# TUFTED TITMOUSE - BAEOLOPHUS BICOLOR

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Paridae Genus: Baeolophus

Species: B. bicolor

### Habitat:

<u>Biomes</u>: Tufted Titmice live in deciduous woods or mixed evergreen-deciduous woods, typically in areas with a dense canopy and many tree species. They are also common in orchards, parks, and suburban areas. Generally found at low elevations, Tufted Titmice are rarely reported at elevations above 2,000 feet.

### Distribution:

<u>In US</u>: Though the tufted titmouse is non-migratory and originally native to Ohio and Mississippi, factors such as bird feeders have caused these birds to occupy a larger amount of territory across the United States and stretching into Ontario, Canada. <u>In Other Countries</u>: NONE.

<u>Holistic Description</u>: A little gray bird with an echoing voice, the Tufted Titmouse is common in eastern deciduous forests and a frequent visitor to feeders. The large black eyes, small, round bill, and brushy crest gives these birds a quiet but eager expression that matches the way they flit through canopies, hang from twig-ends, and drop in to bird feeders. When a titmouse finds a large seed, you'll see it carry the prize to a perch and crack it with sharp whacks of its stout bill.

<u>Species Richness</u>: NO SUBSPECIES <u>Population Dynamic</u>: CHECK THREATS

**Evolution and Systematics:** 

**Evolution**: NONE

<u>Systematics</u>: Geographic variation in Tufted Titmice is minimal. Birds south of n. Texas – n. Georgia may, on average, be smaller, paler, and grayer, but any differences are very slight and broadly clinal. There is a tendency toward increased intensity of black on the forehead toward the western edge of the species' range.

<u>Number of Species</u>: NO SUBSPECIES <u>Number of Genera</u>: NO SUBSPECIES

**Physical Characteristics:** 

Size and Length: Length: 5.5-6.3 in (14-16 cm) Weight: 0.6-0.9 oz (18-26 g)

*Wingspan*: 7.9-10.2 in (20-26 cm)

<u>Coloration</u>: Soft silvery gray above and white below, with a rusty or peach-colored wash down the flanks. A black patch just above the bill makes the bird look snub-nosed.

<u>General Body Features</u>: Tufted Titmice look large among the small birds that come to feeders, an impression that comes from their large head and eye, thick neck, and full bodies. The pointed crest and stout bill help identify titmice even in silhouette. Special Features of the Body: NONE

Special Features of the Head and Sensory Organs: Their bills are short but hardy enough to break open nuts.

**Dentition**: BEAK/LAMELLAE/GIZZARD

<u>Special Features of the Limbs and Digits</u>: They are capable of hanging upside down while searching underneath the branches and the twigs for insects.

<u>Any Special Internal Anatomy</u>: While protecting their territories (as in, their nest boxes, etc.) and removing nesting materials placed by other competing birds (like Eastern Bluebirds or Black-capped Chickadees), they may do a lunging and hissing 'snake display' in order to ward them off.

<u>Sexual Dimorphisms</u>: Sexes alike in plumage: overall grayish color, lighter on breast and belly, with gray pointed crest (that can be lowered or raised). Male tufted titmice are more dominant than females and also sported larger forehead patches. <u>Differences Between Juvenile Stage and Adult</u>: Forehead with variably small to more extensive, indistinct brownish to dusky patch, smaller in size than black patch of later plumages; remainder of upperparts brownish mouse gray; wings and tail slightly darker, obscured with olive gray, the secondaries slightly tinged greenish and the coverts slightly tinged brownish. Underparts dull grayish white, faintly tinged with pinkish buff on flanks. Juvenile body feathers (especially crest feathers and undertail coverts) filamentous and weak due to lower barb density than feathers of later plumages.

## Behavior:

<u>Diurnal, Nocturnal, or Crepuscular</u>: Diurnal

<u>Activity</u>: Tufted Titmice flit from branch to branch of the forest canopy looking for food, often in the company of other species including nuthatches, chickadees, kinglets, and woodpeckers. When they find large seeds, such as the sunflower seeds they take from bird feeders, titmice typically hold the seed with their feet and hammer it open with their beaks. In fall and winter they often hoard these shelled seeds in bark crevices. These acrobatic foragers often hang upside down or sideways as

they investigate cones, undersides of branches, and leaf clusters. They sometimes come all the way to the ground to hop around after fallen seeds or insects. Titmice are very vocal birds and are also quick to respond to the sounds of agitation in other birds, coming close to investigate or joining a group of birds mobbing a predator.

