



Matt Varner, NPS, left, and Jack Wallace, DNR, carefully prepare to release a young nestling into the backing box.

Biologists with the Division of Natural Resources and National Park Service (NPS) are "hacking" peregrine falcons within New River Gorge National River as part of a multi-year restoration program for the species.

"Hacking is the process of placing young falcons in a structure and caring for the birds in a manner that minimizes human exposure until they are mature enough to fly," explained Matt Varner, NPS wildlife biologist.

"The artificial aerie or hack box simulates nesting and feeding conditions on steep rock cliffs. Prey is dropped into the box through a tube so the birds don't see or associate people with the food. This cage-like structure also protects the birds from predators during the pre-flight period while allowing them to get used to the Gorge. They are released from the box when they are ready to 'fledge' (fly), but will return for occasional feedings until their hunting skills allow them to survive on their own."

Peregrine falcons began to decline in the 1950s because of pesticide use, which disrupted eggshell formation and led to nest failure. "The species was officially listed as federally endangered from 1970 until 1999 when recovery objectives were met in most regions. However, peregrine falcons are still very rare in the central Appalachian region and only one pair of peregrines is known to be nesting in West Virginia this year," said Jack Wallace, DNR wildlife biologist.

To begin the restoration project at New River Gorge Na-

tional River, young birds were taken from nests built on bridges in Virginia, New Jersey or Maryland. They are excellent candidates for hacking because of the poor survival rates of chicks reared



The hack box was built by Dave Summerfield, Rodger Channell and Roy Morrison in the DNR Elkins office

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in bridge nests due to premature fledging over open water and collisions with vehicles. Hacking experts from the Center for Conservation Biology at the College of William and Mary in Williamsburg, Virginia removed the chicks from the nests and helped shuttle the nestlings to West Virginia.

"We are also indebted to employees at Shenandoah National Park and the Virginia Department of Game and Inland Fisheries.

They have went out of their way to expedite the transport of the birds from Virginia to West Virginia," emphasized both Varner and Wallace. "When the young falcons were introduced in the Gorge this summer, biologists, rangers and volunteers staffed a daily feeding and observation schedule. The Three Rivers Avian Center and the Access Fund also provided assistance."

"It is extremely important that people *not* try to find the hack site. Human activity within view of the birds could expose them to increased stress or result in the falcons associating humans with food. Either scenario could compromise their survival. Instead, we ask that people visit the park's website at http://www.nps.gov/neri, where photos and updates will monitor the birds' progress," Varner explained.



The bands on these fledglings provide essential identification information.

This is the second peregrine hacking project in the New River Gorge in West Virginia. In a four-year project initiated in 1987, the DNR and The Peregrine Fund, with the assistance of NPS personnel, released several young falcons in the Gorge. That project, however, did not result in nesting peregrine falcons in the area. If all goes well, this project will reintroduce a larger number of young birds and increase the potential for success.

Relying on experience that William and Mary staff has gained after dozens of releases in Virginia since the mid-90s, over 45 birds may be released at New River Gorge in the next 3 to 5 years. Fifteen birds

were released in 2006. Hacking in Virginia has been successful, and adult peregrines are now nesting on cliffs in Shenandoah National Park where live webcam images of the nest can be seen on the Internet at http://www.nps.gov/shen/cams/.

"Our ultimate goal is for the released birds to become imprinted on the New River Gorge and, once they are sexually mature, to return here to nest. The returning falcons may also attract other migrating falcons, allowing the gorge to become a center of peregrine falcon nesting activity and a source of falcons to recolonize other portions of their historic range in the central Appalachian region," said Wallace.





DNR wildlife biologist Jack Wallace, left and New River Gorge National River Chief Ranger Gary Hartley observe the falcons on a cliff. On right, four fledglings sit high above the New River at their new home.