



# Brush Piles

## By Jeffrey Caldwell

Santa Clara Valley Chapter

If native vegetation must be pruned or cleared it can still provide great habitat value in the form of brush piles. Non-native vegetation cleared from natural areas generally will provide much better animal habitat in the form of brush piles than if allowed to continue to compete with or exclude the growth native vegetation. Though dead non-native vegetation will not support as great a diversity of animal life, it will probably support about the same weight of animal life.

At my mother's home I had occasion to do some drastic pruning of a large blue elderberry (*Sambucus mexicana*) and a coast live oak (*Quercus agrifolia*) which had been planted for backyard wildlife habitat over twenty years previously. I didn't have any handy means of carting away such a large volume of debris, so it became a good opportunity for me to personally test the wildlife value of properly constructed brush piles.

I made a few large brush piles in a weedy area of the yard which is only mowed occasionally. The piles were built on foundations of the largest logs and branches, with some attention to arrange them to create lots of hiding places of various sizes and shapes. At each successive level, branches which were progressively smaller in diameter were used, and they were topped with leafy twigs. Note that properly constructed brush piles are built exactly the opposite of the way one would build a bonfire; they should not present a fire hazard.

Over the winter I was pleased to note flocks of small birds flying in or out of the piles, which provided good cover and a good place for them to find insects and spiders. In spring the piles were moved to a wildlife study area. At least five southern alligator lizards and more than twenty California slender salamanders were found under the piles, along with many worms, insects, isopods, millipedes, etc. Not bad for a suburban back yard!

Later I learned that a young dusky-footed woodrat had been captured for the first time in the wildlife study area – a riparian area near the San Francisco Bay that had been studied for years. This discovery was a bit exciting, since the dusky-footed woodrat is a declining species of concern and had never before been detected in the study area. Typically young animals disperse to seek suitable new habitats. I surmise that the shelter provided by our man-made brush piles helped a dispersing individual survive to be detected. Woodrats themselves construct nests that are like brush piles and provide shelter for a great variety of other animal life.

Woodrats are considered a “keystone” species since their activities create habitat for other animals. You, too, can be a “keystone” species – make a brush pile! Any sort of pile of vegetation debris will provide food and shelter for various organisms, even if there is no rhyme or reason to its construction.

More creatures eat dead plant materials than living plant materials! Most plants are somewhat toxic while alive, deterring creatures from eating them. The microbial decomposition of dead plant materials neutralizes the toxic compounds and tends to soften them, making them more palatable and edible for animal-life. Decomposition often creates warmth, as when a compost pile heats up. So a rotting leaf pile is comfortable place for a snake to curl up in the winter!