Birding on DoD Lands: Eglin Air Force Base, Florida

by Lori Blanc and Chris Eberly

The southeastern United States was once dominated by vast expanses of longleaf pine savanna, a fire-adapted ecosystem thought to have encompassed as many as 92 million acres from southeastern Virginia to eastern Texas. Conversion of longleaf pine forest for agriculture, timber plantations, and urban development have left only about three percent of this extensive ecosystem; fire suppression has degraded most of this remainder. Longleaf pine ecosystems are among the most species-rich plant communities in the temperate world. But due to loss and alteration of this habitat, approximately 190 taxa of vascular plants and 56 animal species have become increasingly rare, threatened, or endangered.

Some of the best remaining longleaf pine forests and associated avian and plant diversity can be found in the Florida panhandle. Located in Okaloosa, Santa Rosa and Walton Counties, Eglin Air Force Base (AFB) is the largest forested military reservation in North America and one of the largest conservation areas in Florida. As little as 0.5 percent of old-growth (150-300 years old or more) longleaf pine forest remains globally, and Eglin’s sandhills contain more than ninety percent of it. The Nature Conservancy has recognized Eglin as an area of global significance for biodiversity; Eglin has also been named an Important Bird Area by both the American Bird Conservancy and Audubon of Florida.

The Florida panhandle ranks among the top areas in the U.S. for number of limited-range species, and Eglin itself contains one of the highest concentrations of rare species in the region: 93 rare or listed plants and animals of conservation concern, 63 of which are considered globally rare. It should come as no surprise, then, that Eglin also ranks among the most significant areas for bird conservation in the Southeast. Although not a major neotropical migrant stopover site, Eglin boasts a checklist of 335 native species of birds, second in Florida only to the Everglades. It has 121 confirmed breeding species and 14 federally or state-listed ones, including the endangered Red-cockaded Woodpecker (Eglin features 309 active breeding clusters and more than 6,000 cavity trees used by this species). On the recently released U.S. Fish and Wildlife Service list, “Birds of Conservation Concern 2002”, 34 of the 45 species of concern in the Southeast Coastal Plain occur at Eglin.

History

At the beginning of the twentieth century, approximately one-third of what is now Eglin AFB was privately owned. By 1908, much of this land had been acquired by the U.S. Forest Service as Choctawhatchee National Forest, to be used for the production of naval stores, turpentine, and timber. Eglin Field was established in the 1930s as an armaments testing facility for the Army Air Corps. In 1940, Choctawhatchee National Forest was transferred to the military for use as an Air Force base. Today, the Air Arma-

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Partnerships

Eglin’s Integrated Natural Resources Management Plan contains four principle goals: (1) Support and enhance military mission flexibility and success through sound stewardship practices; (2) In a manner consistent with the military mission, conserve native biodiversity by restoring and maintaining Eglin’s ecosystems with particular emphasis on prescribed fire and water quality; (3) Provide a variety of uses, values, products, and services to present and future generations while maintaining sustainable ecosystems; and (4) Engage in collaborative stewardship with a greater diversity of people both on and off Eglin Air Force Base. The last goal has led to partnerships with 12 universities, 11 local fire departments, and at least 35 other partners, including state and federal agencies and non-governmental organizations.

The Gulf Coastal Plain Ecosystem Partnership (GCPEP) is Eglin’s most important conservation partnership. Its members operate under a 1996 memorandum of understanding affecting more than 850,000 acres in northwestern Florida and southern Alabama. Known for its longleaf pine forests, the Partnership area is also one of the most critical freshwater sites in the United States, encompassing outstanding examples of wetland, riverine, and estuarine systems. The successful initial GCPEP project developed cooperative conservation strategies to protect upland longleaf pine ecosystems, increasing use of prescribed fire to stabilize populations of Red-cockaded Woodpecker and advance restoration of thousands of acres of longleaf pine habitat.

