



Photo: Martin Neptune

Penobscot Indian Nation
Department of Natural Resources

Pəskehtək^wok

Joining of the Branches

Summer 2005 ~ Issue 2

Brown Ash Trees Welcomed to the Community



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Back in the middle of June the DNR Building got a welcome new member added to the indigenous plant demonstration that landscapes the perimeter. Brown Ash trees were planted in a collaborative effort between the Penobscot Nation Boys and Girls Club and SeedTree (www.seedtree.org). Shannon Post of SeedTree brought the saplings that were donated by Fedco.

Roger Paul gave a cultural introduction to the program, teaching some pertinent words and phrases in Penobscot and acknowledging the vital importance of the brown ash (basket-making tree) in the economic and cultural traditions of the Wabanaki. Carol Kinsey thanked all for their welcome and good-spirited participation.

Showing a Penobscot sweetgrass and brown ash basket, shaped like an acorn, Carol told how SeedTree, working to renew ecosystems through human ecology, had chosen to identify with the



acorn. If something as strong as an oak tree can come from something small as an acorn, we can have similar faith that a great good can grow -at least in our hearts- from any small "seed deed" such as this planting of trees together. Roger Paul told also how gratitude is an essential tradition of the Wabanaki people, particularly gratitude to our mother earth from whom all living beings are born and nourished. Tobacco leaf was ceremonially offered to the earth as Roger led a prayer of thanks in Penobscot. Everyone then joined in planting the trees.

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Community members that were present for the planting include:

- Roger Paul
- Jasmine Thompson
- Bill Thompson
- Leigh Neptune
- Claudia Cummings
- Megan Loring
- Gabe Paul

Jasmine's favorite part of the afternoon was "putting the trees in the ground" because she was honored to be helping to "make another generation of them."

It has been thought that populations of Brown ash, *Fraxinus nigra*, a species needing moist soil, have been suffering in Maine. In a 1993 survey, the Maine Forest Service found that more than 30% of brown ash trees studied had suffered more than 80 percent dieback. The Service concluded that "brown ash in Maine has been and continues to be in a state of severe decline throughout the state."

William Livingston, Chairperson & Associate Professor of Forest Resources at University of Maine, says that "basketmakers first noticed in the late 1980s that branches on many brown ash trees had died" and that "they are very concerned about the health of the brown ash because the brittle wood from unhealthy trees cannot be used for making baskets." (1995 Article in Science and Engineering News, University of Maine) In response, UMaine researchers developed a cooperative research program with the Forest Service and the Maine Indian Basketmakers Alliance. The Service selected 22 trees to study at each of six sites located in central, Downeast and northern Maine where information was also available on weather and streamflow.

Although the mystery of what caused the dieback was not completely solved, the project showed that: for the last century, brown ash stands have gone through numerous episodes of decline, most notably in the '20s, '50s and '70s;

- the most recent decline is more extensive than previous episodes and began in 1985 in central Maine and spread north in 1987;
- insect and microbial pests, air pollution and pesticides have been ruled out as the cause of such a statewide phenomenon;
- the most likely causes are weather related and include spring droughts and excessively wet winter conditions followed immediately by freezing temperatures;



- ironically, dieback is more extensive in larger trees on wetter sites, while trees on drier sites had few symptoms;
- tree rings from the past several years show the beginnings of recovery.

In general, brown ash tends to grow slowly in swampy areas and along riverbanks. It does not compete well against faster growing species on drier land and makes up less than one percent of the Maine forest. A denizen of the far north, brown ash does well in Quebec where little decline has been reported. (Dieback has been reported in New Brunswick.)

"In 2000 Forest Health and Monitoring staff re-measured nearly half of the brown ash plots which were originally established in 1992 to assess this decline. A subset of 12 of the established plots had been re-measured in 1996 and 1997 but 2000 was the largest re-measurement since 1995 when 36 plots were assessed.

