

MONTANA DEPARTMENT OF FISH AND GAME
FISHERIES DIVISION
JOB PROGRESS REPORT

State: Montana Title: Southwestern Montana Fisheries Study
Project No.: F-9-R-21 Title: Evaluation of Stream Improvements on
Job No.: II-a Prickly Pear Creek
Period Covered: July 1, 1972 to June 30, 1973

OBJECTIVES

The purpose of the Prickly Pear Creek study included the following:

1. Experimentation with rock and soil berms as a method of controlling stream bank erosion.
2. Determination of which naturally occurring shrub species can be successfully transplanted to speed up revegetation of a denuded area..
3. Estimation of fish population numbers in the area affected by construction.

PROCEDURES

Rock and soil berms were constructed at the toe of four eroding banks. Rocks were placed along the face of each berm to keep them from washing away.

Shrub experiments were conducted on the surfaces of the berms and backslopes. Five different treatments of naturally occurring shrub species were used in the revegetation experiments.

Outside bends along the toe of the highway grade were riprapped during construction to control erosion. Soil was placed in the interstices between large rocks to provide a place for experiments with revegetation of a large rock riprap area.

Fish populations were sampled using 0-500 variable voltage direct current electrofishing equipment and the population estimates were made by the mark and recapture method. Procedures used in population sampling and data analyses are described by Vincent (1971).

FINDINGS

A comprehensive report will follow in the next report period.

LITERATURE CITED

Vincent, R. 1971. River Electrofishing and Fish Population Estimates. Prog. Fish. Cult., Vol. 33(3):163-9.

Water referred to:

Prickly Pear Creek 17-6032-1

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