

Funeral for a Friend

By Andrew Smith

I went to a most unusual funeral recently, the funeral of my dear friend, the forest.

Actually, it was more of a wake than a funeral, and it wasn't for the whole forest, just for the millions and millions of pine trees that have been killed in recent years by the mountain pine beetle. The wake was held in the Custer High School auditorium. I was hoping they'd have a pine tree in a pine box for viewing, but instead they had poetry readings and an interpretation of the life cycle of the forest by a local ballet troupe. Loggers, hunters, hikers, climbers, innkeepers and tourist shop operators were all in solemn attendance.

After the wake a torch-bearing mob marched to a nearby field where a giant effigy of a pine beetle had been constructed and laid atop a pyre of dried wood and old Christmas trees. The whole thing was torched while the crowd cheered and fireworks exploded in the cold night sky.

All of this was put on by the town arts council as a way of helping local people acknowledge and cope with the loss of such a large part of the Black Hills National Forest to an insect that's smaller than a grain of rice.

The forest is changed! Gone! Ruined! Nearly a half-million acres are affected in the Black Hills alone. Whole mountain slopes of once vividly green pines now stand brown and broken and dead. The breeze that once made them sing now breaks their brittle tops and they fall to the ground slowly, in pieces. Stands of ancient pines that have graced rocky ridge tops for many centuries now crumble in rank decay.

And the fires are still to come. Once all this dead forest is lying dried and on the ground it will become a huge stockpile of highly flammable fuel just waiting for a summer lightning strike to set it off.

Unlike Dutch elm disease, chestnut blight, gypsy moths or the emerald ash borer, the mountain pine beetle is a completely native pest. I've seen pictures of chestnut trees taken in the 1800's and some of them were as big as redwoods. It was the most massive, majestic tree of the Eastern U.S., and now it's completely gone. It was a tragic loss to our landscape when it was destroyed by an imported disease, but today no one is alive who even saw a giant chestnut tree.

That's why import and quarantine laws for plants are important and are something we should all support. I would not want to think I

unknowingly helped destroy another one of Nature's treasures just to make things a little more convenient for myself.

But the mountain pine beetle, *dendroctonus ponderosae*, did not arrive on a ship or a plane. It probably arrived with the pine forest itself, as the glaciers and then the spruce forest, retreated northward and the climate warmed up. The beetle is always here and usually does little harm, or is even beneficial to the environment by creating small openings in the forest canopy that increase habitat for a variety of small animals.

But for unknown reasons the beetle population occasionally swells to massive levels and then this tiny insect shows its demonic side, often destroying hundreds of thousands of acres of forest before the population, just as mysteriously, drops to normal levels again. Although the current outbreak seems unprecedented in size, records show a large beetle infestation in the 1970s and an even larger one in the 1800s. In fact, the town of Deadwood got its name from all the standing dead trees that were in the area when settlers first arrived.

The forest will survive this beetle. As old trees fall, new ones spring up. New meadows and habitats will be created. As the pine forest is opened up and fragmented other tree and shrub species will get their time in the sun. And the cycle will go on.

But for now, it's devastating. So much is gone that was green only a few years ago; so many big old trees that will take many human lifetimes to replace. And so many potential bonsai trees too.

Mountain pine beetles don't usually attack bonsai-size trees, although there are other pests that do. But the most effective way to control the beetle is to thin the forest through logging. Beetle epidemics thrive in overly dense forests. Once the forest is open again the beetle population will drop.

So the Forest Service has been logging and thinning as much of the remaining forest as they can to bring the infestation to a halt. Although it works, the beetle is currently far ahead and there is an enormous amount left to do.

In the last couple years I've watched as one after another of my favorite bonsai collecting areas have been logged and then thinned. Rock outcroppings where I have spent many happy years collecting trees for bonsai, and had hoped to spend many more, have now had nearly all the twisted, stunted, little trees removed.

This is a normal part of forest management and I won't complain about it. I have marked the trees on some of these timber sales myself. And the fact that stunted trees are typically removed to allow more healthy trees to grow is what makes collecting those stunted trees allowable in the first

place. But I can't keep ahead of the crews and their big skidders who are trying to get ahead of a tiny, tiny beetle. I can only watch as countless potential bonsai trees get turned to sawdust and pine slash.

From one perspective, if the loggers are able to get there first and thin out the timber, then what remains is protected for the future from the beetles that would likely kill all of it. And that's good. But from my perspective, it's also sad. Either way, so much is lost.

Of course, there are other places to collect trees, and there are other species and techniques to try. Everything changes and we have to change too, like it or not. And new twisted pine trees will someday grow on those same rocks and perhaps be enjoyed and collected by someone else. I hope so. And the cycle will go on.

For now, all we can do is burn a beetle effigy and recognize that we are always in the middle of a changing environment.