" in length (with bias cut each end), is bent at mid-point to form V-shaped plug. One end of plug is inserted in end of marked vinyl tubing, .070" outside diameter x .038" inside diameter x 4-1/4" in length. A tagging needle is inserted through the dorsum and withdrawn, and a chrome plated hollow brass tube ** (with a solid end tapered to a rounded point) is passed through this perforation carrying the free end of the tubing through the dorsum where it is connected to the free end of the plug. The plug trails above in a pear-shaped loop. |

A description of the types of tags used and methods of applying them to the species listed. (Cont.)

| <u>Type</u>                                     | <u>Attachment</u> | <u>Species</u> | <u>Description</u>  |
|---|-------------------|----------------|---|
| Experimental tag "A" (long message wrap-around) | Through dorsum    | Redfish        | (6) Message component 3/4" x 3-5/8" thin sheet vinyl, opaque white, marked with 105 words durable in sea water. Reverse side coated with light adhesive is rolled tightly on end of unmarked vinyl tubing, 7-1/4" in length x .074" outside diameter forming torpedo shaped unit on end of tubing 1" x 3/32". Dipped in transparent silicone as a seal, terminal end of roll shows serial number and instruction "unroll and read". Attached by drawing opposite end of tubing through dorsum with tagging needle and knotting.   |
| Experimental tag "B" (long message capsule)     | Through dorsum    | Redfish        | (7) Soft transparent polyethylene tubing 3/16" outside diameter is cut in 1-1/4" lengths. Message component (6) is rolled on itself (without adhesive) and inserted. Ends of tube are heat-sealed, forming tapered flanges, one perforated. Similar tubing is knotted to capsule and attached to fish as in (6).<br>(Alternate attachment is compatible monofilament fused to an end of capsule when heat-sealed. Drawn through dorsum as in (5), it is secured by passing through hole in 3/16" solid nylon ball and flanging end of monofilament with flame or heat.) |

\*--The Watson-Larsen tag was developed at the Boothbay Harbor Laboratory of the U.S. Bureau of Commercial Fisheries.

\*\*--This hollow brass (chrome plated) tube may be obtained from a veterinarian supply source, or from most rural drug stores--as a "milking tube".