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SILVER CREEK FISHERY INVESTIGATION

1965

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Introduction

A stream survey was made on October 12 of approximately 1 1/2 stream miles of Silver Creek on the Clyde (Nina) Molyneaux property to assess the area as a possible department purchase. An additional 1/2 mile stream section on existing Fish and Game Department property and directly upstream from the property in question was also surveyed.

Six Idaho Fish and Game Department personnel, in addition to the author, participated in the survey--Jim Graban, John Heimer, Dave Heiser, Dave Ortmann, Bill Webb and Tom Welsh.

Stream Morphology

Average Depths

Average depths of the stream section surveyed are indicated on the map. Overall average depth of the areas sounded on the stream section was slightly over 3 feet.

Vegetation

Aquatic vegetation in the stream section surveyed was extremely profuse being composed largely of chara, pondweed, filamentous algae and watercress.

As determined in earlier studies by Gebhards and Irving, the abundance of aquatic vegetation in Silver Creek varies greatly from year to year, the magnitude being correlated directly with the stream flows. In previous low flow periods the vegetation in Silver Creek has been very sparse. 1965 has been a year of unusually high flows and, as a result, aquatic vegetation in the stream is at a very high level.

Since fish growth and production has been shown to be immediately associated with the amount of aquatic vegetation in the stream, 1965 could be considered an optimum year for Silver Creek from a fishery standpoint.

Stream Flow

The U.S.G.S. discontinued its Picabo gauging station on Silver Creek in 1962. As a result, flow records are no longer obtainable for the stream. However, as specified earlier in the report, flows in 1965 were abnormally high.

### Stream Bank Cover

Stream bank cover in the area was generally very sparse. The men in wet suits noted, nevertheless, that a large portion of the stream banks were deeply undercut providing good fish cover--at least at the existing flow. It is possible that plantings of willow could be made along the stream banks to improve stream bank cover.

### Fish Species Composition

Data on fish species composition was gathered primarily by the use of diving gear. A 500 watt, AC shocker was tried out but proved to be largely ineffective due mainly to the high stream flows. Only 12 trout were turned over with the shocker and these were stunned only momentarily and could not be recovered. Underwater observations were made by four men using wet suits, face masks and snorkel tubes. As mentioned previously, the survey began at the present Fish and Game Department property and continued downstream to the terminus of the Molyneaux property in question.

Results of the underwater observations are presented in Table I.

TABLE I

Underwater Observations on Silver Creek Using Diving Gear,  
October 12, 1965

Stream Section	WRB*	wrb*	HRB*	WF*	wf*	sucker
Fish and Game (.5 mi.)	51	0	0	0	0	0
Molyneaux (1.5 mi.)	1,008	6	18	16	0	3

WRB- wild rainbow over 10 inches in length.  
wrb- immature wild rainbow  
HRB- hatchery rainbow, catchable size  
WF- adult whitefish  
wf- immature whitefish

The adult wild rainbow seen averaged approximately one-half pound and went to a maximum weight of about 5 pounds.

### Discussion

The results of the October, 1965 underwater observations on the stream, as stated earlier, present a somewhat biased view of the stream section in question. Optimum stream conditions as occurred in 1965 cannot be expected to happen too often.



Figure 1. Starting point of stream survey on presently owned Fish and Game property October 12, 1965.



Figure 2. Stream section on present Fish and Game property being surveyed by divers.



Figure 3.. Looking downstream at the start of the area surveyed on the Molyneaux property, October 12, 1965.



Figure 4.. Another view of the same area as Figure 3.



Figure 5. Sign on a building at the Point of Rocks on the Molyneaux property.