While ash anthracnose caused defoliation in some plots, and led to higher than expected crown transparency readings, the overall conclusion from the 2000 brown ash survey is that plot trees have recovered and continue to rebuild their crowns after the profound decline of the late '80s." (Dearborn, Richard, and Clark Granger. 2001. Forest and Shade Tree Insect and Disease Conditions for Maine - A Summary of the 2000 Situation. The Maine Forest Service, Department of Conservation, Summary Report No. 15. 66p.)

At present, planning is under way at PIN to do more of the enrichment plantings started by the Boys and Girls Club. The hope is to plant brown ash on other tribal lands and islands in the Penobscot River.



Something To Think About:

God's perspective on mowing the lawn

GOD: Frank, you know all about gardens and nature. What in the world is going on down there on the planet? What happened to the dandelions, violets, thistle and stuff I started eons ago? I had a perfect, no-maintenance garden plan. Those plants grow in any type of soil, withstand drought and multiply with abandon. The nectar from the long lasting blossoms attracts butterflies, honey bees and flocks of songbirds. I expected to see a vast garden of colors by now. But all I see are these green rectangles.

ST. FRANCIS: It's the people that settled there, Lord. The Suburbanites. They started calling your flowers "weeds" and went to great lengths to kill them and replace them with grass.

GOD: Grass? But it's so boring. It's not colorful. It doesn't attract butterflies, birds and bees, only grubs and sod worms. It's sensitive to temperatures. Do these Suburbanites really want all that grass growing there?

ST. FRANCIS: Apparently so, Lord. They go to great pains to grow it and keep it green. They begin each spring by fertilizing grass and poisoning any other plant that crops up in the lawn.

GOD: The spring rains and warm weather probably make grass grow really fast. That must make the Suburbanites happy.

ST. FRANCIS: Apparently not, Lord. As soon as it grows a little, they cut it -- sometimes twice a week.

GOD: They cut it? Do they then bail it like hay?

ST. FRANCIS: Not exactly, Lord. Most of them rake it up and put it in bags.

GOD: They bag it? Why? Is it a cash crop? Do they sell it?

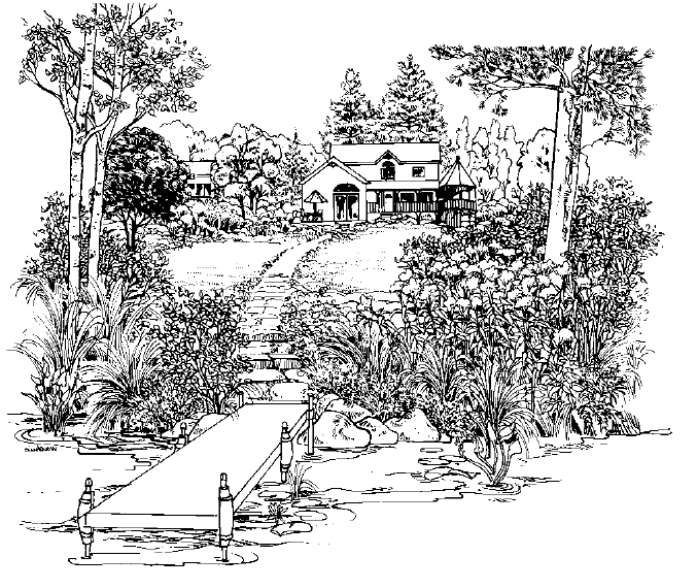
ST. FRANCIS: No, Sir. Just the opposite. They pay to throw it away.

GOD: Now let me get this straight. They fertilize grass so it will grow. And when it does grow, they cut it off and pay to throw it away?

ST. FRANCIS: Yes, Sir.

GOD: These Suburbanites must be relieved in the summer when we cut back on the rain and turn up the heat. That surely slows the growth and saves them a lot of work.

ST. FRANCIS: You aren't going to believe this Lord. When the grass stops growing so fast, they drag out hoses and pay more



money to water it so they can continue to mow it and pay to get rid of it.

