

Whooping Crane Migratory Reintroduction Project

Fall Migration Frequently Asked Questions

1. Why do the cranes have to be taught to migrate?

Cranes learn the migration route from the previous generation. Chicks hatched on the nesting grounds learn to fly with their parents, following them in the fall to the wintering grounds. Their destinations and the route they use may have evolved for thousands of years but it exists only in the memories of the birds that use it. If all individuals of a species are lost from a region, the route is lost forever. Birds that are raised in captivity lack an older generation to teach them and they tend to become resident, staying the entire year in the same location.

2. Why use ultralights to lead the birds?

Several methods have been used in an effort to reintroduce birds in a migratory situation. Whooping crane chicks have been placed with adult sandhill cranes in a cross-fostering program. Birds have been conditioned to follow handlers in a truck and led along a predetermined route. Also, birds have been released with a similar wild species prior to migration in hopes they would follow them south. In another study, cranes were transported to a staging area and allowed to fly free. They were then recaptured and moved farther south and again released. This was repeated along the entire route in hopes the birds could connect-the-dots during the return migration. All of these methods have resulted in varying degrees of success but none have been as viable as the ultralight-led technique. It most closely replicates the natural process of a parent leading the offspring south. Ultralights are the only type of aircraft that can fly slow enough (and not stall) to enable birds to follow. Operation Migration, Inc. has conducted several migration studies with three species of birds and worked with the Patuxent Wildlife Research Center to establish the protocol that would be used to reintroduce whooping cranes into eastern North America.

3. How do you train the cranes to follow the ultralight?

The process is based on the bird's natural instinct to imprint. Once hatched, the chick is attracted to the first creature that nurtures it, normally the parent. This is nature's way of ensuring the offspring stays close and is protected by the adults. The procedure we follow replaces the parent bird with the handler and so the birds imprint on the surrogate parent. Prior to hatching, a recording of the aircraft engine is played to the chicks. They are introduced to the ultralight at about seven days of age and they soon associate it with the handler. The birds are not trained to follow the aircraft; instead they are conditioned to it as an extension of the handler. After they arrive on the wintering grounds and reach the sub-adult stage, they become independent (much like human teenage offspring) and they no longer look to the handler and aircraft for security and comfort. Unlike training, the conditioning diminishes with maturity.

4. Will ultralights lead the cranes back in the spring?

The cranes learn the migration route during the trip south. In the wild they often leave the parent birds during the course of the winter, yet still return to the summering area in the spring. Based on previous research with sandhill cranes, a closely related species, whooping cranes are expected to migrate back to Wisconsin on their own, the next spring.

5. Will all of the whooping cranes chicks that participated in the summer training be included in the migration? If not, why?

Due to the unique biological make-up of whooping cranes, and the very nature of working with wild animals, we fully anticipated the possibility of not completing the migration with the full cohort of cranes. When preparing for migration, the birds underwent rigorous flight and "wild behavior" training. Over the course of the summer, they were continuously evaluated for suitability for the 1,250-mile migration, living in the wild, and migrating back unassisted in the spring. Each crane was judged on its own merit. Those that begin the migration were selected for the study based on overall suitability for insuring success. Using these cranes allows researchers to best focus their attention and learn from the best individuals in the study. It would be great if all the cranes that were hatched initially for this project could ultimately be

part of the final wild migratory population, but that is not likely, or realistic. We are striving to develop a strong wild migratory population and therefore only the fittest, healthiest, most suitable cranes can be used for this extraordinary task.

6. What is the likelihood of a crane not completing the migration?

The birds will be monitored and evaluated daily during migration to ensure good health and well-being and continued suitability for the journey. There will also be personnel on site in Florida to monitor their progress. As many details as possible have been anticipated and planned for in advance to ensure as smooth and safe an existence from hatching, through migration and to life in the wild. However, circumstances may arise that would result in a crane no longer being able to participate in the project. Contingency plans are in place for any crane that might not be able to complete the training, migration, or adaptation into wild existence.

7. When whooping crane populations declined, what were the long-term implications to the species overall?

When whooping crane populations declined in the 1940's, half to two-thirds of DNA diversity was lost in the bottleneck. This reduction in genetic matter isn't setting the entire species up for an inevitable "crash," but it does perhaps reduce the adaptability of whooping cranes in general and makes breeding them in captivity much more difficult.

8. What are differences the Team has noticed between sandhill and whooping cranes?

Whooping cranes are closely related to sandhills, but they are an entirely different species. They are less accepting of change, more observant and are edgier. Physically they grow faster than sandhills, while maturing slower. They are particularly prone to handling injuries as they have longer legs, larger wings and more elongated necks.

9. How can you be sure that these birds will remain wild once they reach Florida?

Every effort has been made to insure they are as wild as they can be. The cranes have been reared in adherence to a strict isolation protocol: they have not heard a human voice, they have never seen a human that wasn't in costume, actual recorded crane calls were used to communicate with them, and the time spent with project biologists was kept to a minimum. Isolation Rearing has worked effectively in the past to produce cranes that are wild, avoid humans, and select proper habitat. There are risks associated with any undertaking involving wild animals. In this case, a team of people with a broad range of expertise has been working together to evaluate and refine all phases of the project.

10. What role do state wildlife agencies have in the states along the migration route?

Our state wildlife agency partners work to help us identify stakeholder concerns related to the project, propose migration stopover locations and help coordinate the migration with private and public landowners. Some of the migration stopover locations are located on prime state-owned wildlife lands. States are kept fully informed of progress made by the migration team and State staffs often are onsite to assist the migration team as the birds and planes flew through their State. Prior to starting this study the Whooping Crane Eastern Partnership obtained the support and approval from all the seven states in the immediate fly way, as well as the thirteen bordering states and two Canadian provinces.

11. Will people be able to watch or view the cranes during the migration?

During migration it may be possible to see the birds from a distance when they land or take off from an overnight location. But the need to keep the cranes isolated from humans means that all efforts are taken to keep people out of the birds' range of vision. No one - not even project leaders or participants - would be allowed to approach the birds. The ultralight pilots take measures to ensure that they are never seen out of costume by the birds, even while they are flying. In addition, video footage and still photographs of the flights and the birds would be available to the public through the news media, on the Whooping Crane Eastern Partnership website, and on the websites of the individual organizations that are part of the Partnership. And the public will be able to track the birds' progress by visiting the WCEP website <http://www.bringbackthecranes.org>

12. Who is the Whooping Crane Eastern Partnership?

The Whooping Crane Eastern Partnership is a consortium of people representing a wide variety of private organizations and public agencies working to reintroduce a migratory flock of whooping cranes back into eastern North America. The ultimate goal of the project is to reintroduce enough birds to the flyway to establish a self-sustaining flock containing at least 25 adult breeding pairs.

Founding members of the Whooping Crane Eastern Partnership are the International Crane Foundation, International Whooping Crane Recovery Team, Operation Migration Inc., National Fish and Wildlife Foundation, Natural Resources Foundation of Wisconsin, U.S. Fish and Wildlife Service, USGS/Patuxent Wildlife Research Center and Madison Wildlife Health Center, and Wisconsin Department of Natural Resources. Many other flyway States, provinces, private individuals and conservation groups have joined forces with and support WCEP by donating resources, funding and personnel.

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