

DEPARTMENT OF NATURAL RESOURCES CHINESE CULTURE UNIVERSITY

DEC 11 2000

PAGE 01

FISH, WILDLIFE & PARKS

FISHERIES DIV.

7 December 2000

Hwa Kang, Yang Ming Shan Taipei, Taiwan 111, R.O.C. (02) 861 - 0511 (Ext. 395) (02) 861 - 7201 (FAX)

Chris Hunter. Chief of Operations
Montana Department of Fish, Wildlife & Parks
Fish Division
1420 East Sixth Avenue, P.O. Box 200701
Helena, MT 59620-0701

Dear Chris:

This is a report on fish collections I made under Scientific Collector's Permit No. SCP-25~(N) during 2000.

Collections were made at 17 stations in the Burns Creek system (BC), including the North Fork, Dawson County (T19N, R56E, Sec. 10, 11, 14) and Richland County (T19N, R57E, Sec. 26, 32, 33) from 27 July through 5 August 2000. Capture removal population estimates were conducted at each site using block nets and seines; minnow traps were used to semi-quantitatively sample heavily vegetated areas. All fish were released live at the site of collection.

On 8 August 2000, I sampled five sites on the lower Little Beaver and Box Elder creek systems, Carter and Fallon counties, near the state line, to see if [could confirm a 1985 record of longnose suckers (Catostomus catostomus) in the Little Missouri River drainage of Montana. This effort was part of my research on zoogeographic origins of isolated populations of longnose suckers in the Black Hills, SD and WY. Collections were made by seine, and all fish were released live at the site of capture.

Species and numbers collected were as follows (BC = Burns Creek, LBC = Lj(110° Beaver Creek, BEC = Box Elder Creek).

| Species | BC | LBC | BEC |
|--|-----|-----|-----|
| northern pike (Esox lucius) | 1 | 4 | 2 |
| goldeye (<u>Hiodon alosoides</u>) | | | 2 |
| common carp (Cyprinus carpio) | 52 | | 26 |
| western silvery/plains minnow | | | |
| (<u>Hybognathus</u> <u>argyritis/placitus</u>) | 15 | | 16 |
| brassy minnow (Hybognathus hankinsoni) | 428 | | |
| emerald shiner (Notropis atherinoides) | | | 21 |
| sand shiner (Notropis stramineus) | 49 | 10 | 32 |
| fathead minnow (Pimephales promelas) | 59 | | 9 |
| flathead chub (Platygobio gracilis) | 22 | 4 | ı |
| longnose dace (Rhinichthys cataractae) | 267 | 8 | 2 |
| lake chub (Couesius plumbeus) | | 2 | 2 |
| creek chub (Semotilus atromaculatus) | 916 | | |
| longnose sucker (Catostomus catostomus) | 26 | | |
| white sucker (Catostomus commersoni) | 554 | 7 | 12 |
| shorthead redhorse (Moxostoma macrolepidotum) | 6 | | |
| river carpsudker (Carpiodes carpio) | 68 | | 1 |
| black bullhead (Ameiurus melas) | 5 | | |
| stonecat (Noturus flavus) | 20 | | 2 |
| brook stickleback (Culaea inconstans) | 63 | | |
| green sunfish (Lepomis cyanellus) | 39 | | 4 |
| largemouth bass (Micropterus salmoides) | 1 | | • |

I'm currently preparing a more detailed report on my 2000 Burns Creek fish community studies for Brad Schmitz in Miles City, and will send a copy to your office upon its completion. I have also sent a copy of this report by mail and have enclosed an abstract of a paper I presented at the American Fisheries Society Western Division Meeting in Telluride, CO, 16-20 July 2000, concerning my longnose sucker research in the Black Hills.

Thank you for issuing the permit; I'll be sending an application for a 2001 permit to cover my research this summer shortly.

Sincerely,

Mark D. Barnes Associate Professor

2 of 2