

How the Chickadee Weathers the Winter

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The temperature has fallen below zero. The car won't start, water pipes are frozen, and schools are closed. If you went outside without winter clothes, you'd freeze before long. Yet the chickadee, a tiny bird that weighs less than a chocolate bar, flies about busily. It doesn't have a scarf or boots. How does it endure cold weather?



This little bird is well equipped for the cold.

The chickadee has to eat constantly during the winter to survive. Just as people use wood to keep a fire burning, the chickadee uses food to keep its body warm. Some of the food it eats during the day is chemically changed into energy reserves. The chickadee's body stores this energy for use at night. That's why birds eat so much early in the morning. When their reserves are used up, they get cold and have to eat again.

During cold spells, chickadees nest together at night to keep warm. Sometimes as many as twenty will huddle together in a hole in a tree. When the weather is extremely cold, they often won't leave their roosts at all. They would burn more energy looking for food than they would sitting still.

The chickadee's feathers are a great layer of insulation that helps this little bird keep warm. The outer feathers have tiny hooks, called barbs, that connect much the way Velcro does. This makes a windproof barrier. Underneath are soft fluffy feathers called down. Down does the same job as the stuffing in a winter jacket. It keeps body heat in and cold air out.

During the winter, the chickadee's body produces more feathers for warmth. On a very cold day, you may see a chickadee fluffing up its feathers. This creates more space between the feathers to trap air that insulates the body.

But the chickadee's feet don't have feathers. How can the chickadee keep its body warm with those bare feet out in the cold? Its body has a slick trick. It cuts down the blood flow to its feet just enough so they don't freeze. To keep from wasting energy, the chickadee learns to live with cold feet.

The chickadee, like other birds in northern regions, has many ways of dealing with the cold. The next time you're stuck indoors on a cold day, admire the chickadees from a window. You can help by filling a bird feeder so they'll have plenty to eat.