<u>Locomotion</u>: Individuals actively fly from branch to branch and from tree to tree. Longer flights are direct and not undulating. Jump along branches and hop while on the ground. Often hang upside down from branches and thin twigs.

<u>Communication and Perception</u>: The Tufted Titmouse's song is a fast-repeated, clear whistle: peter-peter The birds repeat this up to 11 times in succession or up to 35 songs delivered per minute. Females occasionally sing a quieter version of the song.

<u>Home Range</u>: Territorial throughout the year. In summer, usually live in pairs but sometimes non-dispersing offspring from a previous year help feed young. In Michigan, breeding territories range from 3.2 to 5.0 ha in size, averaging 4.2 ha. <u>Degree of Sociality</u>: Titmice sometimes forage in flocks with other species.

<u>Level of Aggression</u>: During the breeding season, males actively sing and chase intruders from the territory. As the nesting season approached, Offut noted that rival males sometimes came within a meter or less, gave high frequency calls, and flew in short rapid arcs around each other. Later in the breeding season, Offut observed two males, with feet interlocked and wings beating vigorously, fall about 6 m to the ground. Such conflicts were often preceded by one of the males crouching with its body horizontal, vibrating its wings, and giving chip notes. This was followed by the male flying toward its opponent and either engaging in a circular conflict or coming into contact, but quickly separating. During interactions, titmice may raise and lower their crests as visual signals of dominance and submission, respectively.

Migration: Resident.

#### Predators:

**Predators**: Cats, Hawks, Owls, Snakes, Red-bellied Woodpecker.

<u>Anti-Predator Defenses</u>: In response to the presence of potential predators, Tufted Titmice utter alarm calls, with high-pitched seet calls given in response to hawks and falcons observed in flight and scolding chick-a-dee calls when a predator is stationary. In addition, titmice approach stationary predators as they utter calls and may make short flights as they change perches in the vicinity of the predator. Titmice and other parids are often the first to arrive at mobbing aggregations and are generally more aggressive toward predators than other species of birds.

#### **Diet and Nutrition:**

<u>Adult Diet</u>: Tufted Titmice eat mainly insects in the summer, including caterpillars, beetles, ants and wasps, stink bugs, and treehoppers, as well as spiders and snails. Tufted Titmice also eat seeds, nuts, and berries, including acorns and beech nuts. Experiments with Tufted Titmice indicate they always choose the largest seeds they can when foraging.

Juvenile Diet: ^^^^

<u>Special Adaptations for Getting Prey</u>: Titmice typically attack prey items using a gleaning maneuver that consists of flights between branches and jumps along branches, taking stationary prey items after landing on a branch or searching bark crevices. Titmice hammer seeds and acorns to break them open, usually holding them under the feet. Also take advantage of crushed acorns on roads, descending to the ground to feed on acorn bits along roadways.

## Reproduction:

Mode of Reproduction: Monogamous

<u>Mating System</u>: Form socially monogamous pairs, usually for > 1 yr. No noticeable courtship behavior during pair formation, but males feed their mates from the time the pair begins prospecting for a nest site until the end of incubation. During nest building, male titmice fed females at increasing rates.

**Mating Season**: March to April

<u>Courtship</u>: No noticeable courtship behavior during pair formation, but males feed their mates from the time the pair begins prospecting for a nest site until the end of incubation. During nest building, male titmice fed females at increasing rates.

<u>Territoriality</u>: HOME RANGE

Mating: "[The male] was . . . in an oak when the female flew into a tree 10 yards [9.1 m] from him. He . . . faced her, and for 30 to 45 seconds craned with bill straight forward and opened slightly, head, neck, and back practically on a line, wings vibrating in a very small arc. Throughout this he uttered a high, thin "eeee." . . . [then] increased the arc of his wing-quivering and the loudness of his "eeee" for several seconds, then flew . . . to another branch where I then saw the female displaying similarly. The male flitted to her and copulated for 2 seconds or so with wings raised high and beating rapidly. Afterward the birds sat silently . . . for several seconds, then disappeared."

