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Dead Trees Are Part of Our World

As trees die wildlife find places to live, sunlight reaches the ground and new plant species invade, attracting new living creatures.

For many creatures a tree does not reach its greatest usefulness until it is dead. I learned part of this as a child: the day the tree surgeon my father had hired destroyed much of my treetop world while I was away at school. A great silvery branch, rich with a succession of flicker nesting holes, lay broken on the lawn. I crouched and listened at each hole to see whether anything alive was trapped within. Nothing stirred.

Looking up to see what was left, I saw that other dead branches which were the home of flying squirrels and hunting perch of phoebes had been smoothly sawed off, nowhere to be seen. But I was relieved to see that my great maple was still standing. A raccoon sometimes spent a day down in a big hole left by a branch lost long ago. In winter, frost rimmed the hole—frost from his body heat when he was in residence, and in summer, spiders spun their webs across the entrance. Old cobby webs suggested that nobody was at home, but fresh, neat webs could have been spun while the raccoon slept down in his hole.

After a few days I felt like climbing again—my fingers and toes found each familiar hold and I swung up into the old maple. I could hide there; perhaps that's why the coon liked it too. As I climbed, I paused to check the coon hole. It had been stuffed with cement and painted a bilious green. The delicate, torn cobweb at its lower edge had no story to tell.

Protest would have been impossible for my father was in power; he would not have listened. My problem then does not differ from my problem today: how to let those in power know that some things they never even considered, *are* important.

Some tree surgery, for sanitary purposes is necessary. But it often goes too far for sometimes those in power do not know the importance of dead limbs and dead trees.

I learned about dead trees when I left home and became an ecologist; I learned that trees die in

many ways: flooding, old age, disease, and fire.

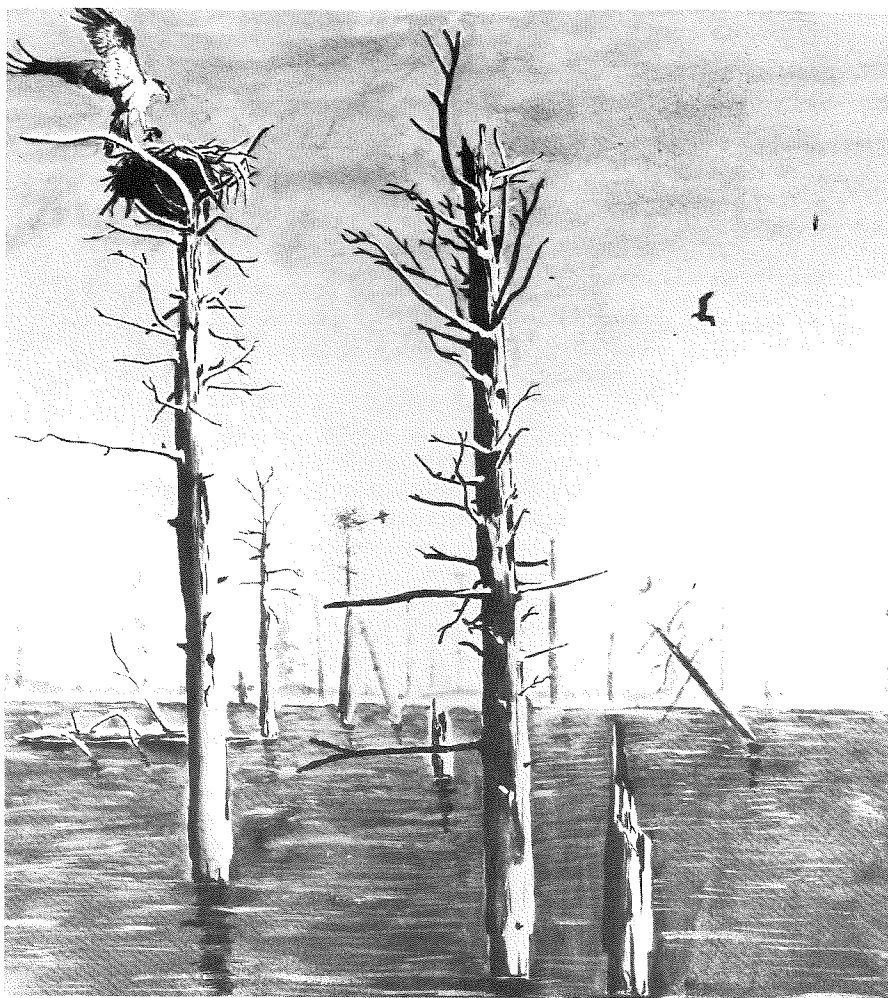
Flooding is one of the excellent suppliers of dead trees. When dams are built a whole succession of events begins: little by little as the standing timber dies in flooded woodlands, tree swallows move into old woodpecker holes. The woodland birds and mammals move out, and a sequence of spectacular new wealth moves in. Bald eagles often build their giant eyries in such sites, and some of the largest concentrations of osprey nests are in flooded dead woods. Great blue herons regurgitate wet warm fish mash to their gangling young and sometimes in the same trees the velvety black baby cormorants are fed in smaller nests in like manner.

Floods have occurred since time immemorial. Beaver-flooded timber created flowages long before engineers ever did. The only *wild* martin colony I have ever seen was in such a flowage.

Now engineers build bigger dams than the beaver. They are often no bonanza. For one thing the trees are usually cut and cleared away before the valley is flooded. An outstanding opportunity for new dead trees lost!

With the decline of the bald eagle, osprey and cormorant populations, we can no longer ignore the need for dead standing timber in flowages. These species can nest in other sites, but dead trees in standing water tend to be safer. They are also often preferred nest sites.

Tree diseases create wildlife habitat also by creating more dead trees. Disease and insects that kill substantial stands of trees set back the plant succession and make openings for sun-loving species. These are natural phenomena. *Widespread* outbreaks of pests or disease tend to be a symptom that man has already meddled too much. This is particularly true of man-made plantations, for pests and disease abound when any one species of plant lives abnormally in a monotype. Large monotype plantations such as are common in the



Lake States are precariously out of balance. Disease and pests help swing them back into balance. We are brought up to abhor pests and disease, not to recognize that these are not simply evidence of God's wrath, but natural and sometimes desirable phenomena.

As trees die, woodpeckers and chickadees find nest sites; sunlight reaches the ground and new plant species invade and attract new living creatures. Even one dead tree breaking the forest canopy brings richness and variety into its sphere of influence by setting back plant succession.

Since Dutch elm disease hit America, our attitude toward dead wood sometimes approaches paranoia. True, dying elms give the disease a better chance to spread during the period that they are dying. But should removal of all dying and dead elms guide our policies toward all diseases and pests? It seems as silly as killing all dogs because some are mad.

Single dead trees in a forest en-

rich the habitat only over a limited area. Fire is the most potent landscaper. Where fire has swept the woods, a whole new succession of plants and animals invades the new burn. Kestrels and bluebirds and tree swallows—birds that could never have nested in the woodland trees—find homes and hunting

grounds in the dead trees that are left.

Flood, plagues and fire all have their place in the natural world. If we remove dead trees, the natural landscape swings out of balance. Losses are counted in phoebes, eagles, flying squirrels and imponderables.

Life springs even from fallen logs.

