

Pileated Woodpecker Secondary Cavity Users

No vacancy

The pileated woodpecker has a niche in the cavity market. Pileated woodpecker cavities make popular homes with building standards matched by few. It isn't the quantity that makes these cavities so sought after: It is the size, square footage and height above the ground. Besides naturally occurring large cavities, there isn't a single species in the Foothills other than the pileated woodpecker that excavates cavities on such a grand scale.

Old cavities make new homes

Many species use old pileated woodpecker nesting cavities. Because natural cavities are much less common and larger cavity using species cannot fit into holes made by other woodpeckers, the constant supply of old pileated woodpecker cavities is important in the Foothills forests of Alberta. Pileated woodpeckers are big birds; they measure 41 centimetres in length. The large entrances and cavity interior makes pileated woodpecker cavities attractive to other large species. In comparison, cavities made by the northern flicker are only half the size of those created by pileated woodpeckers. That would be an impossible squeeze for a big duck like the common goldeneye, or other species like the American marten or boreal owl.



A boreal owl peeks out from a pileated woodpecker cavity.



Some ducks, such as this common goldeneye, nest in old pileated woodpecker cavities.

Did you know....
Pileated woodpeckers occur in forested habitat that stretches from northern British Columbia to central California in the west, across southern Canada to Nova Scotia, and from Nova Scotia south to southern Florida in the east. In Alberta, Canada, pileated woodpeckers occur mainly in the Boreal and Foothills Natural Regions as well as in certain Mountain Natural Regions.

Cavities for different species and needs

Pileated cavities are also popular with the smaller crowd. Bats, squirrels, other woodpeckers and various insects can all be found in pileated woodpecker cavities. All species that use old, vacant pileated woodpecker cavities are called *secondary cavity users*. Secondary cavity users seek out cavities for reproduction, shelter, food storage and roosting (resting or sleeping).

Different cavity shapes and sizes meet different needs. Bat species like the little brown bat, silver haired bat and the big brown bat as well as owls and squirrels use shelf and shallow cavities for shelter and roosting. Wasps build nests in shelf cavities. Squirrels are known to use cavities for storing food like dried mushrooms while owls use them to store small rodent carcasses.



Pileated woodpeckers excavate one new nest cavity annually. Old cavities then become available for use by other species.

Ready to move in

These species are not equipped like the pileated woodpecker to excavate cavities in trees. The presence of pileated woodpeckers and their annual cavity excavation activities create a critical resource in forests where large natural cavities are rare. Whenever a pileated woodpecker moves out, another eager tenant is waiting to move in!

The Foothills Model Forest pileated woodpecker study was initiated in 1993 to determine whether pileated woodpeckers might be adversely affected by timber management practices. The study followed 32 radio-tagged adult pileated woodpeckers over three years and data was collected on pileated woodpecker foraging ecology and cavity tree preferences. Pileated woodpeckers are not likely to become a species at risk in the forest community. However, the study recommended several important management steps to improve the quality of current and future pileated woodpecker habitat.