

The Raptor Resource Project

1998 Mississippi River Hack Site Report

Purpose	To return the Peregrine falcon to its natural habitat on the cliffs of the Mississippi River and its tributaries.
Personnel	Robert Anderson, <i>Raptor Resource Project Director</i> John Dingley, <i>Raptor Resource Project Member</i> Dave Kester, <i>Raptor Resource Project Member</i>
Location	Effigy Mounds National Monument, Allamakee County, Iowa.
History & Detail	<p>Nine falcons were released from Hanging Rock at Effigy Mounds National Monument. Eight peregrines (four males and four females) were captively produced by the Raptor Resource Project and one was rehabilitated from a Raptor Resource Project nest box in Minneapolis, Minnesota.</p> <p>Five of the nine peregrines released from Effigy Mounds were raised inside a natural eyrie constructed of wood, stone, and pea gravel. This chamber was built in an attempt to imprint Peregrines to nest on cliff face. Although Peregrines are successfully nesting in much of the United States, the population in the Midwestern and eastern United States is almost entirely urban/industrial. Research and experience led us to believe that nest-site imprinting was and is playing an important role in determining nest-site selection; therefore, the chamber was built to resemble a cliff in the belief that birds raised inside the chamber will select cliff face to nest on as adults.</p> <p>The hack began on July 18th, 1998, when the five Peregrines raised in the natural eyrie were put into one of two hack boxes. Four more Peregrines were added to the hack site on July 22nd. The young Peregrines roosted around the boxes following the first few days of the release. After one week on the wing, they gathered at the site in the evening, but roosted elsewhere.</p> <p>Two females and two males were wearing tarsus mounted 30-day two-stage lithium-powered transmitters held on with cotton thread, designed to fall off. Once on wing, the young Peregrines moved up and down the valley almost immediately. After one week, the Peregrines were ranging across the river to the Wisconsin side. By the middle of August, observers had witnessed Peregrines chasing away Osprey and taking birds in flight. Fortunately, there was not much need to track the young falcons with telemetry as, each evening, all falcons were accounted for. Telemetry did tell us when the young birds began to wander from the hack site.</p> <p>On August 20th, John Dingley, Bob Anderson, and raptor biologist Bob Chapman placed the quail at the hack site and then retreated to the observation point. Within a very short time, eight individual falcons were observed feeding on the hack boards. This was a full 33 days after release of the first five falcons and 29 days</p>

after releasing the second group. Our observation of eight of the nine released falcons alive and well after a month on the wing confirmed that this Mississippi River cliff release was a huge success.

**General
Evaluation of
the Site**

Hanging Rock is a small cliff protruding from the top of the Mississippi River valley, some 450' above the river below. Overlooking the entire river valley, Hanging Rock served as a prominent landmark for wayward falcons on their early flights, preventing falcons from becoming lost. This hack site is also in the immediate vicinity of many of the historical cliffs where the Peregrine once nested in Minnesota, Wisconsin, and Iowa.

The surrounding mature forest throughout the park is not ideal habitat for the Great Horned Owl. Park Manager Rodney Rolvang surveyed for owls during the owl-breeding season prior to the release. He located a single owl out on the islands in the River and another single bird a few miles to the north. The scarcity of owls confirmed that Great Horned Owl predation should not be a limiting factor at this site.

Recommendations

In accordance with Dr. Tom Cade's advice in Cade's *"Guide to Management of Peregrine Falcons at the Eyrie"*, we believe the time has come to translocate young falcons produced in Project nest boxes located at power plants. Our plan is to obtain the required permits to transplant 10-15 young falcons to the cliff release site. Based on past experience, we can safely hack young birds at a site for two years before returning alumni become aggressive towards new releases, forcing the shut down of the release site. For this reason, we should make every effort to see that 1999's release includes as many falcons as is possible.

Unusual Incidents

There were really no unusual incidents to speak of, although it is worth mentioning that a mosquito hatch four days after the release left hack site personnel drained nearly dry. At first we started applying natural repellents but quickly switched to 100% Deet. Even then, we experienced tremendous losses of blood.

Acknowledgements

There are many people who participated in release, but the Raptor Resource Project would like to acknowledge in particular John Dingley and Dave Kester. Without their boundless enthusiasm and energy, this release would not have happened. John and Dave spent many hours building the natural eyrie, attending the hack, and observing and feeding birds.

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