

NORTHERN FLICKER

BY VAL CUNNINGHAM

THE HOLE STORY

i

Imagine you're a white-breasted nuthatch searching for a safe place to raise your family. Scouting around the edge of the forest, you find an old tree with a deep hole once drilled by a woodpecker. You peek into the darkness, then jump inside to check it out and make sure no bird, squirrel, or other critter has already claimed the space. Suddenly, another nuthatch appears at the entrance. You peck its head, beat your wings, and cry *yank-yank* to drive it away.

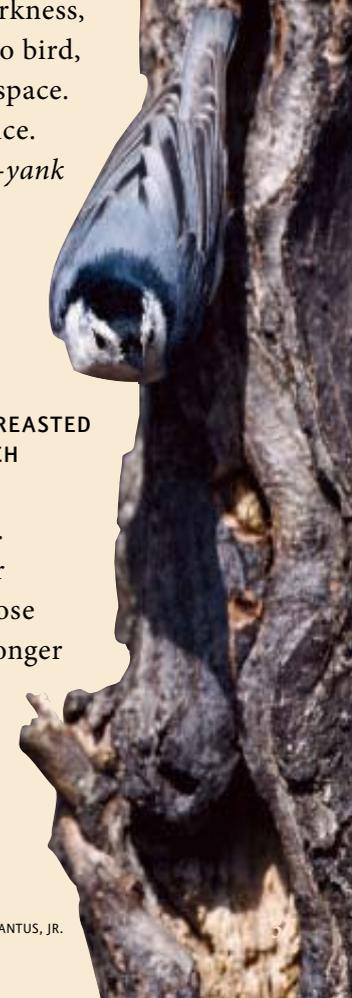
Does it sound scary to build a nest in a hole in a tree? It can be, but building a nest outside on a tree branch can be risky too. Outside nesters lose their young to cold weather or predators about half of the time.

Birds that nest in a hole, or cavity, have better luck. Cavity nesters raise healthy young birds about two-thirds of the time. Young birds in cavities can stay in the nest longer because predators cannot find them as easily. Those extra days give them time to grow bigger and stronger before facing the dangers of the outside world.

From tiny warblers and chickadees to large woodpeckers and owls, 35 bird species make their nests in cavities in Minnesota.

WHITE-BREADED
NUTHATCH

BILL MARCHEL



WHO NEEDS A CAVITY?

Bird eggs must be kept warm until they hatch. Parent birds sit on the eggs to warm them with their body heat. This is called *incubation*. Cavities make this job easier by holding in heat and keeping out rain and wind.

Putting a nest inside a tree cavity or a birdhouse also helps keep baby birds out of reach of many predators.

SPACE FOR A NEST

A pair of northern flickers drilled about 72 holes—some of them 4 inches across—into the Discovery space shuttle in 1995. Bird experts told the NASA space agency that the birds seemed to be trying to excavate a nest, chiseling holes into the insulating foam surrounding the craft's fuel tanks. The shuttle took off five days late, after the flicker damage was repaired.

