

Missouri Master Naturalist

2025 Certification Pin

Brown-headed Nuthatch

Sitta pusilla



Description

The brown-headed nuthatch is smaller but similar in shape to Missouri's more common nuthatch the white-breasted nuthatch. Their namesake field mark is the brown crown extending from the back of the head to the eye, and above a dark eyeline from the eye to the base of the bill. Their wings and back are gray. The throat is white and blends to a pale buffy or light gray for the belly and under the tail. Compared to the white-breasted they have a relatively large head and bill.

They have a distinctive “squeaky toy” voice, and the higher notes are often followed by a lower, nasal call: *KEW- dodododo teew*.

Diet

The specialized adaptations and behaviors of birds allow a natural community to hold a variety of species, so they don't compete directly with each other. The brown-headed nuthatch has tree branch and trunk creeping behavior, this enables it to find insects in bark crevices. This nuthatch will utilize “tools” as well, it may be observed using splinters of woods (like a toothpick) to pry flakes of bark to expose caterpillars and over-wintering insect larvae. Pine nuts and other seeds are a major part of the perennial diet. Spiders and soft-bodied insects are chief protein sources for adults and prey for nestlings.

Habitat

Historically shortleaf pine woodlands and savannas were the major habitats of the brown-headed nuthatch. Typically, mixed deciduous oak-hickory forest will benefit the birds with a diversity of insects, but the stand still needs to be mostly pines for the nuthatch's territory.

Reproduction

The nest site includes live and dead trees with an open cavity or soft rotting wood for easy excavation. The male selects the nesting site and may have “courtship” displays at the cavity to entice the female. Both sexes may add soft grasses, bark strips, hair, and fine pieces of forbs to the cavity nest. Once the mated pair is established, she'll lay a clutch of 4-5 eggs. The eggs are white or off-white and may be heavily marked with brown on the large end of the egg. The eggs are incubated solely by the female. The eggs hatch after 14 days of incubation and both parents feed the nestlings. However, only the female broods and keeps the young nestlings warm. Brown-headed nuthatches have a behavior called

“helpers at the nest” or cooperative breeder, which means unmated birds or last year’s offspring assist with feeding, nest defense, and/or territory patrol. Nestlings are ready to fly in 19 days. The newly fledged young stay in the vicinity of the parents for months. They may forage as a family flock, and even join other species of birds like Carolina chickadees, tufted titmice, pine warblers and ruby-crowned kinglets in the late fall and winter. The mixed flock is referred to as an “inter-specific” flock.

Population Status

The current status is one to watch! Historically the brown-headed nuthatch populated the state’s Ozark region where the habitat had the pine habitat structure formed by intermittent, seasonal fire-influenced savannas and woodlands. However, the deforestation of the state’s forestry resource was devastating to the habitat dependent species and soon endangered state birds, the red-cockaded woodpecker, Bachman’s sparrow, and the brown-headed nuthatch. The nuthatch’s population fell fast, by 1907 only a pair was noted in the Missouri Ozarks. The species has been listed as extirpated from Missouri. As well managed habitat was developed, prescribed fire has been used, and shortleaf pines matured from initial clear-cuts in the Shannon and Carter counties area. These habitat changes resulting from management allowed for a reintroduction of the species. The Missouri Department of Conservation, the Nature Conservancy, Mark Twain National Forest District, American Bird Conservancy, Arkansas Game & Fish Commission, Central Hardwoods Joint Venture, Missouri River Bird Observatory, and Missouri residents have all played a part in their reintroduction. As of 2020, the nearest population was 200 miles away in Arkansas (as a crow flies) with no evidence of the population expanding north into Missouri naturally. So, with preliminary work, biologists mist-netted nuthatches in Arkansas and transported them to an area south of Fremont, Missouri in Carter County. The birds were health checked, banded, and released in their historic habitat. During the 2020 and 2021 seasons, 102 birds were reintroduced. In August 2024 a third seasonal release of 95 nuthatches occurred in the same general area. Regular telemetry and “feet on the ground” monitoring has been taking place since the initial stocking of family groups. The up-to-date observations look very promising that this will be another comeback species for Missouri. We have nesting birds, a couple of generations of Missouri reared birds, and even evidence of recolonizing suitable Missouri habitat 30 miles away from initial release sites.

Soon, Missouri Master Naturalists will likely see the brown-headed nuthatch’s status change to rare, then to uncommon, and hopefully to common resident in specific habitat. We are always thankful for conservation successes.