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ATLANTIC SALMON RECAPTURE INFORMATION

FOR MAINE-TAGGED FISH

by

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Until 1966, marine tag returns from Atlantic salmon tagged in Maine were from post-kelts. These returns resulted from the annual tagging of a portion of the spawning run in the Narraguagus River in eastern Maine beginning in 1962. Early tag return locations were summarized in ICES/ICNAF Salmon Doc. 66-2 and in ICNAF Res. Doc. 67/57. Table 1 presents the post-kelt recoveries in ICNAF waters during 1967.

Comparisons between the number of fish tagged and the number of recaptures must take into account some adjustment for spawning mortality and tag loss, as outlined in Salmon Doc. 66-2. Additional recoveries occur during the spring sport fishery for kelts in the Narraguagus River. The kelt fishery harvests about 10 percent of the available tagged salmon, although in 1967 this harvest was closer to 40 percent when ideal angling conditions prevailed. There is no kelt fishery in the Machias River.

Maine-tagged post-kelts are widely distributed in the western north Atlantic area in the summer following tagging on the spawning run. To date, no tag returns later than the year following the tagging have been received. ICNAF Subareas 3Ps, 3L, and 3K account for more than half the recaptures. The 3Ps recoveries are mostly in early summer while the fish are headed northeastward. The 3L and 3K recoveries are mostly in the fall and early winter, apparently as the fish move southeastward around Newfoundland.

In 1966 the first tagged smolts were released in Maine. This group provided the first opportunity to assess the marine movement of post-smolt and second sea-year salmon originating in Maine. Post-smolt tag returns from both the 1966 and 1967 smolt taggings came from two areas (Table 2), namely the herring weirs along the Nova Scotian shore of the Bay of Fundy and from the mackerel fishery in the vicinity of Halifax, Nova Scotia. The 1966-tagged smolts were recovered in 1967 from a wider area than that outlined by the five years of post-kelt returns. In the month of July 1967, these tagged salmon were in Greenland, Labrador, Newfoundland, and Nova Scotia. Autumn recaptures were made primarily along the Greenland coast. This latter fact is in complete agreement with the ICES/ICNAF information that most of the salmon involved in the Greenland fishery are feeding there late in the second sea-year of life. Early winter, or year-end, tag returns came from the north and easterly coasts of Newfoundland. Apparently the salmon have started the long migration back to the natal river for the 1968 spawning run.

Table 3 contains tag return information on the smolts tagged in 1966 grouped as suggested by Salmon Document 66-6. There is no home river commercial fishery. Grilse are relatively uncommon in Maine waters with the exception being fish of hatchery origin. Therefore, this compilation is at best only a progress report until there is time for assessment of the numbers of tagged salmon which return to the home rivers after two sea-years.

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Table 1. Marine tag returns from adult salmon tagged on spawning run (1966)

River	Year tagged	Number tagged	Recapture year	Month	ICNAF Subarea Divisions										Sub-total	Year total							
					1A	1B	1C	1D	1E	1F	2G	2A	2J	3K			3L	3Ps	3Pn	4V	4W	4X	5Y
Narraguagus	1966	292	1967	June									1							2	4		
				July																		1	
				October			1																1
Machias	1966	582	1967	June									1	1	1	1				4	9		
				July																		2	
				September																			1
				October			1	1															2
				November																			3
				December															1?	8			
Totals		874		Unknown	0	1	2	0	1	0	0	0	0	0	0	0	0	0	1	1	28		
																				1	32		

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Table 3. Tag returns from hatchery smolts released in Maine in 1966

Month of Release	River	Type of tag	Number released	Commercial		Tag Returns		Total
				Greenland	Distant	Angling Year 1 (1966)	Fishway trap	
April	Narraguagus and Machias	Modified	82,000	0	21	0	0	21
		Carlin						
				31	40	7	17*	95
								116

* Incomplete returns

Year released	Number released	Recapture year	Month	ICNAF Subarea Divisions													Sub-total	Year total											
				1A	1B	1C	1D	1E	1F	2G	2H	2J	3K	3L	3Ps	4V			4W	4X	5Y								
1966	82,000	1966	April																										
			May																										1
			June																										1
			July																										15
			August																										4
			September																										
			October																										1
		1967	June																										3
			July																										16
			August																										2
			September																										5
			October																										17
			November																										10
			December																										10
			Unknown																										8
			Total																										71
																													93
1967	80,700	1967	April																										1
			May																										1
			June																										3
			July																										15
			August																										3
			Total																										23
																													23