The Nature Conservancy (TNC) has been one of Eglin’s most important conservation partners since 1990, assisting with collection of biological data, management of planning workshops, and oversight of biological research including the Longleaf Pine Restoration Project. TNC also played a leading role in forming the Gulf Coastal Plains Ecosystem Partnership. Eglin AFB maintains an active association with Choctawhatchee Audubon Society, which assists with survey and monitoring projects, including the annual Christmas Bird Count and single-species surveys for Snowy and...
Piping Plover, Wild Turkey, and others. Don Ware, Bird Count Coordinator for Choctawhatchee Audubon, can be reached at 850/862-6582 when his travel schedule permits for information on birding the Eglin area, and on Audubon count activities. The Audubon chapter also leads field trips in and around Eglin. Eglin’s Bald Eagle and Burrowing Owl monitoring programs are staffed, free of charge, primarily by Choctawhatchee Audubon Society. Another volunteer maintains a 32-box bluebird trail on Hurlburt Field (not open to the public), which fledged 97 bluebirds in 2003.

**Birding Eglin**

Outdoor recreation at Eglin, including birding, requires a recreational permit from Jackson Guard. Permits, which cost $5, are valid from 1 October–30 September and require that you watch a brief educational/safety video. You will be provided with a detailed Outdoors Recreation Map showing the road system, providing current regulations, and delineating areas that are open and closed to the public. Eglin reservation is closed from two hours after sunset until two hours before sunrise. Vehicles may be operated in open areas only on numbered or established roads. Please respect locked gates and closed areas.

Jackson Guard is located at 107 Route 85 North, just north of John Sims Parkway in Niceville, and is open Monday through Thursday from 7 a.m. to 4:30 p.m., Friday from 7 a.m. to 6 p.m., and Saturday from 7:30 a.m. to 12:30 p.m. It is closed on Sundays and Federal holidays. More information may be obtained by calling Jackson Guard at (850) 882-4164. A bird checklist for the base is on the web at <www.hasinalliance.org/bird-checklist.html>. We present birding opportunities more in terms of habitats than of specific locations. Because of the large acreage available for birding, the quality of habitat types throughout the site, and the extensive road network, chances of viewing a specific species are roughly equal in any appropriate habitat.

**Upland forests**

About three-quarters of Eglin exemplify the Sandhills Ecological Association, characterized by scattered to dense longleaf pine, an open to light midstory of mostly turkey oak, and a groundcover of various fire-adapted forbs and grasses. Much of the sandhills habitat, historically timbered, has been modified by turpentine production and fire suppression. Restoration activities have been conducted at Eglin since the 1980s, including management with prescribed burning. On average, 40,000 acres are burned annually, largely during the growing season.

At Eglin, dead trees are not salvaged as part of the forest management practice. Stags are abundant in some parts of the base; as a result, cavity-nesting birds, many of them of interest to birders or conservationists, represent a major component of the woodland bird community at Eglin. Thirty resident cavity-nesting species include seven woodpeckers (Downy, Hairy, Pileated, Red-bellied, Red-cockaded, and Red-headed Woodpeckers, and Northern Flicker). The Southeastern American Kestrel (*Falco sparverius palaus*) has declined by 82 percent since the early 1940s and is listed as threatened in the state of Florida, but occurs at Eglin in very high densities. Red-headed Woodpecker, a Partners in Flight priority species, is a common resident breeder at Eglin. In the past two years, an ongoing study of cavity-nesting birds at Eglin documented 91 kestrel nests and 160 Red-headed Woodpecker nests, each reflecting only a small sample of what likely exists on the Eglin reservation. Bachman’s Sparrow and Brown-headed Nuthatch, declining longleaf pine specialties, are also easily found among the sandhills of Eglin, beneficiaries of the base’s ecosystem management program. Other species likely among the sandhills include Mississippi Kite, Common Ground-Dove, Yellow-billed Cuckoo, Chuck-will’s-widow, Loggerhead Shrike, White-eyed Vireo, Blue-gray Gnatcatcher, Brown Thrasher, Pine Warbler, Yellow-breasted Chat, Summer Tanager, and Indigo Bunting.

The Patterson Natural Area, one of thirteen “Special Natural Areas” at Eglin AFB, contains the largest remaining contiguous stands of old-growth longleaf pine forests—approximately 4,500 acres of old-growth longleaf pine averaging 130 years old. Only the southeastern portion of the Patterson Natural Area is open to the public, and access may occasionally be denied due to mission conflicts. These accessible 190 acres are located east of Range Road 678 and west of Range Road 253. If you are unable to gain access to the Patterson Natural Area, many other options are available. Because the majority of Eglin consists of sandhills habitat, one can easily see most of the sandhill bird species in almost any of the open areas on base. The best qual-

*Winging It, October 2003*
ity sandhills habitat can be found on the western half of the reservation.

