

Birds of the Oak Ridge Reservation

More than 200 species of birds have been documented on the U.S. Department of Energy's (DOE's) Oak Ridge Reservation (ORR), more than on any other single tract of land in Tennessee. These species include common backyard birds along with less common species that need large, unbroken tracts of habitat for successful nesting. In recognition of the diversity and conservation significance of its habitats for birds, the ORR is being considered for designation as an Important Bird Area by a coalition of conservation groups that includes the National Audubon Society.



Once state-listed as endangered, ospreys now successfully nest on areas such as Freels Bend.

Partners in Flight, a project that monitors bird species at risk of extinction, has determined that 13 of the 16 species that are of top conservation priority in the region have been reported on the reservation. Many of these birds are common on the ORR because it provides varied habitats that are important for both breeding and migrating. The ORR's habitats include large expanses of mature hardwood forest, unbroken by development or farmland; brushy corridors and cutover forest; abandoned pastures; grasslands; cedar glades and barrens; and wetlands.

The wood thrush, a species very high on the list of concern, is the second most abundant forest-breeding bird found on the reservation. Other forest birds with conservation priority that nest on the ORR include the worm-eating warbler, Kentucky warbler, Louisiana waterthrush, chuck-will's-widow, prothonotary warbler, brown-headed nuthatch, yellow-billed cuckoo, acadian flycatcher, eastern wood-pewee, and yellow-throated vireo.

The brushy areas and cedar glades and barrens on the reservation have become increasingly important bird habitats. Agricultural practices on farmland surrounding the ORR have decreased the regional acreage of brushland and replaced extensive areas of native warm-season grasses—such as big and little bluestem, Indian grass, and broomsedge—with intensively managed, non-native pasture grasses such as fescue. Cedar glades and barrens are increasingly rare habitats worldwide. However, they are relatively abundant on the ORR on exposed limestone in small, drought-prone forest openings. Birds of conservation interest that nest in brushy areas and cedar glades and barrens on the ORR include prairie warblers, blue-winged warblers, and field sparrows.



These bird species of conservation interest all nest on the Oak Ridge Reservation.

Wetlands have become increasingly uncommon in the region. On the ORR, wading and shore birds make extensive use of its almost 600 acres of wetlands and shorelines. Bird species of conservation interest that use these areas include anhingas, great egrets, little blue herons, and bald eagles. A few species, including wood ducks, mallards, and great blue herons, are year-round residents and breeders. Many other species of ducks and wading birds stop to feed on the reservation during migration or spend the winter here.



Nesting boxes have been placed around the reservation to encourage breeding by species such as eastern bluebirds and tree swallows. (Photo © R.K. McConathy)



The state-listed loggerhead shrike has been seen in areas like the Three Bend Scenic and Wildlife Refuge.

In June 1999 then-Secretary of Energy Bill Richardson designated the Three Bend Scenic and Wildlife Refuge as a conservation and wildlife management

area to preserve some of the reservation's unique habitats and wildlife. This 3,000-acre area with three peninsulas is being managed and protected through a cooperative arrangement between DOE and the Tennessee Wildlife Resources Agency (TWRA). The refuge provides grassland breeding habitat for grasshopper and field sparrows, prairie warbler, and yellow-breasted chat; hedgerows for white-eyed vireos; riparian breeding habitat for the willow flycatcher; woodlands for the migrating olive-sided flycatcher; and mixed forest and brushland for orchard orioles and many other species.



*Wild Turkey Tom
Photo © R. K. McConathy*



ORNL Photo

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The diverse habitats on the ORR also support populations of upland game birds that include mourning doves, northern bobwhites, and ruffed grouse. Wild turkeys were released on the ORR in the late 1980s in a highly successful research and restoration project, undertaken jointly by TWRA, Oak Ridge National Laboratory (ORNL), and the University of Tennessee.

For more information on the resources of the Oak Ridge National Environmental Research Park, please contact the ORNL Natural Resources Manager, Pat Parr at 865-576-8123, or parrpd@ornl.gov.

Pat Parr (top right), ORNL natural resources manager, holds a radio-tagged turkey, and university researchers use radio-telemetry equipment to track turkeys on the reservation.

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