

PALLID STURGEON PROPAGATION AT MILES CITY STATE FISH HATCHERY ^{AFS}

Mike Rhodes
Montana Fish, Wildlife, and Parks
Miles City State Fish Hatchery
Miles City, MT 59301

Pallid sturgeon were put on the endangered species list on September 6, 1990. In an effort to supplement and restore this species, the USDI Fish and Wildlife Service, through its Garrison Dam and Gavins Point National Fish Hatcheries, began capturing adults for egg collection and culture, with the intent of future releases back into the Missouri River below Fort Peck Reservoir. In December 1998, the Missouri River iridovirus was detected at both of the federal facilities and they had to be quarantined and the fish destroyed. In order to continue the culture of pallid sturgeon, the Miles City State Fish Hatchery was asked to participate in the recovery program. In April 2001, six adult sturgeon (2 female, 4 male) were collected from the Missouri River and transported to the Miles City hatchery. One female and two males were put into each of two 12-ft circular tanks. During June, weekly egg samples were collected and staged for development. On 25 June, it was determined that the eggs were at optimum condition, so both the males and females were injected with LHRH, with the females getting a second injection the following day. Green eggs were detected in the tank approximately 24 hours after the first injection. Milt was pre-collected the morning of 26 June and spawning began at 6:00 pm, continuing at 2-hour intervals until 6:00 am the following morning. All eggs were coated with Fuller's Earth and put into incubation jars. A total of 235,000 eggs were collected with an average eye-up rate of 95 percent. All eggs had hatched by 1 July and were transferred to 6-ft circular rearing tanks on 5 July. Due to handling stress, no initial inventory was taken that day. In mid-July a severe parasite infection occurred, causing high mortality. These fish were started on a dry diet, Biodiet #1 starter and have progressed to 1.5 mm pellets. These fish are currently 5 to 6 inches long and are free of any iridovirus. They are scheduled to be planted back into the Missouri River in August.