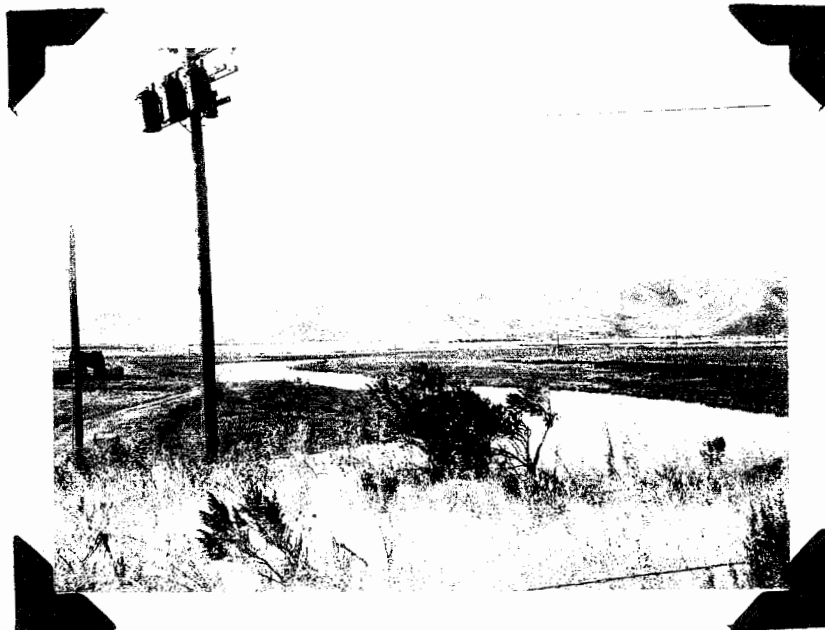


Figure 6. Looking upstream on Silver Creek near the Point of Rocks.

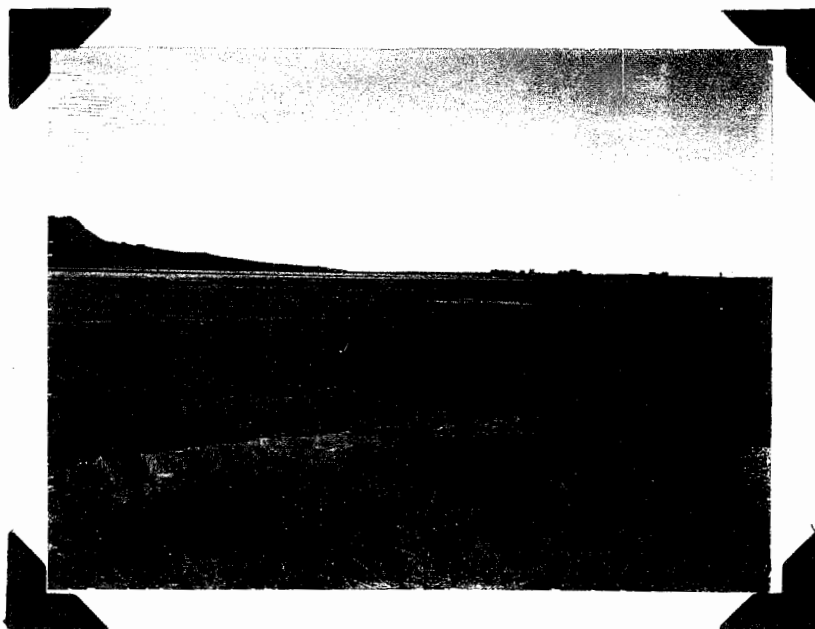


Figure 7. A view of some of the agricultural land adjacent to Silver Creek on the Molyneaux property.

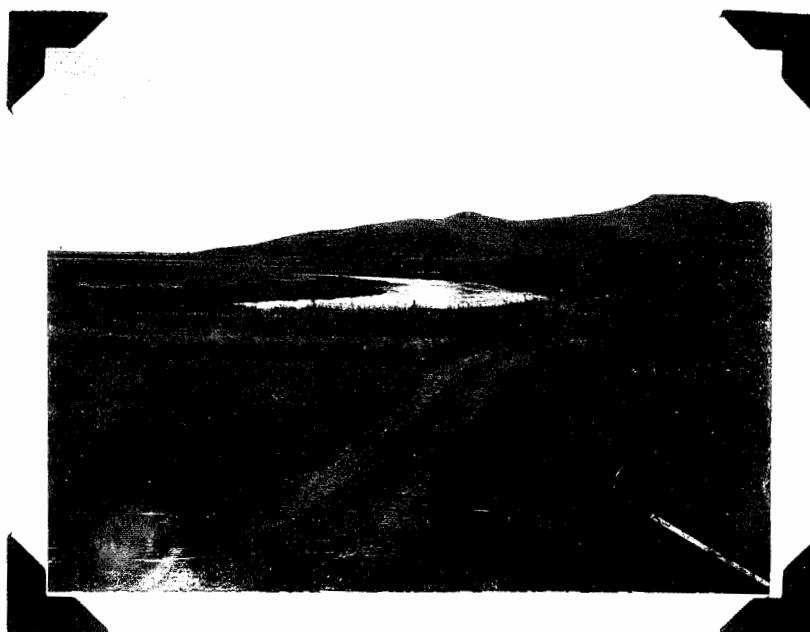


Figure 8. Looking upstream on Silver Creek from a site on the Molyneaux property near the Point of Rocks.

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November 5, 1965

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STATE

W. H. CASTLE

CLYDE MOLYNEUX

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CLYDE MOLYNEUX

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I.F.A.G

CUP OF ROCKS

GRAVEL

\* Map traced from aerial photo.

PICARD LIVESTOCK CO. INC.

