BROOKHAVEN NATIONAL LABORATORY Site Environmental Report 2019 VOLUME 1

Despite being found on nearly every continent and being the fastest diving bird in the world, the peregrine falcon (*Falco peregrinus*) was once nearly extinct in the mid-19th century. From the 1940s to the 1970s, peregrine reproduction took its own steep decline due to the widespread use of devastating pesticides such as Dichlorodiphenyltrichloroethane (DDT) which caused hatchling eggshells to thin. As a result, this majestic and fabled bird of prey (i.e., raptor) was listed as U.S. federally endangered.

Thanks to a combination of conservation efforts, such as the release of young captive birds, nesting management, and the banning of DDT and other chemical pesticides, the population of peregrine falcons has gradually increased in the United States and Canada. While it was removed from the federally endangered list in 1999, it maintains this status in New York State.

According to the New York State Department of Environmental Conservation, peregrine falcons have made a resurgence in a variety of habitats in the state, and true to their nature to nest in high-altitude locations, have been found commonly nesting on bridges and building ledges in and near a number of major New York cities, as well as along cliff ledges in the Adirondack mountain region.

Peregrines will utilize other birds' nests when available, just as a pair of peregrines did on the Brookhaven National Lab site when they forced common ravens to abandon their nest on the High Flux Beam Reactor (HFBR) stack in 2019. This pair of peregrines produced two to three offspring.

One or two peregrines had been observed around the HFBR stack in 2017 and 2018 but no nesting was confirmed at that time.

In 2020, authorized Laboratory staff removed the ravens' nest to discourage the peregrines from nesting due to planned demolition of the stack. Since that time, a couple of falcons have been seen in the area, one of which may have been an immature bird from the previous summer.

The subject of this year's Site Environmental Report cover was taken by Lab employee Rodger Hubbard, who surveys and aligns components in the National Synchrotron Light Source-II Accelerator Division.

Hubbard observed the bird at "the entrance to the picnic area in an old oak tree that was recently trimmed. He had just finished a meal of a wood duck which I missed but found the remains."

As raptors, peregrines are known to capture their prey while soaring high then diving precipitously or knocking prey out of the air and feeding on it after it falls to the ground.



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