

Woodpeckers of the Watershed

by Aviva Rossi
2011

“Tap tap tap...tap tap tap”—What is that sound? Walking along a trail, or even looking out a kitchen window, the distinctive sound of a woodpecker drilling into wood is a trademark of areas with mature forests. In our watershed, well-provisioned with mature trees, we are lucky to provide habitat to a profusion of woodpeckers. These often-conspicuous species can be seen extracting insects from bark, enthusiastically drilling holes in trees—as well as utility poles and buildings—to store acorns, or drilling into bark for the nutritious sap. Many of the species have a similar general appearance: a bird with a splash of black and white, clinging vertically to a tree trunk, supported by a stiff tail, tapping its beak intently into the wood.

Woodpeckers are diurnal, roosting at night inside holes they have excavated. In many species the roost will become the nest during the breeding season, although it is not uncommon for a pair to excavate many alternative holes in their territory. In our area, all wood-pecker species nest in tree cavities. By excavating, woodpeckers play a crucial role in many forest ecosystems; a diverse array of other birds—as well as mammals, reptiles, amphibians, and invertebrates—use the cavities for shelter and nesting. Most woodpeckers also drum on objects as a form of communication and territory defense. When doing so, they try to make as loud a noise as possible, and that’s why wood-peckers sometimes drum on metal objects. One Northern Flicker was heard drumming on an abandoned tractor from a half-mile away!



Pileated woodpeckers, with their large size, dramatic coloration and shape, often announce their presence with a loud barking call. Nesting in the woodlands of the western part of our watershed with large mature trees, they make occasional forays into our gardens. Photo by Gary Leo

Woodpecker species have some really amazing evolutionary adaptations for their way of life, with each species having some or all of them. If any of us tried to bang our head against a tree even once, much less at the force and frequency of the woodpecker, we’d have quite a headache. The bird’s small size helps to prevent brain damage, and the orientation of the brain within the skull increases the area of contact between the brain and the skull; and unlike other birds, the bones between the beak and the skull are joined by a flexible cartilage, which cushions the shock of each blow.

To generate that much force, the woodpecker has to be firmly attached to the surface it is drilling into. If it wasn’t, it would just knock itself off the tree after the first blow. Woodpeckers have a toe arrangement that helps give them the solid base they need. It consists of four toes, the first and the fourth facing frontward and the second and third facing back, attached to sharp claws and short legs.

The tails of all woodpeckers are stiffened, and when the bird perches on vertical surfaces, the tail and feet work together to support it. As well as having stout beaks, many woodpeckers have a narrow, sticky tongue with bristles used to dislodge and extract insects from their burrows in the wood or bark. Some woodpeckers can even extend the tongue four to five inches beyond the tip of the beak.

To protect their eyes from flying debris, in the millisecond before contact with wood a thickened third eyelid closes. The nostrils are also often protected by having only a slit-like opening, with special feathers to cover them.

Our watershed supports seven species of woodpeckers, all adapted for a different woodland niche:

The Acorn Woodpecker is a very common local species where oaks are abundant, even in urban and suburban areas. This species can often be seen storing acorns in holes in trees, or frequently in telephone poles or wooden buildings. Acorns are stored in separate holes drilled into a single —granary tree, used by several birds. They do not fill up a hollow tree, but drill holes, and put the acorn firmly into the hole. One granary tree may have up to 50,000 holes in it, each of which is filled with an acorn in autumn. If you see a woodpecker furiously working an acorn into a utility pole outside your window, you should be able to easily tell if it is an Acorn Woodpecker: no other woodpecker has a black back, white belly, and black-white-and-red face pattern.

The Lewis's Woodpecker is a larger and very darkly colored woodpecker of open woodlands. It has metallic greenish black on its back, a gray collar and breast, pinkish-red belly, and dark red face framed with greenish black. An interesting life-history trait of this species is that although both adults contribute equally in daytime care of the young, only the male broods at night. The Lewis's Woodpecker seldom, if ever, excavates wood to catch boring insects. Instead, it gleans insects from the tree surface, or most commonly, catches them in flight. Lewis's Woodpecker eats mostly insects in summer, but switches in winter to acorns and other nuts, which it often stores in bark crevices. Because the food source and method of storage is similar to our friend the Acorn Woodpecker, they will fight over stored food.

