

# Black-capped Chickadee (*Poecile atricapillus*)

## Description

The Black-capped Chickadee is a songbird and member of the *Paridae* family. That family also includes titmice. The species name, *atricapillus*, means “black head of hair.”

Black-capped Chickadees are about 5.5 inches long (12-15 cm) and weigh about 0.4 ounces (10-14 g). By comparison, a letter weighing twice as much requires a single stamp. They have a black cap and bib with white cheeks, greenish gray back, dark gray wings and tail, and white underparts with buffy flanks (sides) (Figure 1). Feet are bluish gray, and beaks are short and black. Their black eyes are hidden in their black caps. To the human eye, the sexes look the same, and juveniles are very similar to adults. The Chestnut-backed Chickadee also is common in this region, but is smaller with chestnut-colored back and flanks. The Mountain Chickadee is the closest relative genetically to the Black-capped Chickadee, but they are rarely seen in the metro area.



Black-capped Chickadee – photo by Alain Wolf, licensed under CC-BY-SA-3.0

## Diet and Feeding Behavior

Black-capped Chickadees feed largely on invertebrates in the summer (e.g., 80-90%, mostly caterpillars) with the rest of the diet consisting of seeds and fruit. In winter about half the diet consists of insects and spiders, while the other half consists of seeds and fruits. They pick food from bark, twigs, and leaves, often while hanging from branches. Chickadees also capture flying insects in the air. When eating larger seeds, chickadees often take the seeds to dense cover before cracking the hull – people with bird feeders are familiar with chickadees quickly grabbing one seed and flying off to cover to eat it.

In winter, chickadees often join other species of insect-eating species in mixed foraging flocks. Because chickadees are quite vocal in these winter flocks, finding chickadees along the winter trails at TRNWR can be a good way to find nuthatches, kinglets, wrens, brown creepers, and bushtits.

## Reproduction

Black-capped Chickadees breed in their first year after hatching. Chickadees nest in tree cavities created by other species or that they make themselves if the wood is soft or rotten. The pair can excavate a nest chamber in 2 days to 2 weeks (usually 4 to 5 days) depending on softness of the wood. Chickadees also use nest boxes. Chickadees line the nest with soft material such as moss or animal fur.

Egg laying usually starts in mid-April in Oregon. Eggs are white with brown speckles mostly on the round end. Chickadees lay one egg each morning until the clutch of eggs is complete. Most clutches contain 6, 7 or 8 eggs though clutches can range from 1 to 13 eggs. Egg incubation starts with the next to last (i.e., penultimate) egg, and hatching occurs after 12 to 13 days. When hatched, nestlings are mostly naked, blind, and weigh about 0.05 ounce (1 gram). In the first few days the female broods (keeps warm) the nestlings while the male brings most of the food to the nest. As the nestlings grow, both parents will bring food to the nest. Nestlings fledge (i.e., leave the nest) at about 16 days old, but continue to be fed by the parents for 2 to 4 additional weeks. A week after fledging it is hard to tell the fledglings apart from the parents.



Black-capped Chickadee eggs.  
[www.allaboutbirds.org/guide/Black-capped\\_Chickadee/lifehistory](http://www.allaboutbirds.org/guide/Black-capped_Chickadee/lifehistory)

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Black-capped Chickadee  
*Poecile atricapillus*



Figure 3. Black-capped chickadee range map – Source: [www.allaboutbirds.org/guide/Black-capped\\_Chickadee/id](http://www.allaboutbirds.org/guide/Black-capped_Chickadee/id)

Chickadees rarely have more than one successful nest per year, but will re-nest if their first nest attempt fails. Chickadees rarely reuse a nest cavity, preferring instead to re-nest in a new location. Approximately two thirds of nests successfully produce fledglings.

## Distribution and Habitat

Black-capped Chickadees are widespread through most of the forested areas of Canada and the northern half of the U.S. (Figure 3). They are familiar to anyone in the Portland metro area with a backyard bird feeder. They are resident (i.e., non-migratory) throughout their range, though some juveniles may disperse long distances.

Black-capped Chickadees use a variety of habitat types, including deciduous and mixed forests, open woods, parks, willow thickets, and cottonwood groves. At TRNWR look for Black-capped Chickadees in or near the Riparian Forest and along habitat edges at the seasonal ponds, Rock Creek, and Tualatin River.

