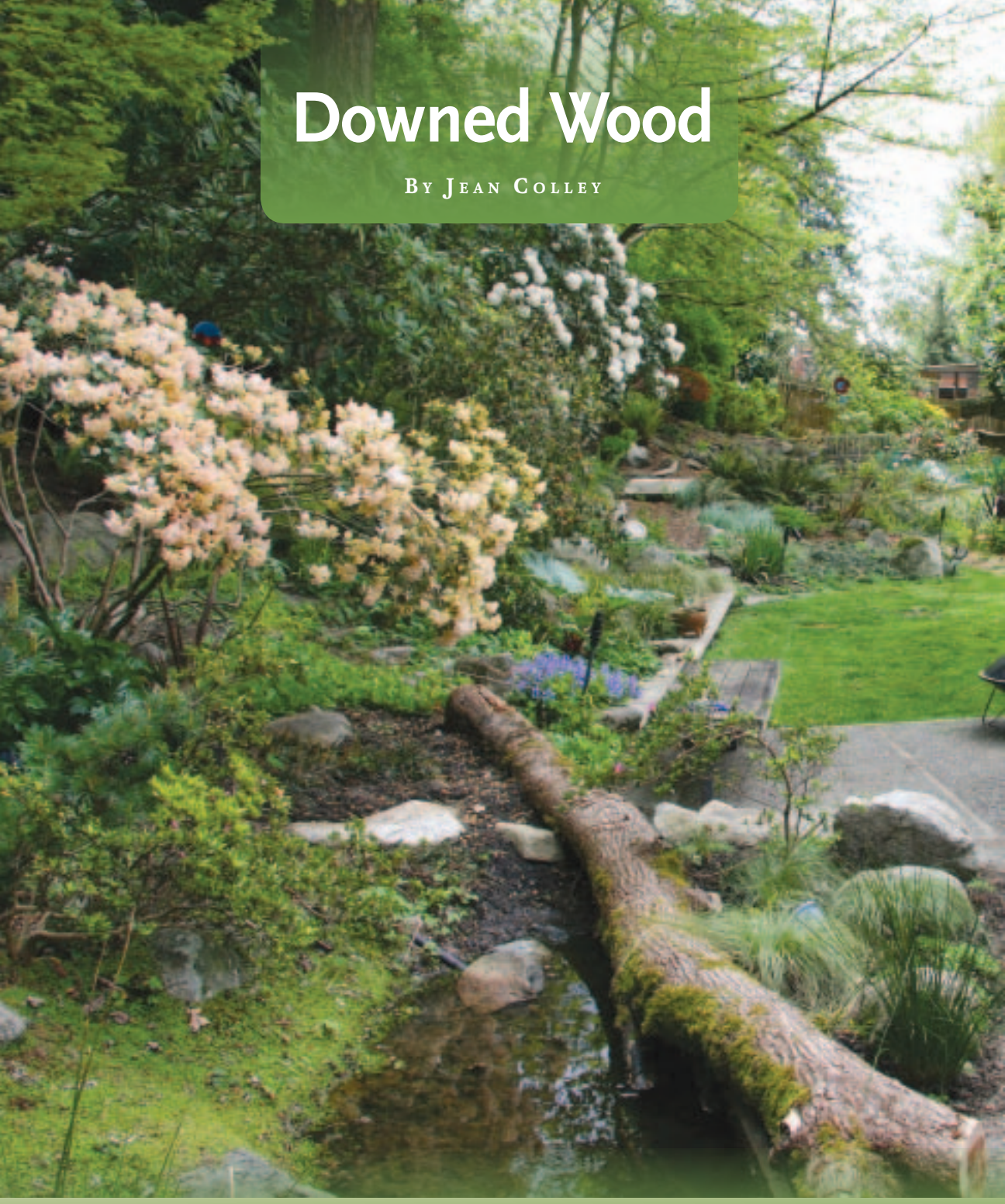
Downed Wood

By Jean Colley



A bigleaf maple trunk creates a natural-looking edge for a pond adjacent to the author's patio. (Photo by Jean Colley)

For too many seasons, my husband Peter and I devoted substantial effort to keeping our woodland garden—starring three mature Douglas firs, a western hemlock and a bigleaf maple—overly tidy. In our dogged pursuit of a spic-and-span landscape, we sent branches, twigs and even whole trees to the chipper-shredder.

