

**STATE OF CALIFORNIA  
DEPARTMENT OF FISH AND GAME**

**FISH PATHOLOGIST REPORT**

**LOCATION**

Merced River Hatchery

**DATE**

1-5-04

**SPECIES AND SIZE**

RTH catchables (Moccasin)

**HOLDING AREA**

A,B

**PARASITES AND DISEASE CONDITION**

131 RT (62 from A, 69 from B) were randomly netted and examined for the presence of copepods (*Salmincola californiensis*) on body and gill surfaces. Fish were also examined for deformities due to coldwater disease or other causes.

No copepods or deformities were seen on any of these fish.

Microscopically, moderate numbers of Gyrodactylus were present on the body, and Loma cysts were present in the gills.

**RECOMMENDATIONS**

**COMMENTS**

In the first week of October 2003, 4300 lbs of BK from Crystal Lake Hatchery were placed into the head of each pond, ~2150 lbs per pond. Losses among these fish due to sexual maturation and subsequent fungus were substantial between October 2003 and January 2004. Fish appear to be in good condition presently. Approximately 1200 lbs of these BK remain. The BK served as "biofilters" to prevent copepod infestation of RT being reared directly below them. RT from Moccasin Creek Hatchery were stocked into ponds in the second and third weeks of October and were reared there until of proper size for planting.

**SUBMITTED BY**

Bill Cox, Ph.D., Senior Fish Pathologist, CDFG

## FISH PATHOLOGIST REPORT

**LOCATION**

Merced River Hatchery

**DATE**

11-15-04

**SPECIES AND SIZE**

Chinook adults

**HOLDING AREA**

Spawning table

**PARASITES AND DISEASE CONDITION**

The fish culturist reported that fish were lethargic compared to prior years, displaying a lack of energy and strength when handled at spawning.

Six fish were examined. The only likely explanation for this was a consistent bacterial infection of the gills, mostly with columnaris (*Flavobacterium columnare*), but also occasionally with fusiform bacterial gill disease. This might lead to gill hyperplasia and make oxygen uptake more difficult resulting in a "lack of strength". Histological samples would need to be taken to verify gill hyperplasia. These were not taken.

**RECOMMENDATIONS**

None

**COMMENTS**

Warm water conditions, 58 to 59 F, existed at the time of sampling. These temperatures are conducive to bacterial infections as noted above, and would not be considered uncommon. The lack of strength, however, seems to be a new observation at this facility.

**SUBMITTED BY**

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