## Conservation

The highest densities of breeding Black-capped Chickadees are found in New England, the upper Midwest, and the upper Willamette Valley (Figure 4). Black-capped Chickadee populations are stable or increasing in the eastern portion of their range, but are declining in parts of their western range, including the upper Willamette Valley and lower Columbia River (Figure 5). The reasons for the western range declines may be related to the loss of habitat (e.g., loss of forested edges with dead snags through forest management practices or city expansion).

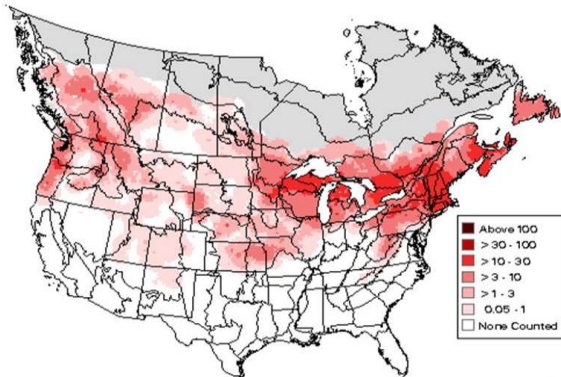


Figure 4. Black-capped chickadee – Breeding Bird Survey distribution map 2007-2013  
<http://www.mbr-pwrc.usgs.gov/bbs/>

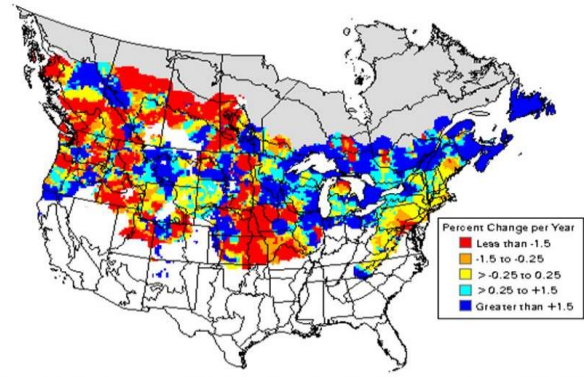


Figure 5. Black-capped chickadee – Breeding Bird Survey trend map 1966-2013  
<http://www.mbr-pwrc.usgs.gov/bbs/>

## Fun Facts

- There is a pecking order within flocks. Some birds are “winter floaters” that spend time with more than one flock—these individuals may have a different rank within each flock.
- Black-capped Chickadees cache or hide seeds and other food items to eat later – each hidden in a different spot. They can remember thousands of hiding places. Chickadees and their relatives have a larger hippocampus (i.e., brain region associated with spatial memory) than species that do not cache seeds. Each fall they also recruit new brain neurons for remembering new details, such as cache sites and changes in social flocks.
- Black-capped Chickadees have a very complex set of calls. Calls identify the rank of individual chickadees within a group; provide information about other species in their flocks; and serve as predator alarms. The more “dee” notes in a chickadee call, the higher the threat level. Most birds that associate with chickadee flocks respond to chickadee alarm calls, even when their own species doesn’t have a similar alarm call.
- Chickadees may mob their predators (e.g., small hawks or owls) with long, rapid strings of “dee-de-dee” calls.
- The average chickadee life span is about 2.5 years, but the oldest known wild chickadee lived to be 12 years and 5 months old.

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## Resources

1. Cornell Lab of Ornithology. *Black-capped Chickadee*. All About Birds web site. [https://www.allaboutbirds.org/guide/Black-capped\\_Chickadee/id](https://www.allaboutbirds.org/guide/Black-capped_Chickadee/id)
2. Foote, Jennifer R., Daniel J. Mennill, Laurene M. Ratcliffe and Susan M. Smith. 2010. Black-capped Chickadee (*Poecile atricapillus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/039>.
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5. Gruson, E. S. 1972. *Words for Birds: A Lexicon of North American Birds with Biological Notes*. Quadrangle Books, Inc., New York, NY.
6. Sauer, J. R., J. E. Hines, J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link. 2014. *The North American Breeding Bird Survey, Results and Analysis 1966 - 2013. Version 01.30.2015* USGS Patuxent Wildlife Research Center, Laurel, MD.