However, as time went on, I began to see those twigs, branches and trunks in a new light. Such "downed wood" could be a handy material to create the nooks and crannies for plants that make a garden more interesting. Bigger pieces could become focal points in the landscape.

My relationship with downed wood got serious the day our gardener and I rolled, inch by inch, a 15-foot-long section of a bigleaf maple trunk into the back yard. The trunk, almost a foot in diameter, weighed close to 500 pounds and came from the gardener's Kitsap Peninsula acreage. We got it situated so that it created a horizontal and natural-looking edge for the waterfall and pond adjacent to our patio. It was a thing of beauty.

Downed wood is eventually dead wood, but it's also part of nature's food chain. Gardeners, with more knowledge than I, pointed out that—as organic matter—downed wood adds biomass to the garden, enriching the soil as it decays. Over six years, I have watched my 15-foot maple trunk next to the patio segue into a nurse log, sprouting ferns and mosses and a thrilling crop of "turkey tails" (the mushroom *Trametes versicolor*).

What the Arboretum Does With Downed Wood

I recently talked to Chris Watson, arborist for Washington Park Arboretum, about downed wood in the landscape. It's good stuff, for a lot of reasons, he agreed. In the Arboretum, prunings of large trees (16- to 20-foot pieces) are being used more and more to line trails, curtail erosion, and mark off planting areas.

"Sometimes, when they fit our esthetic, we leave pieces where they grew or fell," Watson said. "We also will leave downed wood as a habitat feature. It will become home to bugs and grubs. As it breaks down, little holes and crevices are used by animals and birds. Woodpeckers, in particular, love dead wood.

"The more of that we leave, the better. At the Arboretum, we are a refuge. Wildlife is part of what draws people here and what they enjoy. So we manage for wildlife."

Turkey tail mushrooms sprouting from a nurse log. (Photo by Jean Colley)

A nurse log lining a trail in the Woodland Garden at Washington Park Arboretum. (Photo by Niall Dunne)

Although saving and reusing downed wood is hardly a new idea in parks, many home gardeners—for a variety of reasons—still have trees and large branches cut up and hauled away, rather than leaving some behind as habitat.

"If you compare the pristine residential garden with the native forest where needles fall, trees fall, and everything is left in place, the forest is a different place. The nutrients stay in place," Watson said. "But at home we rake up our leaves, cut up and haul out our trees and branches. Then we spend money on compost, which is essentially downed wood."

From Parks to Gardens, Logs to Snags

I'm a big fan of the 65-acre Wetlands and Uplands Habitat Restoration in Magnuson Park in Seattle, completed just a few years ago. I especially love the huge logs scattered throughout the site.

Jason Henry, a principal at the Berger Partnership—the Seattle-based landscape architecture and urban design firm that created the plans for Magnuson Park, and whose clients also include the Arboretum—chatted with me recently about downed wood.

"Using wood from trees in the landscape is as local as you can get. Material reuse makes perfect sense, particularly on park sites," he said. "On those sites, every time there's a storm, large branches and whole trees come down; one of our techniques is to reuse that downed wood as snags or nurse logs in the landscape."

Henry is encountering more landscape clients who want to be involved in restoration or in creating an ecologically sound landscape. "They want to do the right thing, but they don't all know what to do," he said.

Because of issues of scale and esthetics, not every garden "needs" a snag (defined as a standing, dead or dying tree) or a nurse log, he noted. A garden of small perennials might not be enhanced with such additions.

But everyone can participate at some level. Gardeners have long used willow branches to make small-scale fences. On the Union Bay Wildlife Area, students repurposed dead blackberry vines to create fanciful wreathes and other pieces of "art" for bird and insect habitat. Gardeners can save a piece of wood from a tree and create a bench or even a table. Or they can employ downed wood to denote an event or make a cultural connection.

Henry told of a client whose shoreside willow was dying. It had been a landmark tree on Lake

A snag created for the wetlands of Magnuson Park, Seattle. (Photo by Jean Colley)

Washington for some 70 years, and the client and many others had fond memories of it serving as a way-finding marker. Too, a rope swing in the tree provided decades of fun for his family and friends.

