

# Giant Woodpeckers and Dead Trees

By Pamela Eyden

Late summer is the time when the young of most birds have fledged and are growing big enough to live independent lives. Many parents are no longer foraging for specific food — bugs and fruit — to feed their young. Some have shifted their diets to gain weight and energy for their migration. The warblers and water birds, raptors and waders we've watched since spring will soon be gone.

Woodpeckers are one of the birds that sticks around. In the forests of the Upper Mississippi they stay close to their territories all year. There are seven woodpecker species here — downy,

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Pileated woodpecker. (Billy Reiter-Marolf)

hairy and pileated woodpeckers; red-headed, red-bellied, yellow-bellied sapsuckers and northern flickers. All of them sport black, white and red in different configurations, and are relatively common.

The pileated woodpecker is not just the largest woodpecker around these parts, but one of the largest forest birds in North America. By sight or by sound, you can't mistake it for any other bird or woodpecker. It has a prominent, bright-red crest pointing from the top back of its head, a two-to three-foot wingspan and a body the size of a large crow or small cat. It flies with a distinctive undulating swoop. When it lands on a tree, it jumps and grabs its way up the trunk like a powerful young logger with hooks on his feet.

The pileated is a logger of sorts. With its long beak shaped like a chisel, it can make short work of a piece of

rotting wood. Its beak strikes the trunk with a force said to be equal to a

When they're at work, chips fly in all directions, often leaving telltale piles of wood chips at the base of the tree.

human sprinting headfirst into a wall at 16 miles per hour, over and over.

Ouch!

How can it survive doing this? Its beak and head have adapted to the task. The beak has a flexible outer layer to

handle the shock and vibration, and an inner layer of dense bone that transfers the shock to the bird's whole body. Its brain is tightly packed in its skull, which may prevent it from suffering the kind of damage done to humans in car crashes.

Like other woodpeckers, pileateds drill wood to get at insects hidden inside — carpenter ants, beetle larvae, termites, flies, caterpillars, cockroaches, grasshoppers — although they also eat nuts and berries, including poison ivy berries.

A biologist in northeast Iowa once watched downy, hairy and pileated woodpeckers all foraging together from the same poison ivy bush.

Holes drilled to get at bugs are oblong and often absurdly large with



*Pileateds carve out large holes in tree trunks. (Pamela Eyden)*

multiple holes up and down the trunk. Pileateds' holes are by far the largest. When they're at work, chips fly in all directions, often leaving telltale piles of wood chips at the base of the tree. They also excavate holes for their nests, to protect their young and to take shelter in after the day's work is done, and at the end of the season. Territorial and monogamous, male and female pileateds share the work of raising young, but then each retreats to its own roost hole, which it uses for just one season. They excavate new holes every year.

Just as you can't mistake the swooping flight of a pileated, you can't mistake the loud hammering it makes drilling the holes. No other forest bird

or creature can equal it.

"They do hammer to excavate for bugs, but they also do it to communicate," said Jon Stravers, an independent bird researcher who has tracked forest birds for 44 years near his home in McGregor, Iowa.

"They choose the biggest deadest trees in their territory to send messages to each other. Each pair of pileateds have their own pattern of drumming. It's usually every 38 to 44 seconds — their way of announcing, 'This territory is ours!'"

Stravers pointed out that birds find the bugs inside the tree by listening for them, and that the bugs themselves communicate with each other inside the tree.

You might think of pileateds as housing developers. When the nesting season is over, woodpeckers abandon their nests and other creatures move in. At least 20 species are secondary tenants, including wood ducks, kestrels, saw-whet owls, hooded mergansers, screech owls, barred owls, black-capped chickadees, white-breasted nuthatches, tufted titmice, house wrens, tree swallows, prothonotary warblers, great crested flycatchers, eastern bluebirds, chimney swifts, European starlings and

tree-dwelling brown bats.

Ecologists note that these big holes accelerate the decomposition of trees and the recycling of the nutrients in them. They do their share to control insect outbreaks by opening up and changing the temperature in wood where insects are overwintering.

There are thousands of acres of dead and dying trees in the river's floodplain forests now, killed by floods and prolonged high water, and by emerald ash borers — forests of tall, gray ghosts of ash, cottonwoods, silver maples. In some places — Reno Bottoms, Chippewa Bottoms, Trempealeau Refuge, Sny Magill, Wyalusing —

the result looks creepy and unnerving. You'd think that, with all these dead and dying trees, woodpeckers would be having a field day, but it's not that simple

"I have observed pileated woodpeckers and other woodpeckers using the dead trees in the die-off areas, but I don't have much hard data from our songbird surveys to quantify an increase in use," said Billy Reiter-Marolf,

**"Pileateds work live trees in healthy forests, and they help to keep a forest healthy by consuming insects in the live trees."**

rolf, wildlife biologist for the McGregor district of the Upper Mississippi River National Wildlife and Fish Refuge in Prairie du Chien, Wis.

"I do expect the die-off areas to provide increased opportunities for insect foraging, as well as nest cavity excavating, which should benefit woodpeckers and other cavity-nesting birds for several years."

But a stand of dead trees is wide open and bright — an environment the birds wouldn't like for nesting, because the nests can get too hot.

"There may be a preference for cavities in shaded areas, versus cavities in sunny areas, as nest temperature could be an important factor in nesting success," said Reiter-Marolf.

Woodpeckers need a living forest habitat. There may be a lot of bugs in those acres of dead trees, but they aren't likely to be the right bugs.

"After the trees die, the type of insects shifts," said Stravers. "There are just the decomposer bugs."

"Pileateds work live trees in healthy forests, and they help to keep a forest healthy by consuming insects in the live trees. A dead forest doesn't offer the same kind of sustainable insect resource as a healthy forest." 🌳

*Pamela Eyden is editor-at-large.*

🔊 *Watch and listen to a clip of pileateds on the Big River website.*