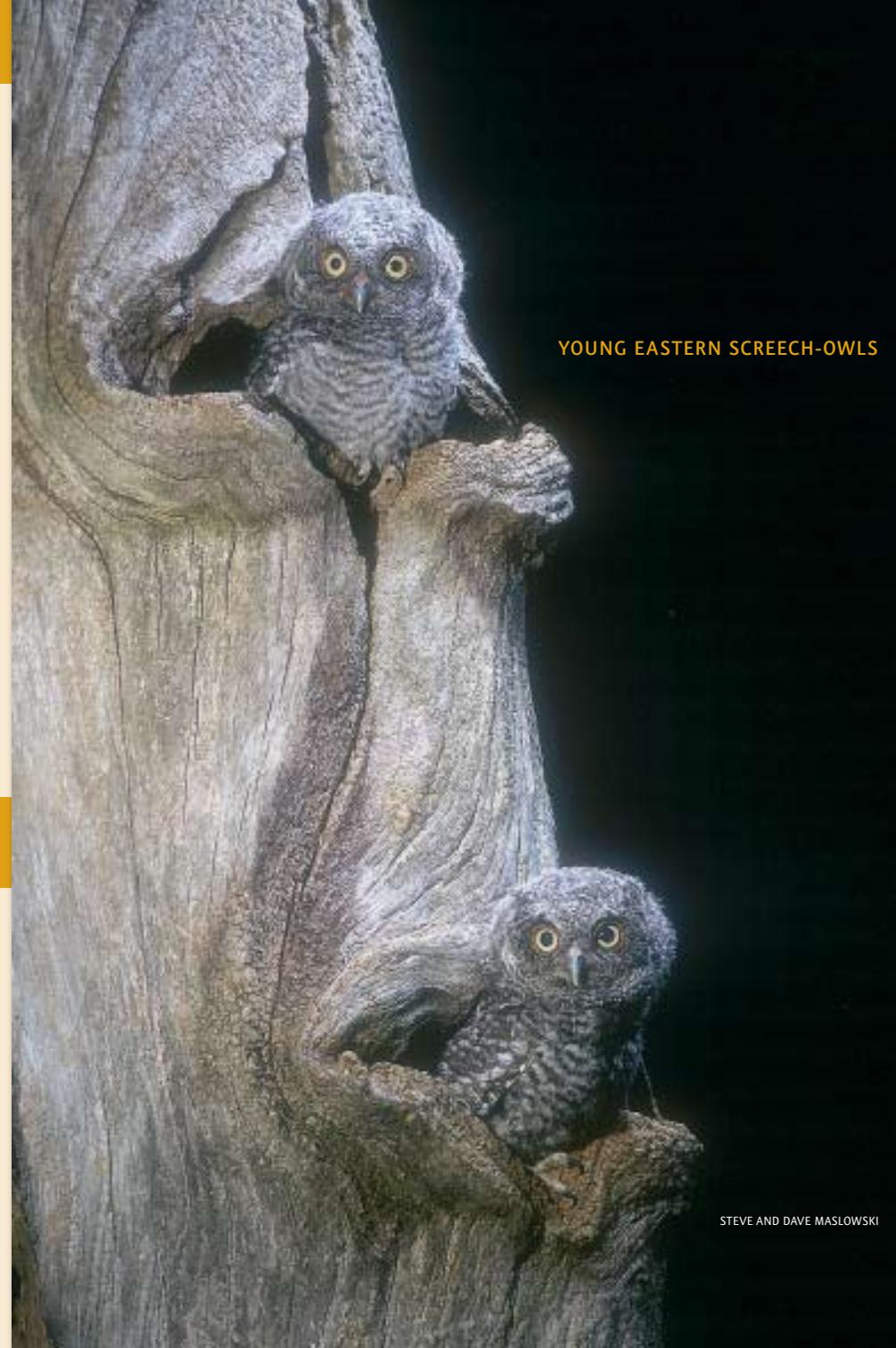


ANTHONY MERCECA, DEMBINSKY PHOTO ASSOCIATES

A HOLE TO CALL HOME

Where do parent birds find a nesting hole? In Minnesota, 13 bird species create their own holes in trees. One champion hole-maker is the **northern flicker**. This speckled woodpecker has a long, strong beak for drilling into trees. A flicker is a *primary nester*, or *excavator*. All species of woodpeckers are excavators.

Most cavity nesters don't drill their own cavities. **Bluebirds, wood ducks, house wrens, owls**, and other *secondary nesters*, or *nonexcavators*, search for nest boxes, abandoned woodpecker holes, or trees with natural cavities (caused by lightning strikes, wind breaking branches, insects).



YOUNG EASTERN SCREECH-OWLS

STEVE AND DAVE MASLOWSKI

PRIMARY NESTERS

Downy woodpeckers live in every part of Minnesota year-round. In May a pair chooses a nesting tree at the edge of a forest or park or even in a back yard. They find a dead branch or broken tree stub, from 8 feet to 50 feet high, and start drilling.

You can hear their steady tapping as they chip away at the wood for two to three weeks. First they chisel an entrance the size of a silver dollar. Then they hollow out the cavity, making it about as deep as this magazine is tall.

The downies often excavate underneath a branch or in a hidden place in a stub. They carry away the wood chips and sawdust they produce, so squirrels and other predators won't notice the signs of nest building.

When the cavity is finished, the female woodpecker lays four or five glossy white eggs inside on a few leftover wood chips. Both parents take turns sitting on the eggs until hatching in about 12 days. After three weeks of being stuffed with insects and larvae, the nestlings venture outside the cavity. After three more weeks of meals provided by their parents, the young must live on their own.

DOWNY
WOODPECKERS



BILL MARCHEL

BLACK-CAPPED
CHICKADEE

Black-capped chickadees live throughout Minnesota in all seasons. In mid-May a pair starts excavating a nest hole in a tree in a forest or open space such as a back yard.

Because of their tiny beaks, chickadees search for well-rotted wood, often in birch trees or pine stumps. Both parents quietly chip away or pull out the soft, dead wood to create a cavity 4 to 10 feet off the ground. They carry away most of the wood chips to fool predators looking for a nest to raid.

To keep out larger birds, the little chickadees make their entrance hole only about the size of a quarter. They work seven to 10 days to make a cavity and spend another four days building a cuplike nest of moss, plant down, hair, feathers, and spider webs.

The female lays and incubates six to eight speckled eggs. When the chicks emerge in about 12 days, both parents handle feeding chores. Young leave the cavity after about 16 days, but they follow their parents around, begging for food for another three or four weeks.