Rather than simply cutting down the tree and grinding it into wood chips, Henry created a snag out it. It still stands, a vivid reminder of the site's history, and it continues to provide habitat for birds. Just recently a visitor spotted a kingfisher perched on a side branch. "Any tree tied to the culture of a place has the opportunity to be remembered through repurposing," Henry commented.

Gardeners, generally practical people, should also remember that it is usually much easier to leave a large log in place rather than cut it out and haul it away.

"The more you can make use of the woody stuff in your garden, the better off you are going to be," Henry said. "Every aspect of your wood has the potential to become habitat and improve the garden."

Using Downed Wood and Creating Snags

Wood does decay, so using downed wood in the landscape means that in 10 to 20 years it will become immersed in the landscape, and eventually it will disappear.

Among our local natives, Western red cedar (*Thuja plicata*) is the most naturally resistant to decay, but Douglas firs (*Pseudotsuga menziesii*) and Western hemlock (*Tsuga heterophylla*) are also slow to subside. According to Watson of the Arboretum, madronas (*Arbutus menziesii*) have the ability to stand dead for years and make great snags. Poplars and willows will probably rot out sooner rather than later, but are still suited for use as downed wood. "You do need to be careful they don't start sprouting and spread," Watson cautioned.

Dead alders tend to create snags themselves in that they break apart easily. For this reason they shouldn't be left standing in the home garden. Our native bigleaf maples decay pretty easily. The huge sugar maple trunk we left in place after the tree crashed down our hillside in September 2013 is shrinking noticeably. (See "Tree Down," by Jean Colley; "Washington Park Arboretum Bulletin," Fall 2014.)

When creating a snag from a dead or dying tree in a park or garden, arborists customarily remove large branches that could eventually become unstable and tumble down. Arboretum

Holes made by a pileated woodpecker on a snag at the north end of Azalea Way, Washington Park Arboretum. (Photo by Niall Dunne)

arborists regularly monitor snags and remove them if the trees seem at risk of falling. When the arborists leave a snag, they'll leave it short enough so that if it does fall, it won't hit anything sensitive nearby—such as a trail, bench, parking lot or building.

If the downed wood came from a tree infected with a fungus like *Verticillium* or *Armillaria*, the Arboretum is leery about using that wood in the landscape again.

"We had a Japanese maple infected with *Verticillium*," remembered Watson. "We chipped it and aged the mulch as long as we could. Do we spread the disease by later using that mulch? I've heard other arborists discuss it, but I'm not sure."

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At the least, gardeners should refrain from using downed wood near trees like Japanese maples known to be susceptible to fungal diseases, since any downed wood in the Northwest will inevitably harbor fungi and insects.

Pruning Dead Wood for Wildlife

A grove of native conifers—Douglas fir, hemlock and western cedar—grows at the north end of Azalea Way in the Arboretum, right across the road from the Graham Visitors Center. These trees had not been pruned in quite a while and were thicketed with dead wood. Rather than follow conventional pruning technique and saw off the dead wood at the branch collar, Watson simply broke pieces off by hand. "This stabilizes the remaining wood and removes any hazardous branch pieces that might present a risk to Arboretum visitors," he said, "But it also leaves some dead wood on the tree to create bird and insect habitat."

The practice is somewhat akin to the pruning techniques pioneered by English arborist Neville Fay. An outspoken advocate of "conservation arboriculture," Fay urges his colleagues not to impoverish biodiversity by removing aging or dead trees from the environment.

"Fay is a bit controversial," Watson said. Even when pruning a live branch, Fay argues for leaving part of the branch as a "coronet"—a jagged cut that greatly increases its surface area and allows more decay to proceed. "We don't typically prune with jagged cuts at the Arboretum, except when we are removing a whole tree and leaving a snag," Watson added, "but other people are doing it. They're exploring the options to see what they can do to create more niches and attract more wildlife."

Meanwhile, back on my patio, my nurse log is slowly collapsing. But it's also getting a good workout this winter as birds forage it every day, looking for grubs and bugs.

Jean Colley, an editor and writer, is a member of the board of directors of the Friends of Yesler Swamp.