

THE GREAT OUTDOORS



*The white-throated sparrow's most distinctive markings are the white patch beneath its bill and the two white wing bars. It is a passerine, a bird that has feet adapted for perching.
Photo: J. Morton Galetto*

Winter Resident

White-throated sparrows, arriving from Canada have an interesting variation related to their plumage

By Jane Morton Galetto, CU Maurice River

From my office window each winter, I get to view birds in the leaf litter along the edge of the woods. One avian cold weather performer putting on a show is the white-throated sparrow. Normally I see the leaves being tossed about and a blur of motion

rather than the bird itself. If it ventures onto the mowed grass then I can more readily pick it out. In photographs one might think they are easy to spot but their plumage is very obscure, and without the help of optics they can be especially difficult to see clearly.

During the spring breeding season, they are primarily confined to Canada. There they raise young in open cup-style nests on the ground, and camouflage and flight are critical to their survival. Their spring habitat is the boreal forests of our northern neighbor; these are characterized by coniferous and deciduous trees: a mixed forest. They nest in clearings with dense low vegetation – shrubs on the edges of forests. These clearings are often the result of fires: however ponds, bogs, and roadsides also offer similar edge habitat.

White-throated sparrows migrate each winter to our region. Some hardy birds are known to live year-round in the northeastern United States, but here in southern New Jersey they are winter residents.

Beginning in November I have been hearing them announce their presence with a call described as “Old Sam Peabody, Peabody, Peabody,” or, possibly more aptly, “Oh Sweet Canada, Canada, Canada.” Ornithologist David Sibley offers this

description: Song a high, pure whistle sooo
seeeeeeee dididi dididi dididi with little or no
pitch change. For me it sounds like someone
whistling a bugle reveille. However you
describe it, the song is a clear sweet call of
two “pay attention notes” followed by a
repetitive phrase, often delivered three
times.

In some regions white-throated sparrows
have developed dialects. Northern British
Columbia biologist Ken Otter discovered a
new two-syllable song in the region. His
team of biologists, studying the evolution of
different bird species vocalizations, found
that between the 1960s and 2000s a
doublet-ending song had emerged. Their
research found the song to be travelling via
usage by migrating birds. In experiments,
white-throated sparrows, known for their
aggressive protection of nesting territory in
spring, responded with equal antagonism to
either presentation of their song – be it a
triple ending or double ending.

The evolution of song is normally slow. At
first researchers thought the doublet was
confined to the western side of the Rocky
Mountains, but once a few birds east of the
Rockies learned the double ending it took off
with some zeal and by 2019 birds were
singing it in Québec. They theorize that
young males heard different dialects when

they were establishing their song and copied the new version.

When it comes to singing and aggression, white-throated sparrows have a surprising variation linked to their plumage. There are two morphs of white-throated sparrows: a "white-striped form" and a "tan-striped form." Females and males that have the white facial stripes are more aggressive than their tan counterparts. White-striped males actually have higher levels of testosterone than their tan form. Furthermore birds are drawn to the other color morph when pairing up – you might say "opposites attract."



There are two morphs of white-throated sparrows a "white-striped form" and a "tan-striped form." In 1961 ornithologist James Lowther discovered that the coloring was a morph, not simply a feather variation or age difference. A young

birds' plumage resembles that of the tan morph. Photo: Courtesy Steve Gifford

The morph differences don't stop there. The white-striped morph males spend little time tending to the young while the tan-striped morph males are very dutiful about parental responsibilities. The white plumage males spend more time defending territory with their song.

Their aggressive behavior is primarily confined to breeding season. By the time the white-throated sparrows are here in southern New Jersey they flock together, even with other species like juncos and chickadees (called a mixed flock). In winter they are essentially chilled out. If you have a feeder you will often see them eating on the ground with juncos. There are pecking orders at the feeder but the aggression you would witness on breeding grounds has essentially vanished.



*White-throated sparrows feed and nest on the forest floor.
Photo: Courtesy Steve Gifford*

White-throated sparrows mainly eat seeds and berries, making them important dispersers of plants. The pigments in seeds and berries provide carotenoids that give them the yellow lores, the feathers between their eye and bill.

When nesting their diet is especially reliant on insects and invertebrates caught on the forest floor. These include "dragonflies, wasps, stinkbugs, beetles, flies, and caterpillars, as well as spiders, millipedes, centipedes, and snails (Cornell)." Their foraging style is to hop and kick leaf litter backward with their feet and seize any prey that appears. They uncover seeds on the ground with a similar tossing behavior.

White-throated sparrows are considered to be stable as a species. But sadly, as we have discussed before, birds are on the decline and these sparrows are no exception. Cornell reports that between 1966 and 2019 their numbers have diminished, with an estimated .74 percent decline for a loss of a third of their population. Habitat disappearance, effects of windows, and feral cats are major contributors to these decreases. Since they are nighttime migrants, lighted buildings and

tall structures also play a part in their decline.

You can help birds by providing native plants that offer seed sources in winter. Leaving leaf litter on the ground is also critical to these birds' and many other avian species' foraging style. You may also consider window stencils for preventing collisions with the glass. On the web the American Bird Conservancy offers a host of advice on how to prevent avian deaths due to windows. ■

Fast facts on White-throated Sparrow



Note the yellow lores above the white-throated sparrow's eyes. Photo: J. Morton Galetto

Scientific name: *Zonotrichia albicollis*

Size: 6.3 to 7.1 inches long

Wingspan: 7.9 – 9.1 inches

“This species is named for its distinctive bright white throat patch that stands out against its grayish chest and cheeks. It has a dark gray bill and a distinct yellow spot between the bill and each eye. On each side of the face, a thin black stripe extends from the base of the bill, and through the eye to the back of the head. Two thicker black stripes run from the bill across the top of the head. Three white or tan stripes run between these four black stripes. White-throated sparrows closely resemble white-crowned sparrows, which have a pinkish colored bill (instead of gray), lack a yellow spot in front of each eye, and lack the stark white throat patch (Oklahoma Dept. of Wildlife).”

Nest: Open cup-style constructed from grasses, twigs, pine needles, fine roots, animal hair, and moss.

3-6 pale greenish-blue eggs; can have a second brood

Incubation: 11-14 days

Chicks: Altricial – meaning helpless and requiring significant parental care at birth.

Fledging: 7 to 12 days

Females and males are sexually mature within a year

Lifespan: typically 6 years. A record bird that was banded in Canada was recovered at 14 years 11 months.

Conservation status: least concern

Sources

White-throated sparrow *Zonotrichia albicollis*, Animal Diversity Website.

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