

POSTER PRESENTATIONS

TRAMMEL NET EFFICIENCY FOR JUVENILE PALLID AND SHOVELNOSE STURGEON ^{AFS}

Eric W. Oldenburg, Paul C. Gerrity, and Christopher S. Guy
Montana Cooperative Fishery Research Unit
Department of Ecology, Montana State University
301 Lewis Hall, Bozeman, MT 59717
cguy@montana.edu

William M. Gardner
Montana Fish, Wildlife, & Parks
P.O. Box 938
2358 Airport Rd., Lewistown, MT 59457
bgardner@state.mt.us

Pallid sturgeon (*Scaphirhynchus albus*) and shovelnose sturgeon (*Scaphirhynchus platorynchus*) have declined throughout the Mississippi River basin because of anthropogenic habitat alterations. To accurately document continued decline or recovery of sturgeon (*Scaphirhynchus* spp.), the efficiency of sampling these species needs to be evaluated. Drifting trammel nets are considered to be an important tool for sampling sturgeon in lotic systems. However, little information exists on the efficiency of drifting trammel nets for sampling sturgeon. Thus, our objective was to evaluate the efficiency of drifting trammel nets for sampling juvenile pallid sturgeon and shovelnose sturgeon. In July and August of 2003,

we attempted to recapture 10 radio-tagged juvenile pallid sturgeon and shovelnose sturgeon in the Missouri River above Fort Peck Reservoir. After a radio-tagged fish was located, a trammel net was deployed 75 m upstream and retrieved 45 m downstream of the fish location. A maximum of four drifts were attempted at each location. Overall efficiency was 35 percent; whereas, first drift efficiency was 40 percent, second drift efficiency was 50 percent, and all remaining drifts were unsuccessful. Capture efficiency was 60 percent when combining the first and second drifts. Stepwise logistic regression was used to model the probability that a drift would not capture a sturgeon. However, none of the abiotic variables were significant ($P > 0.05$) in the logistic regression model. Nevertheless, these results suggest that drifting trammel nets are a relatively effective sampling gear for pallid sturgeon and shovelnose sturgeon.