

I. Project Title: **Evaluation of Stocked Razorback Sucker and Colorado Pikeminnow in the Gunnison River**

II. Principal Investigator(s): Chuck McAda, Project Leader
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III. Project Summary:

The purpose of this project was to determine 1) stocking success of domestic-reared razorback sucker and domestic-reared Colorado pikeminnow in the Gunnison River, particularly fish stocked in 2002, 2003, and 2004, 2) the post-stocking distribution of domestic-reared razorback sucker and domestic-reared Colorado pikeminnow in the Gunnison River, and 3) locate razorback sucker spawning areas in the Gunnison River in the Delta area [added for 2007].

2006 Results. Two adult razorback sucker previously stocked in the Gunnison River were captured during May and 45 razorback sucker recently stocked in August 2006 were captured in late-September. Two wild adult Colorado pikeminnow were captured during the July sampling trip. Nonnative fish of interest that were collected and removed during the three sampling trips included 136 green sunfish, 2 largemouth bass, and 2 grass carp. No smallmouth bass were seen or collected.

2007 Results. Sampling commenced on May 1 and ceased on June 1 totaling 13 days. A total of 11 different razorback sucker (mean total length: 472 mm; range: 419 – 542 mm) were collected during this effort (9 female, 2 male). Seven razorback sucker were collected in this same backwater between May 7 and May 30. There was on occasion on May 25 where there was an aggregation of five razorback sucker. In this instance, these 5 razorback suckers were caught in this same backwater at RM 51.4. Only one male razorback sucker collected on June 1 was tuberculate. Of interest was the survival of these 11 razorback sucker from the time they were stocked until their recapture in 2007. Two razorback sucker had been at large for 127 months (~ 10.6 years; stocked in 1996), one at large for 96 months (~ 8 years; stocked in 1999), 6 at large between 65 and 70 months (~ 5.4 and 5.8 years; stocked in 2001), and 2 at large for 55 months (~ 4.6 years; stocked in 2002). No wild or stocked Colorado pikeminnow were observed or collected during 2007. For nonnative fishes, in 2007, 20 green sunfish were collected. No northern pike or smallmouth bass were encountered during 2007.

IV. Study Schedule:

- a. initial year: 2006
- b. final year: 2007

V. Relationship to RIPRAP:

IV. Manage Genetic Integrity and Augment or Restore Populations (Stocking Endangered Fishes)

IV.A.3. Razorback sucker

IV.A.3.b. Evaluate stocking success as identified in monitoring plans for stocked fish

IV.A.4. Colorado pikeminnow

IV.A.4.c. Evaluate stocking success as identified in monitoring plans for stocked fish

VI. Accomplishment of FY 2007 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

A. FY-2007 Tasks and Deliverables:

Task 1. Electrofish all possible riverine habitats.

Task completed.

Task 2. Analyze data; prepare annual RP report.

Task completed.

Task 3. Prepare draft and final project reports.

Task cancelled by the Recovery Program office (as per Tom Czapla); submission of the 2007 annual report will suffice for final report.

B. Findings (2007 Highlights)

General

1. Effort was initially scaled back to only 1 week in mid-May for the 2007 field sampling because effort and funds were re-allocated to the smallmouth bass removal study on the Upper Colorado River. Later consideration was given to concentrating effort in a smaller portion of the Gunnison River which might be more profitable in not only ascertaining survival of stocked fish, but collecting ripe razorback sucker and possibly locating spawning areas. Therefore, the 5-day sampling trip in mid-May that was originally planned for a 54-mile portion of the Gunnison River from Confluence Park near Delta to Redlands Dam was abandoned.

Sampling commenced on May 1 and ceased on June 1 totaling 13 days. Sampling occurred about every other day or every third day to spread the effort over a wide duration of time to increase the likelihood of encountering spawning razorback suckers. On each sampling occasion, two outboard-powered electrofishing craft were used. Sampling was performed between Hartland Diversion Dam (RM 60) downstream to RM 48.0. Sampling was intended to continue until mid-June. However, mechanical breakdowns with jet-powered electrofishing boats cancelled any additional sampling after June 1.

A total of 11 different razorback sucker (mean total length: 472 mm; range: 419–542 mm) were collected during this effort (9 female, 2 male). All razorback sucker collected had been previously stocked. One razorback sucker was caught twice and in the same backwater location (river mile 51.4) on May 7 and May 25. Seven razorback sucker were collected in this same backwater between May 7 and May 30. There was one occasion on May 25 where there was an aggregation of five razorback sucker. In this instance, these five razorback suckers were caught in this same backwater at RM 51.4. Of the other captures, one razorback sucker was collected immediately upstream of the Delta U.S. Hwy 6 & 50 bridge (RM 57.6) and one was caught in the mouth of Roubideau Creek (RM 50.3). The number and date that razorback sucker were collected during this effort were, 1 – May 7, 1 – May 9, 1 – May 11, 1 – May 18, 5 – May 25, 2 – May 30, and 1 – June 1. One male razorback sucker collected on June 1 was tuberculate. None of the other razorback sucker collected over this 1-month period expressed gametes or were tuberculate. No other aggregation of razorback sucker were located during the 1-month sampling period.

Of interest was the survival of these 11 razorback sucker from the time they were stocked until their recapture in 2007. Two razorback sucker had been at large for 127 months (~ 10.6 years; stocked in 1996), one at large for 96 months (~ 8 years; stocked in 1999), 6 at large between 65 and 70 months (~ 5.4 and 5.8 years; stocked in 2001), and 2 at large for 55 months (~ 4.6 years; stocked in 2002).

No wild or stocked Colorado pikeminnow were observed or collected during 2007. For nonnative fishes, in 2007, 20 green sunfish were collected. No northern pike or smallmouth bass were encountered or collected during 2007.

VII. Recommendations:

A. None

VIII. Project Status:

A. Project Complete. Submission of the 2007 annual report is considered the final report for this project.

IX. FY 2007 Budget Status

Note: 2/3 of the budget and effort (2 weeks) were re-allocated to RP Project No.: 126, Removal of Smallmouth Bass in the Upper Colorado River between Price-Stubb Dam near Palisade, Colorado, and Westwater, Utah, for FY-2007.

Note: a portion of the funding (\$ 14,793) from RP Project No. C-4b-GV was re-allocated to RP Project No.: 121a for FY-2007 to sample the Gunnison River from Hartland Diversion Dam to the mouth of Roubideau Creek looking for ripe razorback sucker with the intent of locating spawning areas.

A. Funds Provided: \$ 14,973

B. Funds Expended: \$ 14,973

C. Difference: \$ -0-

D. Percent of the FY 2007 work completed, and projected costs to complete:
100%.Recovery Program funds spent for publication charges: \$ -0-

- X. Status of Data Submission (Where applicable): All razorback sucker captured during 2007 were checked for a PIT tag. All 11 razorback sucker had 400 khz PIT tags that were detected; two fish already had an additional 134 khz PIT tag. Nine of these 11 fish were implanted with 134 khz PIT tags. The following data were collected from all T & E fish prior to their being released: total length (mm), weight (g), reproductive condition, and date and location of capture. These data have been computerized. These completed, computerized data will be provided to the UCRB database coordinator upon his request.

XI. Signed: Bob D. Burdick 10/23/2007
Principal Investigator Date

APPENDIX:

- A. More comprehensive/final project reports. If distributed previously, simply reference the document or report. None

Prepared and compiled by Bob D. Burdick, 10/23/2007
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