The Raptor Resource Project 1999 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, Raptor Resource Project Director John Dingley, Raptor Resource Project Member Dave Kester, Raptor Resource Project Member			
Location	Effigy Mounds National Monument, Allamakee County, Iowa.			
History & Detail				
	All falcons were herded behind the blind in the hack boxes for each feeding. As we prepared to leave the site, we would open the hide door and allow the young falcons to emerge and find garnished hack boards. We found that this method greatly reduced falcons from bolting prematurely when first released and allowed us to daily clean the hack box of prey remains.			
	A young tiercel from the first year's release was found dead this summer, most likely the victim of a car, at the foot of a LaCrosse cliff. We will be watching this area closely next spring for signs of nesting by falcons released in 1998.			
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. Great Horned Owl predation has not caused any problems at this site, although the 1999 hack was disturbed by Bald Eagles and a Red-tail hawk, as is described later on in this document.			

Recommendations	The Project plans to continue to work on returning Peregrines to the cliffs of the Mississippi river, although we will be changing our focus somewhat. Just this summer, 34 Peregrine chicks fledged from utilities located on the Mississippi river. We believe that this population can be directed to the cliffs through the placing and eventual removal of nest boxes on cliff face.		
	This method is efficient, inexpensive, and does not require the removal of chicks from the nest, as did the transfer of chicks from utilities we originally proposed. After a Peregrine pair occupies a cliff nest box for a period of two to three years, the box will be removed. It is our belief that, in a location with suitable nesting spots, Peregrine parents will subsequently migrate to the cliff. A very similar process was used to successfully return Peregrines to trees in Germany and we believe that it will work here as well.		
	Our experience at the hack site has led us to believe that raccoons might be a bigger threat to chicks than Great Horned Owls are. Any nest boxes and subsequent cliff nesting locations must be as free from the threat of raccoon predation as is possible.		
Unusual Incidents	The first group of falcons was released early on the morning of July 13, 1999. All four emerged and fed without bolting. Just two hours later, two immature Bald Eagles appeared, soaring only a few feet above the young falcons. One tiercel took flight. He circled approximately 100' above the hack site and then drifted off to the west. This tiercel, <i>Coleman</i> (C/Y), was trapped and released by Brett Mandernack at the old Eagle Valley Nature Center near Cassville, Wisconsin, on September 30 th .		
	On the morning of July 16, 1999, five falcons were turned loose from the second hack box. All five emerged and fed without bolting. Later that afternoon, a very pallid haggard Red-tail hawk stooped out of a soar and knocked one of the young falcons off of its perch. We did not see what happened to the young falcon since we followed the Red-tail to see whether it was carrying the falcon away. Fortunately, there was no falcon in its talons and we did not see any feathers drifting down the cliff face.		
	Since we had just turned loose the falcons, we could not go immediately to check on the downed falcon without bumping the remaining young birds into premature flight. When we began regular feeding two days later, I was able to sneak through the woods below the hack site. The falcon had roosted on a small rock, then moved to a larger boulder near the cliff, and finally to a tree. I was relieved. Both sets of falcons survived their encounters with birds of prey.		
	On July 22, 1999, one of the young falcons was observed with all but the two outside tail feathers missing. Dave Kester and I do not believe that this was the same bird we saw hit by the Red-tail six days earlier, since the bird with the missing tail feathers was a female and we thought the bird hit by the Red-tail was a tiercel. The young falcon with the missing tail feathers continued to return to the hack site for several weeks. Interestingly, she was only observed at the hack site every other day.		

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SEX	HATCH	USFWS BAND	COLOR BAND	NAME
male male	5/25/99 5/31/99	2206-35839 2206-35840	C/Y E/Y	Coleman J.D.
male	6/1/99	2206-35841	E/K	Dan'l
female	6/5/99	1807-53918	X/B	Pat
female	6/5/99	1807-53919	W/Y	Eliz
male	6/4/99	2206-35846	E/S	Brocken
male	6/4/99	2206-35842	D/E	Gunnar
male	6/7/99	2206-35843	D/T	Billy
male	6/7/99	2206-35844	D/P	Mac