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The Center for Conservation Biology completes cliff surveys of the southern Appalachians

A complete report of the systematic survey of cliff surfaces conducted by the Center for Conservation Biology in cooperation with the Fish and Wildlife Service and the National Park Service has been completed. The survey covered a significant portion of the southern Appalachian Mountains including nearly all of the mountains of Virginia a small portion of Kentucky, and the spine of the Appalachians in West Virginia. During the course of helicopter flights, 242 exposed rock surfaces were mapped, characterized, and surveyed for bird use. Cliffs had a combined length of 122.4 km and a combined area of 470 ha. More than 25% (118 ha) of the collective rock surface that was mapped was occluded by vegetation.

Eleven bird species were observed using cliff faces during aerial surveys. Birds were either roosting/loafing or nesting. Cliffs appear to represent prominent roosting sites within the landscape for several bird species. Vultures were observed roosting on 124 (51.2%) of the 242 cliffs surveyed with an additional 54 (22.3%) cliffs with characteristic whitewash. Nests of 5 species were detected on cliffs including Common Ravens (35), Turkey Vulture (2), Peregrine Falcon (1), Red-tailed Hawk (1), and Great Horned Owl (1). Common Ravens and Red-tailed Hawks built stick nests on the cliff surface or within overhangs while Turkey Vultures, Peregrine Falcons and Great Horned Owls were nesting within crevices or overhangs.

Given the distribution of historic breeding sites, the release of nearly 250 young falcons in the mountains, the growth of the population in coastal Virginia, and the recovery of breeding populations within the northern Appalachians, the near absence of Peregrines from the study area was surprising. Close examination of historic eyries suggests that the re-growth of vegetation around cliffs may have played a role in the lack of activity. Intense recreational use of the most prominent formations may have also played a role. It is also possible that the previous approach to hacking in the study area may have been inadequate to establish breeding pairs within this landscape.

One of the benefits of the systematic approach used in this survey is the documentation that exposed rock surfaces are not evenly or randomly distributed throughout the study area. The survey allowed for the delineation of 6 geographic areas that contain dominant rock formations that will not be degraded over time by vegetation and multiple surfaces that appear appropriate for nesting. Because of their qualities, these areas should represent priorities in the reintroduction, management, and monitoring of the Peregrine Falcon population. Over the next decade, efforts should be made to re-establish nesting pairs within all 6 of these sites so that they may serve as "nuclei" for re-colonization of this portion of the southern Appalachians.

CCB is interested in any sightings of adult Peregrines in the mountains from March through July and young-of-the-year during June and July. To learn more about Peregrines in Virginia visit the VAFALCONS page at <http://www.ccb-wm.org>.

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