

Trumpeter Swan Iowa to Arkansas migration experiment 2008-2010



DNR trumpeter swan restoration coordinators Ron Andrews (left) and Dave Hoffman prepare a young swan for its journey to Arkansas. Individually numbered green neck collars will aid scientists in keeping tabs on the huge birds as they travel the flyways. LOWELL WASHBURN/Iowa Department of Natural Resources.

Summary: Many Trumpeter Swans have no experience migrating. Knowledge of routes, potential safe resting areas along the way and wintering areas are learned from parents. Restoration flocks don't have this traditional information.

Iowa DNR, Arkansas Game & Fish Commission (AGFC) the National Park Service, the U.S. Fish and Wildlife Service, Gorgas Science Foundation and TTSS teamed up in January 2008 to initiate a three year experimental migration project. The Iowa DNR relocated 8-month old free-flying trumpeters from Iowa sites to two locations in northwestern Arkansas: Buffalo River National Park and Holla Bend National Wildlife Refuge. The swans were marked with collars assigned to the Iowa Trumpeter Swan restoration program and released in sibling groups beginning in January 2008.

For 2 years, they were released at Holla Bend National Wildlife Refuge and on the Buffalo River National Park. The third year there was one release on the refuge. A total of 51 Trumpeter Swans were released over the 3 years. All have been marked with green collars with a three-character code that can be used to identify an individual. All have corresponding leg bands as well as standard USGS metal leg bands.

Now released in Arkansas' milder winter terrain, it is hoped they will imprint on this area as well, before spring restlessness leads them off to wing their way north. We hope these members of a growing Interior Population of Trumpeters will establish a migration between Iowa and Arkansas.

Trumpetings July 2007- How the project began

INTERIOR POPULATION NEWS

Mississippi Flyway and Technical Session approves migration experiment – At its July 2007 meetings, the Mississippi Flyway and Technical Session approved a 3-year experiment proposed by TTSS and the Iowa DNR to expand Midwest migration beginning in winter 2007/08. Approval was granted to move 20-25 trumpeters per year from Iowa to Arkansas

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Scientists are using reverse migration imprinting to introduce young birds that have never migrated into the state and let them use their instincts to return to Iowa. Birds produced in the wild have the benefit of families that stick together through the winter, and the adults lead the way south. Scientists hope the birds released this year, 2008, will migrate back to Holla Bend Refuge in the fall.

The first winter swan release

In February 2008, Iowa DNR captured 18 free-flying cygnets and connected with the Arkansas Game and Fish Commission (AGFC) to release these swans on the Buffalo River National Park and the Holla Bend NWR. northwestern Arkansas: Buffalo River National Park in Boxley and Holla Bend National Wildlife Refuge near Dardanelle. The theory was that because these cygnets had gained their compass readings in Iowa before they were released in Arkansas, they would migrate back to Iowa by early summer, molt in Iowa, and return to Arkansas in fall. The goal is to have the Arkansas River Valley as a place to come in the winter.

The swans made a road trip in crates all the way from Iowa to be released on the Holla Bend Refuge.

Volunteers from three conservation agencies released 13 juvenile trumpeter swans into an icy slough just off the Arkansas River. On Wednesday, the Arkansas Game and Fish Commission and the Iowa Department of Natural Resources also released five swans in the mill pond at Boxley Valley near the Buffalo River. The U.S. Fish and Wildlife Service participated in the Holla Bend release. Several were spotted in late spring 2008 in exploring in Madison County, Arkansas. Most of the Holla Bend-released swans had found the Boxley released swans – from over 100 miles away!

Karen Rowe, Arkansas Game and Fish, said the project's cost to Arkansas citizens is minimal, aside from the money the AGFC has spent on neck and leg bands for the swans. Iowa has absorbed most of the cost, which Andrews estimated to be more than \$1.5 million over 12 years.

"The public's contribution in Iowa has been phenomenal," said Ron Andrews, Iowa Department of Natural Resources, succumbing to a fit of alliteration. "The public's powerful passion is propelling the project forward, and we're 'trumpeting' the cause of wetlands conservation."

Iowa to Arkansas migration experiment - 2nd winter release – On February 17, 2009, Ron Andrews and Dave Hoffman, Iowa DNR Trumpeter Swan Restoration Program, along with the Arkansas Game and Fish Commission (AGFC) and the National Park Service released four full-winged cygnets at the Buffalo River National Park and 11 cygnets at the Holla Bend National Wildlife Refuge in northern Arkansas. This was the 2nd year of a planned 3-year release.

Iowa Releases Trumpeter Swans Third Year at Holla Bend NWR



Iowa Swans in Release Pen Await Journey to Arkansas in 2010

On February 10, 2010, Ron Andrews of the Iowa Department of Natural Resources led a parade of cars from the Visitor's Center at Arkansas' Holla Bend National Wildlife Refuge (HBNWR) to a release site near the Arkansas River on the refuge. He looked pretty fresh, considering he and Dave Hoffman, DNR Wildlife Technician, had chauffeured a rowdy crowd of 1st-year Trumpeters down the Interstate Highways the previous day from Iowa. Sixteen Trumpeter Swans met 16 citizens willing to help with this third release of Trumpeters as part of a migration experiment.

2011 Update on the Arkansas-Iowa swan migration experiment

Green collar 1P1 and mate were observed at Beemer's Pond near Webster City, IA on Nov 27th 2010, then at Magness Lake, AR on Jan 14, 2011. 1P1 is a 2007 hatch year female from Lake Wapello State Park released at Holla Bend NWR (6 S Dardanelle, Arkansas) on 1/24/2008.

Additional swans left Beemer's pond during the same time period when the winter snow and cold set in. It is hoped that the departing swans were led south to Arkansas by an experienced traveler, IP1, and were able to learn new migratory routes.

Birds produced in the wild have the distinct benefit of parental guidance. Swan families stick together through the winter and when weather finally forces a migration, adults lead youngsters south, following the same pathways the older birds have already flown. By contrast, captive reared youngsters are on their own.

Ron Andrews explained, "When wetlands freeze tight, they're forced to sort things out by themselves. Decisions are critical and must be made quickly. Without knowing where to go, many of those young swans end up in trouble.

"The whole purpose of the Arkansas experiment is to increase the survival of young swans raised from flightless (captive) breeders," said Andrews. "Until recently, these 16 young swans have been free flying in the vicinity of the wetlands where they were raised by captive, wing-clipped parents. Those free flights have hopefully fine-tuned their inner compass and will guide the birds back north next spring.

"Once they successfully complete the first round trip, the route will be permanently stored in their memory. As those birds become adult breeders three or four years from now, they'll be able to show their own young the safest way south."