<u>Nest Placement</u>: Tufted Titmice nest in cavities but aren't able to excavate them on their own. They use natural holes and old nest holes made by several woodpecker species, including large species such as Pileated Woodpecker and Northern Flicker. Additionally, Tufted Titmice also nest in artificial structures including nest boxes, fenceposts, and metal pipes.

*Nest Description*: Titmice build cup-shaped nests inside the nest cavity using damp leaves, moss and grasses, and bark strips. They line this cup with soft materials such as hair, fur, wool, and cotton, sometimes plucking hairs directly from living mammals. Naturalists examining old nests have identified raccoon, opossum, dog, fox squirrel, red squirrel, rabbit, horse, cow, cat, mouse, woodchuck, and even human hair in titmouse nests. Nest construction takes 6 to 11 days.

*Egg-Laying*: Clutch Size: 3-9 eggs Number of Broods: 1 brood Egg Length: 0.7-0.8 in (1.7-2 cm) Egg Width: 0.6-0.6 in (1.4-1.6 cm) Incubation Period: 12-14 days Nestling Period: 15-16 days Egg Description: White to creamy white, spotted with chestnut-red, brown, purple, or lilac.

<u>Hatching and Incubation/Gestation</u>: Almost entirely naked and pink, with tufts of down on head and along spine, eyes closed

<u>Development</u>: As reported by Pielou, the newly hatched young are almost entirely naked, pink, and blind; the mouth and abdomen are large and the limbs are small compared to the rest of the body. Natal down is present as 6 small dusky gray to blue-gray tufts, 2 each on the capital, humeral, and spinal tracts, with the number of feathers per tuft no more than 14. Eyes are partly open on the 4th d posthatch, and on the 8th d they are open completely.

<u>Parental Care</u>: Females brood newly hatched nestlings for the first few days, during which time their behavior does not differ much from that during the latter stages of incubation. Females stop brooding at night when nestlings are 12-13 days old. During the first 4 d posthatch, males feed the young twice as often as females; females spend about two thirds of their time brooding and only bring food when returning from intervals between brooding periods.

*Lifespan*: The lifespan of the tufted titmouse is approximately 2.1 years, though they can live for more than 10 years.

### **Conservation**:

<u>Official Federal Status</u>: Least Concern <u>Special Statuses in Individual States</u>: NONE

<u>Threats</u>: Tufted Titmice are common and along with the similar Black-crested Titmouse, populations increased between 1966 and 2015, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 8 million with 100% living in the U.S. The species rates a 7 out of 20 on the Continental Concern Score. Tufted Titmouse is not on the 2016 State of North America's Birds Watch List. These birds' range has been expanding northward over the last half-century. Possible reasons for the range expansion include a warming climate, reversion of farmlands to forests, and the growing popularity of backyard bird feeders.

Conservation Efforts: ^^^^

## Extra Facts:

- 1. The Black-crested Titmouse of Texas and Mexico has at times been considered just a form of the Tufted Titmouse. The two species hybridize where they meet, but the hybrid zone is narrow and stable over time. They differ slightly in the quality of their calls, and show genetic differences as well.
- 2. Unlike many chickadees, Tufted Titmouse pairs do not gather into larger flocks outside the breeding season. Instead, most remain on the territory as a pair. Frequently one of their young from that year remains with them, and occasionally other juveniles from other places will join them. Rarely a young titmouse remains with its parents into the breeding season and will help them raise the next year's brood.
- 3. Tufted Titmice hoard food in fall and winter, a behavior they share with many of their relatives, including the chickadees and tits. Titmice take advantage of a bird feeder's bounty by storing many of the seeds they get. Usually, the storage sites are within 130 feet of the feeder. The birds take only one seed per trip and usually shell the seeds before hiding them.
- 4. Tufted Titmice nest in tree holes (and nest boxes), but they can't excavate their own nest cavities. Instead, they use natural holes and cavities left by woodpeckers. These species' dependence on dead wood for their homes is one reason why it's important to allow dead trees to remain in forests rather than cutting them down.
- 5. Tufted Titmice often line the inner cup of their nest with hair, sometimes plucked directly from living animals. The list of hair types identified from old nests includes raccoons, opossums, mice, woodchucks, squirrels, rabbits, livestock, pets, and even humans.
- 6. The oldest known wild Tufted Titmouse was at least 13 years, 3 months old. It was banded in Virginia in 1962, and found in the same state in 1974.

**Notable Species**: NONE