

State of California
Department of Fish and Game

FISH PATHOLOGIST REPORT

Location

Feather River Hatchery

Date

5 April 2001

Species and Size

fall chinook pre-smolts

Holding Area

G-5

Pre-liberation Fish Health Assessment

Twenty fish were randomly netted from mid-pond and analyzed using the Health Condition Profile system (see attachment). Some external signs of IHN remain, with approximately 1/3 of the fish exhibiting slight to moderate anemia of the gills, and one of those fish exhibited exophthalmia. A little over 1/3 of the fish also had slightly pale kidneys, although the kidneys were not thin, and 3 fish had slightly enlarged spleens, indicating possible inflammation due to an infectious agent. Other organs appeared normal. Red blood cell levels were all within normal range (above 35%), indicating these fish ~~are~~ ^{maybe} in a recovery phase from the IHN.

Fish are on the lean side, with a mean mesentary fat content value of 1.25 (most fish had less than 50% coverage of pyloric caecae). Ktl values are all above one, suggesting the fish have not yet reached smolt stage. Partial silvering with still-visible parr marks indicates fish are nearing smolt stage. An additional 20 fish from the pond were given a 24 hr salt challenge (30 ppt) and only 17 survived, which supports Ktl value analysis. Fish were also sampled for virus assay; results pending.

Mean fish weight was 7.5 grams (60/lb) and length was 85 mm (3.4 in).

Comments

These fish had been split from pond C-2 at Thermalito Annex and brought to the main hatchery pond G-5 on March 5 to assess the effect of returning them to colder water, after their five week stay in the 59-60° water of Thermalito. The fish had been brought to Thermalito the end of January while experiencing an outbreak of IHN contracted at the main hatchery, to see if the warmer water of Thermalito would suppress the disease. Mortality numbers had dropped from a high of 2150 the first week of February, to between 50 and 75 during the week before the fish were transferred. The losses for March for pond G-5 totaled 435, and the fish are growing well. Water temp. 49° F

Submitted by

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Attachment: FHA data capture sheet

Score 19
 Species Fall Chinook
 Pond G.5

Location F.R.H.
 Investigator T. Jack
 Water Temp. 9.1°C

	EXTERNAL										INTERNAL										BLOOD				
	Length MM	Weight Grams	Kil.	Fin	Skin	Eye	Gill	Ybr	Thym	Uter	Spleen	Kidney	Gut	Item	Leuc	WPro	Hct	Smolt	Canal Score						
1	88	7.5	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1						
2	88	8.5	1.25	1	0	0	0	0	0	0	0	0	0	50	0	0	2	0	1						
3	78	6.0	1.26	0	0	0	0	0	0	0	0	0	0	46	0	0	1	0	2						
4	91	8.4	1.1	0	0	0	1	0	0	0	0	0	0	57	0	0	1	0	2						
5	74	4.1	1.0	0	0	0	0	0	0	0	0	0	0	44	0	0	1	1	1						
6	96	9.9	1.12	0	0	0	0	0	0	0	0	0	0	40	0	0	2	0	2						
7	92	8.8	1.13	1	0	0	0	0	0	0	0	0	0	44	0	0	1	0	1						
8	88	7.5	1.1	0	0	0	0	0	0	0	0	0	0	39	0	0	1	0	1						
9	84	7.3	1.23	0	0	0	1	0	0	0	0	0	0	37	0	0	1	1	3						
10	88	8.1	1.19	0	0	0	0	0	0	0	0	0	0	43	0	0	1	0	1						
11	92	8.5	1.09	1	0	0	0	0	0	0	0	0	0	43	0	0	2	1	4						
12	96	9.9	1.12	0	0	0	0	0	0	0	0	0	0	37	0	0	2	1	2						
13	87	7.9	1.2	0	0	0	0	0	0	0	0	0	0	40	0	0	1	0	1						
14	73	5.4	1.39	0	0	2	1	0	0	0	0	0	0	45	0	0	1	1	6						
15	79	5.2	1.08	0	0	0	0	0	0	0	0	0	0	40	0	0	1	1	1						
16	86	6.5	1.27	0	0	0	0	0	0	0	0	0	0	40	0	0	1	1	1						
17	80	6.4	1.25	1	0	0	0	0	0	0	0	0	0	38	0	0	1	1	1						
18	93	9.5	1.18	0	0	0	0	0	0	0	0	0	0	42	0	0	1	1	2						
19	85	7.9	1.29	0	0	0	0	0	0	0	0	0	0	47	0	0	1	1	1						
20	80	6.5	1.27	0	0	0	0	0	0	0	0	0	0	38	0	0	2	1	3						
\bar{X}	85.35	7.49	1.19	0	0	0	0	0	0	0	0	0	0	42	0	0	1	1	2						
SD	7.2	1.58	.09	0	0	0	0	0	0	0	0	0	0	42.6	0	0	1.25	.75	1.9						
CV														4.86											
%N				80	100	95	70	100	100	100	85	65	100												

Remarks