GOD: What nonsense. At least they kept some of the trees. That was a sheer stroke of genius, if I do say so myself. The trees grow leaves in the spring to provide beauty and shade in the summer. In the autumn leaves fall to the ground and form a natural blanket to keep moisture in the soil and protect the trees and bushes. Plus, as they rot, the leaves form compost to enhance the soil. It's a natural circle of life.

ST. FRANCIS: You better sit down, Lord. The Suburbanites have drawn a new circle. As soon as the leaves fall, they rake them into great piles and pay to have them hauled away.

GOD: No fooling? What do they do to protect the shrub and tree roots in the winter and to keep the soil moist and loose?

ST. FRANCIS: After throwing away the leaves, they go out and buy something which they call mulch. They haul it home and spread it around in place of the leaves.

GOD: And where do they get this mulch?

ST. FRANCIS: They cut down trees and grind them up to make the mulch.

GOD: Enough. I don't want to think about this anymore. St. Catherine, you're in charge of the arts. What movie have you scheduled for us tonight?

ST. CATHERINE: "Dumb and Dumber," Lord. It's a really stupid movie about....

GOD: Never mind. I think I just heard the whole story from St. Francis.

EPA's Cap-and-Trade Plan for Mercury Fails to Protect Public Health

Conservation groups file lawsuit in federal court over Clean Air Act violations

Washington, D.C.—Conservation groups filed litigation today challenging the Environmental Protection Agency's weak rule establishing a cap-and-trade system for mercury reductions. A cap-and-trade system not only increases mercury levels in some areas by creating mercury "hotspots," it also falls far short of mercury reductions originally mandated under the Clean Air Act, which EPA has decided to ignore.

National Wildlife Federation (NWF), Environmental Defense and Sierra Club, represented by Earthjustice, filed their challenge in the U.S. Court of Appeals for the District of Columbia Circuit (Docket #05-1267). The Chesapeake Bay Foundation and Waterkeeper Alliance are also joining the suit. The cap-and-trade rule creates a mercury trading market where plants can trade credits, avoiding overall reductions and increasing mercury levels in some areas.

For instance, Texas power plants currently release some 10,000 pounds of mercury each year. Under the EPA's proposed cap-and-trade system, Texas will be required to reduce its mercury output from 2010-2017 to 9,314 pounds annually. This meager 7 percent reduction will do little to attack the threat of mercury contamination in the state's waterways and lakes. Three of Texas' coal-burning power plants are among the top 15 highest mercury emitters in the country. Under EPA's rule, two of these plants—Martin Lake and Limestone—could actually increase their overall mercury emissions through 2017.

"Texas is the perfect example manifesting how flawed EPA's approach at mercury reduction really is," said Dr. Ramon Alvarez, a scientist with the Texas office of Environmental Defense. "Our state has the highest mercury pollution levels in the country, but EPA is allowing some of the dirtiest plants to increase their pollution. This is not environmental protection. It is a windfall for polluters and a threat to those most susceptible to mercury poisoning."

But the mercury problem is not exclusive to Texas. The entire Chesapeake Bay Region is a huge mercury hotspot. Maryland, Virginia and Pennsylvania—states bordering this natural treasure in which the fisheries industry plays a huge economic role—all have fish consumption advisories for mercury. According to a 2004 study conducted by the National Oceanic and Atmospheric Administration, sources within 60 miles of the Bay contribute more mercury to the Bay than distant sources. Power plants like Constellation's Brandon Shores Plant in Maryland, Reliant Energy's Keystone Power Plant in Pennsylvania and the Chesapeake Energy Center in Virginia will be allowed to continue emitting mercury and contaminating fish populations throughout the Bay.

Forty-five states have advisories against fish consumption due to mercury contamination. Waterbodies such as the Chesapeake Bay experience unhealthy levels of mercury, limiting fishing and other recreational activities. Mercury is a dangerous neurotoxin

found to stall the development of children's brains, both in and out of the womb. Every year an estimated 630,000 babies are born in America with unsafe levels of mercury in their blood.

