When Dead Wood is Good Wood

We may think that keeping our woods healthy includes cleaning up and clearing out any dead wood however; nothing could be further from the truth if wildlife diversity is important to us. By some estimates, the removal of dead material from forests can mean a loss of habitat for up to one-fifth of the animals in the ecosystem.

Over 70 kinds of Wisconsin mammals, birds, reptiles and amphibians, not to mention swarms of insects, spiders, millipedes and other invertebrates use snags (dead or dying trees). These critter condos provide den, nest and feeding sites, as well as sites for food storage, perching, preening and courtship rituals. Many ecologists believe dead wood is one of the greatest resources for animal species in the forest.

Dead wood is found in most forest types and comes in three forms. Living hollow trees, snags, and logs. Specific causes of tree injury and death, such as fire, disease, and insects, may target different tree species and age classes; thus, a mix of snag species and sizes occurs naturally across the landscape.

Living hollow trees are created when a tree is damaged, such as in a wind or ice storm, and the wound in the heartwood of the tree becomes infected with heart-rot fungi. As heart-rot fungi infects the heartwood the decay processes eventually cause the cylinder of heartwood to detach from the sapwood and slump down resulting in a cavity within the tree.

Snags are standing dead and dying trees that are left upright to decompose naturally. Snags come in two styles: hard and soft. Both are important to wildlife. Look for signs of injury or a rotten core—dead branches, rotting branch stubs, fungal growth, old wounds, scars and discolored or soft bark are all signs of a dying tree.

Hard snags have rotten centers, a solid exterior and usually a few limbs attached—they make the best den trees. Hard snags are standing trees with sound sapwood and decayed heartwood. A tree’s characteristics determine its snag and cavity potential. For example, sugar maple, elm, black and white oak, hickory and butternut are excellent cavity trees with high wildlife value. These hardwood trees grow to large sizes, decay slowly, and produce hard, upright and long-lived snags. Soft snags, with their pulpy wood fibers, make good forage sites for insect-eating birds and excellent nest sites for woodpeckers and songbirds such as black-capped chickadees.

A log is a snag or part of a snag that falls on the ground. Once a snag has toppled over it does not lose its value to forest wildlife. Downed and rotting logs provide moist and earthy homes
for salamanders, snakes, mice, moles, shrews, earthworms, millipedes, centipedes and more! As the tree decomposes, nutrients are recycled into the soil and a microhabitat favorable for the growth of new tree seedlings is often created. The accumulation of organic material, including damp, rotting wood and leaves, favorably affects mushroom populations. Additionally, many species of fungi, moss, lichens, ferns, and invertebrates that form an integral part of a healthy forest depend on dead trees and down woody material for all or a part of their life cycle.

Learn more about wildlife resources on the WWOA website. As you are enjoying fall walks in your woods, take note of your living hollow trees, snags, and logs. These will be places to observe animals and animal tracks in the coming snowy months.