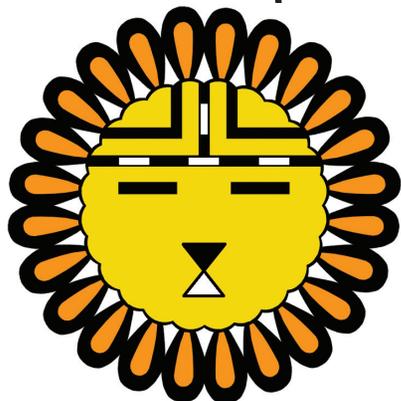


Journal from



the James

What good is a dead tree? ...

BY ASSISTANT DIRECTOR JOHN LAUNDRÉ

With the drought persisting in our area, a lot of concern, and rightfully so, has arisen regarding the loss of many of our trees. As usual, when we have trees dying, especially after a forest fire, we hear the arguments that these trees need to be cut down so they don't go to "waste." When a tree in town or in our yard does die, by the drought or any other reason, yes, they should be removed, primarily for safety reasons.

However, how about the rest of the forest? To paraphrase the old saying: If a tree dies in a forest, does it matter? Is a dead tree only good for the lumber or firewood it might produce? Shouldn't we remove them all, tidy up the forest as it were, to reduce the potential fire danger?

The list goes on and on about why we should remove dead trees from a forest — for the good of the forest. However, not surprisingly, trees have been dying in forests long before we got here. What happened to them then? Did they just "go to waste?" Or, in the efficiency of nature, did they actually play a role in forest ecology? We need to ask, beyond our needs and concerns, "What good is a dead tree?"

As it turns out, the answer to that question is "a lot." Anyone who has walked in the forest and has seen a standing dead tree only has to look carefully to see that a lot of wildlife species depend on it. Woodpeckers top this



Ladybugs thriving in a dead tree. PHOTO BY JOHN LAUNDRÉ

list, as can be evidenced by the many holes they make searching for insect grubs, also obviously dependent on the tree, living under the bark. Woodpeckers also make larger holes for their nests, which in turn are used by other cavity-nesting birds.

Other obvious benefactors of the passing of a tree are the mushrooms. As their mycelia (vegetative parts) secure nutrients by penetrating and spreading through the tree trunk and its roots, their characteristic fruiting heads appear as "fairy rings" around the tree or as shelf mushrooms, clinging to the trunk. The fleshy tissue of these mushrooms, in turn, become food for squirrels and a myriad of insects. A standing dead tree, then, can be seen as an ecosystem in itself, supporting and nourishing a vast array of organisms.

But when that tree falls down is when the action really starts. Once on the ground, the tree's jumbled trunks and branches provide havens for rabbits, chipmunks and ground-nesting birds from their predators, and for tender young plants from their herbivores. The trunk quickly is invaded by ants and termites, which in turn feed other animals, including bears. Nothing more satisfying to a bear than to rip into a rotting log and devour the fat, juicy termites living within.

The trunk also continues to support a diverse mushroom community, joined by mosses, small flowering plants and even young trees. In many a crowded forest floor, often the only free space to germinate and grow is on the surface of a newly fallen tree or its stump. The chemicals in the wood, released by the insects and fungal growth within, provides an excellent source of nutrients to grow new plant tissue.

Lastly, as the final remnants of the tree decay and enter the soil, they provide the nutrients for future trees, repeating the cycle of life in the forest. So, yes, dead trees are important. They are not "dead" ecologically but actually begin a new and important phase in the life of the forest. Every stage of their "death cycle," from when the last leaf/needle falls to when the last piece of wood dissolves into the soil, provides an important link between their glory days as living trees to the legacy they leave behind, a legacy not of death but of rebirth.

To tidy up the forest after their death breaks that cycle, deprives these ancient forest monarchs of that legacy of rebirth. A messy forest, with all its dead and rotting trees, is actually a healthy forest, full of life and rebirth. So let's not tidy up our forest too much.