"I plan to have children in the next two years and I eat fish from the Chesapeake Bay region," said Ally Gontang, an employee and member of the Chesapeake Bay Foundation. "However, I have had my hair tested for mercury and my level is above EPA's alert for women of childbearing years. My fiancé and I are both saddened by and mad at EPA's actions."

Power plants are, collectively, the worst toxic emitters in the country. They spew 40% of all mercury emissions, or roughly 48 tons of mercury each year. Over 1100 coal-fired electric generating units at 450 power plants nationwide are affected by this rule. While this rule is a weak attempt at mercury reductions, it provides no emission limits for other power plant pollutants like arsenic, lead and chromium. Power plants collectively emit more than 70 tons of arsenic and 80 tons each of lead and chromium annually.

For those who rely on subsistence fishing, EPA's rule is a travesty, avoiding mercury reductions on rivers and lakes that sustain food supplies for many people. "EPA's rule is an assault on our tribal people and culture," stated Eric Nicoliar, the Air Quality Manager for the Penobscot Indian Nation within Maine. "Our 1,100 members are being forced to subsist on mercury-laden fish taken from the Penobscot River everyday. Under EPA's illegal cap and trade scheme, the Ohio Valley coal-fired power plants will be free to poison our sacred waterways with mercury for many more years to come."

Although the cap-and-trade rule may provide some limits on mercury emissions, the rule will not take full effect until 2018, providing a much lower emissions standard than what is required under the Clean Air Act. Litigation challenging the cap-and-trade rule will not slow any mercury reductions, but rather could defeat a weak rule that already allows for much longer mercury attainment goals than those already required by the Clean Air Act. EPA incorrectly assumes that mercury reductions could result from other pollution controls required by separate regulations. These reductions will not come near what could have been as the result of a strong mercury reduction rule.

This lawsuit, as well as litigation filed May 18 challenging another portion of EPA's power plant rule, challenges EPA to develop emission standards that offer protections we all deserve. Eight other conservation groups and 13 states have also filed litigation challenging EPA's weak rule.

For more information on Texas power plants, visit www.environmentaldefense.org/go/texasmercury. Additional information on mercury contamination in the Chesapeake Bay can be found at www.cbf.org.

NOTICE:

West Old Town Landfill Air Emissions License Proposal



From: Eric Nicolar
To: Indian Island Community



Dear Community Members,

An air emissions license is being proposed by Casella Waste Systems Inc. for the West Old Town landfill (WOTL). The staff at the Air Program will be doing a thorough technical review and research to evaluate the amount of air emissions being emitted, the type of controls for the proposed level of expansion, and the impact on the population and environment. Our focus will include tribal lands, the Penobscot River air shed, and other local and regional transport issues. Odors and other nuisance permit conditions should be included in the draft license. We will be making ourselves available to answer questions and research specific requests about the impacts of the WOTL, while we develop public comments for the tribe. **If the interest is large enough, we would also like to hold a public hearing so that we can keep our people as informed as possible.**

The expansion of the landfill will generally affect us all in some way or another.

We hope that you take this opportunity to seek answers to your questions and concerns.

Our phone numbers are:



Air Manager, Eric Nicolar 817-7336
Air Technician, William Thompson 817-7340



PLEASE STAY TUNED

This photo is just the beginning of more information to come!

As you can see, Joe "Hugga" Dana is pictured here with a fine Striped bass. He caught this beauty on one of his recent evening fishing trips in the Bangor-Brewer section of the lower Penobscot River. And this one was brought home to feed his family!

We are thrilled to have Hugga approach us about putting an article in the newsletter about "Stripers." So please stay tuned!!! In a future issue of the DNR newsletter we will be doing just that! The article will include lots of information including their life history, where are they in the Penobscot River, and how the Penobscot River Restoration Project will affect them.