Downy Woodpeckers, “Downies”, and their larger look-alike, the Hairy Woodpecker, are an excellent first challenge for beginning birdwatchers. They are both commonly observed within the watershed, including at backyard feeders, and have very similar coloring. The Downy even often joins flocks of chickadees and nuthatches, and is only slightly larger than them. Both species have black upperparts and are checked with white on the wings, the head is boldly striped, and the back has a broad white stripe down the center. Males have a small red patch on the back of the head, while females of both species lack this. The Hairy is about 1/3 longer than the Downy. However, if you see one alone, size can be hard to judge. The bill is a good way to tell them apart. The bill of the downy woodpecker is noticeably shorter than the width of its head, less than 1/2 its width. The bill of the hairy woodpecker is almost the full width of its head.

Nuttall's Woodpecker's color pattern is distinct from other wood-pecker species in the Corte Madera Creek Watershed. It is small, with a black-and-white, barred back. The males have a black forehead, streaked with white on the center of the crown, and red on the rear crown and upper nape. The females have black on their forehead, crown, and nape with just some white streaking. Although Nuttall's Woodpeckers are nearly confined to oak woodlands, they do not eat acorns, instead eating insects and some fruit that grow in that habitat.

The Northern Flicker is a large, brownish woodpecker, with a slightly down-curved bill, and a flared tail of tapered feathers. The brown plumage is richly patterned with black spots, bars, and crescents. When they fly they are very recognizable, with a flash of salmon pink color in the wings out here on the west coast, and a bright white section on the rump. Northern Flickers are common in this area, and you can find them in many habitats, including along Corte Madera Creek's riparian woodlands, and marsh edges. Although it can climb up the trunks of trees and hammer on wood like other wood-peckers, the Northern Flicker usually forages on the ground. Northern Flickers eat mainly insects, especially ants and beetles they gather from the ground. Flickers also eat berries and seeds, especially in winter, including poison oak, dogwood, wild grape, and elderberries.

The Pileated Woodpecker is the largest woodpecker in California, nearly as large as a crow with a large, dull black body and distinctive red crest. If you see one, you will immediately know it is something



Red-breasted sapsuckers are partial migratory birds in some of their range, but occur in our area year-round, feeding on the sap of willows and conifers, as well as other trees such as the California pepper tree seen in the photograph. Photo by Charles Kennard

different from other local wood-peckers due to its size alone. The Pileated Woodpecker makes deep rectangular excavations in trees and logs in pursuit of insects. These excavations can be so broad and deep that they often attract other birds, such as the Hairy Wood-pecker, to feed at the excavations, and they can even cause small trees to die. The Red-breasted Sapsucker creates rows of holes in the bark of woody plants and feeds on sap that appears there, and revisits this re-source throughout the day to ensure sap production. This species will also eat insects and fruit. When feeding young, sapsuckers often forage for ants, and some of these may be dipped into sap wells, perhaps for added nutritional value. Other species make use of sap-sucker wells to supplement their food intake with sap or with insects attracted to the sap. Hummingbirds of several species make use of sap-sucker feeding holes and come to rely on them. The Rufous Hummingbird nests near sap wells and may follow the woodpecker around during the day, and may even time their migration to coincide with that of sapsuckers so they can feed off the sap wells.

Woodpeckers are adaptable and varied, however, many face declining populations. This declining trend among many woodpecker species should be viewed with concern because these species play a keystone role in the ecology of woodland communities where they excavate many of the cavities later used by other cavity-nesting species. Although a single cause isn't always obvious, there are some important factors that are likely affecting these species. The European Starling is highly invasive and an aggressive competitor for nesting cavities. Woodpeckers are dependent on the availability of dead and dying trees, so when these are removed their population may suffer. However, in our area with plentiful public open space, we can often enjoy the sight of these entertaining birds.

Any use of text or photographs for other than personal purposes is prohibited without permission from Friends of Corte Madera Creek Watershed

Friends of Corte Madera Creek Watershed P.O. Box 415, Larkspur, California 94977
info@friendsofcortemaderacreek.org