

**International Commission
for the
Northwest Atlantic Fisheries**

1950

1970

RESTRICTED

Serial No. 2337
(E.g. 14)

ICES/ICNAF Salmon Doc. 70/11
(also ICNAF Res. Doc. 70/33)

ANNUAL MEETING - JUNE 1970

Parasitic investigations in juvenile and adult salmon
in 1968 and 1969 in selected Irish waters

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Table 1. Incidence and abundance of parasites of Smolts by species and area of origin (1969)

SOURCE	DATE	% Parasitised	Trematoda		Nematoda		Acanthocephala	
			Dicoccotylus sagittata	Crepidostomum metacecicus	Crepidostomum farinaceum	Derogenes varicosus	Gontracaecum sp.	Cystidcola salvelini
LEE	21 28.4.69	33%	9(3)	—	—	—	—	33 (9)
SIANEY	20 3.4.69	NIL	—	—	—	—	—	—
O'NEAL	22 10.4.69	27.2	—	—	18.9(2)	2 (6)	50(30+)	40 (3)
BOYNE	20 28.4.69	85	—	10(5)	5(5)	—	—	95(12)
SUIR	23 6.5.69	100	—	—	3(6)	—	—	30(10) 80(4)
FOYLE	24 6.5.69	100	—	—	—	80 (30+)	6(3)	40(15) 60(20)
CORRIB	9 29.4.69	88.8	—	20(8)	—	—	—	—
	20 13.6.69	100	—	12(10)	4(4)	10(40+)	—	85(30+) 90(8)

First figure represents percent of each sample infested and figure in parenthesis indicates mean number parasites per infested fish.

Table 2. Incidence and abundance of parasites by species,
in 51 adult salmon from Irish waters, 1968.

SPECIES	OCCURRENCE
<u>Protozoa</u>	
<i>Discocotyle sagittata</i>	4 (2)
<i>Derogenes various</i>	86 (40+)
<i>Hemiuirus levinseni</i>	4 (3)
<i>Grepidostomum metoecus</i>	10 (12)
<i>Tetracolyte sp.</i>	1 (3)
<u>Cestoda</u>	
<i>Eubothrium crassum</i>	45 (8)
<i>Diphyllobothrium dendriticum</i> (pl.c.)	2 (1)
<u>Nematoda</u>	
<i>Anisakis larvae</i>	80 (15)
<i>Contracaecum sp.</i>	30 (8)
<i>Raphidascaris sp.</i>	15 (4)
<i>Porrocaecum sp.</i>	9 (6)
<i>Rhabdochona sp.</i>	12 (6)
<i>Ascarophis sp.</i>	5 (4)
<i>Cystidicole farionis</i>	90 (100+)
<i>Camallanus lacustris</i>	8 (2)
<u>Acanthocephala</u>	
<i>Echinorhynchus truttae</i>	4 (2)
<u>Crustaceae</u>	
<i>Salmincola salmonea</i>	4 (6)
<i>Argulus foliaceus</i>	1 (1)

Table 2B. Incidence and intensity of infestation of parasites of adult salmon, by species and area of origin, 1969

		Proto- zoa		Trematoda		Cestoda		Nematoda		Acanthocephala		Crustacea	
No.	Date	Examined 16	Weight in lb.	Ichthyoph-	Multitubellis	Sagittata	Dicroidotyle	Varicosus	Hemimyrus	Levitinensis	Diplostio-	Heptacavum	Centrarchum (Ple-
R. BOYNE	Feb. 5 May 18 Aug. 9	0 ²	5	-	-	-	-	-	-	-	-	-	-
L. CORRIE	Apr. 11 June 10	0 ²	11	-	-	-	-	-	-	-	-	-	-
R. DROWES	Apr. 12 June 9	0 ²	12	-	-	-	-	-	-	-	-	-	-
R. BLACKWATER	May 8	+	8	-	-	-	-	-	-	-	-	-	-
R. INAGH	July 6	0 ²	5	-	-	-	-	-	-	-	-	-	-
R. LEE	July 9	0 ²	15	-	-	-	-	-	-	-	-	-	-
R. SLANEY	May 15	0 ²	15	-	-	-	-	-	-	-	-	-	-
R. WATERVILLE	July 12	0 ²	12	-	-	-	-	-	-	-	-	-	-
R. LIFFEY	Apr. 10	0 ²	10	-	-	-	-	-	-	-	-	-	-
R. TINNY	May 5	0 ²	5	-	-	-	-	-	-	-	-	-	-

Table 3. Incidence and abundance of *Anisakis* larvae in adult salmon in Irish waters.

Infected Organ	% fish infected '68 '69		range '68 '69		mean per infected organ '68 '69	
Viscera	80 87.5				2 1	
Pyloric caecae	60 56		1-18 1-20		6 5	
Liver	25 40		1-5 1-10		1 5	
Body cavity (free)	8 10		1-5 1-15		2 3	
Stomach	10 4		1-3 1-4		1 1	
Intestine	20 5		1-9 1-3		4 2	
Mesentery	30 20		1-80 1-15		4 4	
Spleen	3 8		1-2 1-8		2 4	
Oesophagus	- -		- -		- -	
Air bladder	- 1		- 1-1		- 1	
Urinary bladder	- -		- -		- -	
Muscles	45 20		1-10 1-6		5 4	