

## Trees that Record History

**Holy Mother Earth, the trees and all nature, are witnesses of your thoughts and deeds.**

**—Winnebago saying**

By PAM BERNS

In first grade, I fell in love with a beautiful, old cedar tree whose knotty roots grew into the side of the limestone cliff behind my school. I remember feeling that the tree was my friend and it was very important for it to be exactly where it was. It belonged there. I could imagine that when the tree was smaller, Native Americans looked upon it with awe. I was captivated by the way the light cast shadows from the roots onto the cliff. My love of trees and the environment continued through my first career as a watercolor artist. I spent over a decade painting highly textured, gnarled trees that took on human characteristics.

After first seeing the amazing California redwoods, I was mesmerized by the giant trees that lived in biblical times. We have to preserve these sacred relics. There is no price to put on a tree that has witnessed so much history.

In exploration of imagery to paint, I stumbled on old horse skeletons, Indian paths, overgrown cemeteries and the original homestead logs of Door County's first Scandinavian settlers, and I transformed them into works on paper. When I slowly began to see the overdevelopment of Door County, my painting imagery became sparse. I could no longer find the old trees, deserted beaches, empty fields and old relics to paint. I moved to Chicago.

The spiritual world of our Native Indian forebearers spoke to our responsibility to the environment. They honored the earth that nurtured them. They knew that our environment had a spirit unto itself. They spoke with reverence about the land.

We have no right to leave it in a worse condition than when we found it. It is ours but for a few years. And we have a responsibility to nurture and preserve our land and water, our fish and other creatures.

In my elementary school in a rural setting, we were required to study agriculture. We learned about the sustainable cycles of crop rotation, like planting clover or peas one year to replenish nitrogen in the earth. We learned to respect the earth.

Today, things are different. We exhaust the land.

Agriculture has grown into a giant chain of factory farms, breeding facilities and transportation, and with these huge conglomerations come increased soil erosion, use of chemicals and animal mills that treat their subjects with little respect. Cattle and hog farms have open-air animal waste ponds that can equal the waste of small cities and make it toxic for their neighbors to breathe.

Agence France Presse reports that according to Nathan Pelletier of Dalhousie University in Canada, when you look at all the environmental costs of food from field to plate, figuring what a cow eats to when it is ready for slaughter to the emissions expelled by manure, the livestock sector—especially cattle—is estimated to account for 18 percent of the global greenhouse gas emissions. At the American Association for the Advancement of Science, Pelletier reported that even though beef produces 30 percent of meat consumption in the developed world, it's responsible for 78 percent of the emissions. That is, four times more than pork and 10 times as much as poultry.

Chris Weber, professor of civil and environmental engineering at Carnegie Mellon University, told Agence France Presse that "Switching to no red meat and no dairy products is the equivalent of (cutting out) 8,100 miles driven in a car...that gets 25 miles to the gallon." The average household in the United States contributes about

five tons of carbon dioxide a year by driving and approximately 3.5 tons of equivalent emissions with what's eaten.

"If people were to simply switch from beef to chicken, emissions would be cut by 70 percent," says Pelletier.

Factory farms also exhaust the earth and are reliant on chemicals to grow produce, thus exposing humans and animals to toxic pesticides and other chemicals. The runoff of these chemicals ends up in our rivers and streams that eventually find their way into the tributaries where fish are hatched. The "dead zone" in the Gulf of Mexico, where no fish can exist, is caused by the chemical runoffs and animal waste that flows from the Mississippi River.

Most of the fish on our country's ocean coasts are also threatened—from pollution and over-fishing.

According to the Huffington Post, Christopher Field of the Carnegie Institution for Science says that carbon emissions have been growing at 3.5 percent per year since 2000, up from the .9 percent a year in the 1990s. The largest reason for this increase is the use of coal as an energy source, mainly because it is cost-effective. Projections have been too optimistic: rising ocean levels are posing a threat to lower level areas like New York and Florida.

Efforts to curb carbon emissions through biofuel use may backfire, explained Michael Coe of the Woods Hole Research Center because U.S. farmers switched from growing soybeans to corn, Brazilian farmers have switched to growing more soybeans on fields that were once tropical forests, which soaked up carbon dioxide. Instead, the burning forests ended up releasing gasses into the air, thus negating any declines in U.S. emissions, reported the Post.

"If we run our cars on biofuels produced in the tropics, chances will be good that we are effectively burning rainforests in our gas tanks," says Holly Gibbs of Stanford University.

Sadly, in December, 2008, the Bush administration repealed a rule requiring buffers around streams, where wastes from mountaintop removal could not be dumped. Thanks to a Fourth U.S. Circuit Court of Appeals in Richmond, Virginia, coal companies will be able to dump tons of mining waste directly into streams without violating the Clean Water Act.

According to Tierra Curry at the Center for Biological Diversity, "Either Congress or the Obama administration need to reinstate the Stream Buffer Zone rule...but better yet, mountaintop removal should be prohibited and the burning of coal immediately phased out to save the planet from dangerous climate change."

Since mountaintop removal coal mining began in 1970, an estimated 1.5 million acres of hardwood forest have been lost, over 470 mountaintops have been permanently destroyed and 1,200 miles of streams have been buried.

Walking Buffalo, who was born in 1871, said, "Did you know that trees talk? Well they do. They talk to each other, and they'll talk to you if you listen. Trouble is, white people don't listen. They never learned to listen to the Indians so I don't suppose they'll listen to other voices in nature. But I have learned a lot from trees: sometimes about the weather, sometimes about animals, sometimes about the Great Spirit."—Pam Berns

Both Indian quotes are taken from *Touch The Earth* by T.C. McLuhan. Outerbridge & Dienstrey, 1971.

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