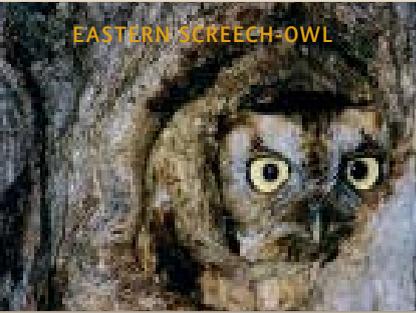
STEPHEN B. ANTUS, JR.



ADULT CHICKADEE
FEEDING YOUNG

SECONDARY NESTERS

S **Eastern screech-owls** live everywhere in Minnesota, except the far northeastern corner. Look for them year-round, roosting in trees during the day. Because a screech-owl's coloring looks like tree bark, you can look right at it without seeing it—until it opens its large, yellow eyes.



SCOTT SHARKEY

The screech-owl's curved beak can tear up rodents but not excavate a cavity, so it looks for a natural cavity or woodpecker hole or nest box. The owl parents look for a home 5 to 30 feet off the ground in woods, swamps, parks, forests, and suburban back yards.

In May the female incubates four or five glossy white eggs for about 26 days, while the male brings food. The young leave the nest when they're just over a month old, but the parents still have a job to do. For another 10 weeks, they feed their young and teach them survival skills.

AMERICAN KESTREL

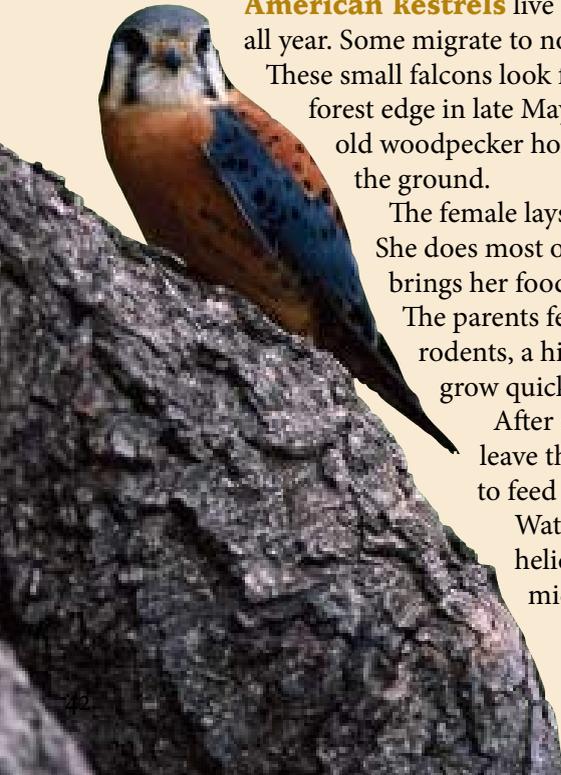
American kestrels live in the southern part of the state all year. Some migrate to northern Minnesota in the spring.

These small falcons look for a nest site in an open space or a forest edge in late May. They choose a natural tree cavity, old woodpecker hole, or nest box from 9 to 32 feet off the ground.

The female lays about five pale, speckled eggs. She does most of the incubating, while the male brings her food. The eggs hatch in about 30 days. The parents feed their young insects and small rodents, a high-protein diet that makes them grow quickly.

After about a month, young kestrels leave the nest, but their parents continue to feed them for another 12 days.

Watch for kestrels hovering like small helicopters over a field as they hunt for mice or voles.



STEPHEN B. ANTUS, JR.

HOME HELPERS

H As people clear more and more land to build houses and shopping malls, some cavity nesters might not be able to find a nesting tree at all. Whenever someone removes a dead tree from a yard or a forest, another cavity-nesting place vanishes.

Birds compete fiercely for the limited number of cavities. If they can't find a cavity, they simply won't nest. Some non-native birds, such as house sparrows and starlings, will kill other birds to claim a cavity.

You can put up a nest box (also called a birdhouse) to make a new space for cavity nesters. Cornell University's Lab of Ornithology (*ornithology* means study of birds) offers a Web site (www.birds.cornell.edu/birdhouse) with instructions on how to build and place a nest box. The book *Woodworking for Wildlife* (available at www.minnesotasbookstore.com, or by calling 800-657-3757) also offers instructions.

Hang a nest box in your yard, and you'll have hours of fun watching your new neighbors—cavity nesters! ●

Val Cunningham is a nature writer and editor in St. Paul. She spends as much time as she can outdoors watching birds and other wildlife.

ATTENTION TEACHERS!

To find an online teachers guide for this story, visit www.dnr.state.mn.us/young_naturalists/cavity_nesters.

To learn more about using *Minnesota Conservation Volunteer* as a teaching tool, contact Meredith McNab, meredith.mcnab@dnr.state.mn.us or 651-259-5348.



DAVE AND STEVE MASLOWSKI



DAVE AND STEVE MASLOWSKI