**Wetlands and Coastal habitats**

Nearly 62,000 acres of wetlands and riparian forests include Atlantic White Cedar swamp, floodplain wetlands, depression wetlands, and seepage slopes. Riparian forests along Eglin’s 1,158 miles of streams combine with surrounding upland forests to attract 35 species of warblers (including breeding Swainson’s, Kentucky, Prothonotary, Hooded, and Yellow-throated), six vireos, and Swallow-tailed and Mississippi Kites. Starting from Highway 98 just west of Hurlbut Field, good birding can be found heading north on Range Road 253 to the Patterson Natural Area and on to Range Road 234. In the area where the road crosses Turtle Creek, Mississippi Kites are often seen during spring migration, and Barred Owl is resident. Another good riparian area is along Yellow River, between areas 13 and 14 in the northwestern part of the base. Swallow-tailed Kites probably nest in this stretch of floodplain forest. Vantage points where roads cross the larger forested streams merit special attention from birders.

Eglin’s seventeen miles of barrier island beach and dune habitat on Santa Rosa and Okaloosa Islands provide nesting habitat for Snowy Plovers, Least Terns, and sea turtles (and roosting habitat for the occasional nudist sunbathing from the western end of the beach). A good birding spot is at the eastern end of Okaloosa Island, where Route 98 crosses the channel into Destin. The ponds and surrounding grasses by west Destin jetty can yield Clapper Rail and wintering Nelson’s Sharp-tailed Sparrow. Look for Least Tern, Snowy Plover, and Black Skimmer in summer. In winter, scan the Gulf of Mexico for sea ducks and Northern Gannet.

**Spray fields**

Some of the best birding at Eglin can be found at a municipal landfill, holding ponds, and wastewater-treatment spray fields in an area leased to Okaloosa County. During one four-month fall migration season, 194 species were recorded here. Spring migration can be equally productive. Although these sites do not require an Eglin permit for entrance, a permit facilitates moving among the areas. To reach the Fort Walton Beach spray field, head north on Route 189 (Beal Parkway) from Route 98 in Fort Walton Beach, then take the Beal Street Extension (the first left north of Green Acres Road) to its end. The spray fields are on the right. Check in at the office and ask permission to drive the perimeter road; a log book lists rare bird sightings. Black-necked Stilts breed in the area, shorebirds frequent the site during migration, and wintering sparrows like Grasshopper, Le Conte’s, Nelson’s Sharp-tailed, White-crowned, and Lark can be found in the weedy fields. Mississippi Kites, which nest nearby, are regular in spring and summer. Just northwest of the spray fields is an old landfill. The pond here hosts nesting Common Moorhens and Pied-billed Grebes. King Rails may winter here and nest in the swamps to the west. Also check the mulch area, where retained water can attract birds. Henslow’s and Le Conte’s Sparrows may be found here in winter, and Black Rail has been recorded. To reach the Okaloosa County holding ponds, return to Route 189, turn left, and turn left again after 0.8 mile onto Roberts Boulevard. The holding ponds, about 0.5 mile ahead, attract migrant shorebirds such as Baird’s, White-rumped, Stilt, and Pectoral Sandpipers, and both dowitchers. Sharp-tailed Sandpiper and Ruff have been recorded here, along with at least sixteen species of waterfowl.

Return to Route 189 and proceed east. In about two miles, turn left onto Range Road 234 (Timberlake Road—have your Eglin permit with you). The Okaloosa spray fields are about one mile ahead on the left. You must stay on the road, but scan these ponds even though drought has made them almost nonexistent during the past few years. Continue to Range Road 250 and turn left. You can park at the dead end, in about 0.5 mile, and continue south on foot on the “Vagrant Trail” (which eventually runs into the landfill and county spray fields). The Vagrant Trail is a good place for, well, vagrants, especially in fall and winter. Ash-throated Flycatcher is a regular in winter, Harris’s Sparrow has been observed here, and Vermilion Flycatcher has been found here each of the last four winters.

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Rapidly declining and listed at Threatened in Florida, the Southeastern American Kestrel is one of many cavity-nesting birds that flourishes at Eglin AFB. This fledgling was photographed by co-author Lori Blanc.