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My name is Peter Wynne. My wife and I own 65 mostly forested acres in Preston Township, in northern Wayne County, and I'm a board member of Wayne-Lackawanna Forest Landowners Association.

In September 1995, I wrote a letter about forest health issues facing landowners in northern Wayne County to Jerry Birmelin, who was then our representative in Harrisburg. Preparing for today, I reviewed that letter and found to my dismay that the problems detailed there are still with us.

I want to focus first on what happened to my property during the outbreak of the Forest Tent Caterpillar in our region in the early to mid 1990s, but before I finish I'll also try to put things in some sort of perspective.

In June 1994, my wife and I returned from a brief vacation to find caterpillars swarming over our property. We were advised that these wormy creatures -- larvae of the Eastern Tent and Forest Tent Caterpillar species -- would pupate into moths and be gone in a week or so, that spraying would be a waste of money and that damage by the insects would be insignificant.

The caterpillars evidently didn't know any of that. They continued to swarm our property and thousands of surrounding acres until early July -- for five weeks, not one. On the First of July -- I kept a diary -- the insects were still feeding, not searching for places to pupate.

Forest Tent Caterpillars prefer to feed on Sugar Maples, and ours were completely defoliated. When the trees tried to leaf out again, the tender young leaves were killed first by anthracnose fungus, then by an early frost. Rather than insignificant, the damage to our Sugar Maples proved just about absolute. Nearly every tree had suffered severe dieback, which was evident the following summer, and Sugar Maples accounted for some 60 to 65 percent of the trees on our land.

In the middle of our 65 acres, we now had an area of approximately 30 acres that boasted no more than a few dozen viable trees. Damage elsewhere on the property was extensive. We had gone in a single year from a beautiful

mature northern hardwood forest to having mostly a scruffy blackberry patch that only now is beginning to show signs of regrowth as a hardwood forest.

This spring, we're in the middle of another outbreak of the Forest Tent Caterpillar in Wayne and Lackawanna Counties, and textbook wisdom has it that the worms will inflict mortal damage only if they defoliate Sugar Maples for three successive years. But the experience of the 1990s in Wayne County would argue that "it ain't necessarily so."

The conventional approach to the Forest Tent Caterpillar was formulated when our forests were not being subjected to global warming, for example, along with usual droughts and such. The warming trend we've been experiencing puts special stress on Sugar Maples which come from a species with a natural range that spreads northward into Canada.

Some authorities have argued Sugar Maples don't need special protection from the Forest Tent Caterpillar because it's a native insect and part of the tree's natural environment. I'd say that argument is based on a scientifically unsupportable assumption.

When the Sugar Maple and the Forest Tent Caterpillar coevolved, our forests weren't crisscrossed with roads and dotted with farm fields, houses and other buildings. Roadways are also flyways for moths. If you read American agricultural literature of the early 19th century, you gradually realize that insect pests are seldom mentioned.

When the Sugar Maple and the Forest Tent Caterpillar coevolved, we didn't have acid rain; bird populations were different (and some bird species eat caterpillars); we didn't have an outsized deer herd gobbling up all the maple seedlings, and our forests had yet to be clearcut to make way for fields and pastures and to provide mine timbers and tanbark, firewood and lumber for houses, only to be reforested in an unexplained and lopsided fashion so that a species like the Sugar Maple became dominant in areas where it never should have.

To put it bluntly, we haven't had a truly "natural environment" in Pennsylvania for a century and a half, and to muster that argument to turn down the use of pest-control measures against a native species is specious.

Insect invaders tend to be controllable in the main and seem to be more controllable with each passing year.

Granted that two foreign insect invaders have been

generating newspaper headlines in recent years as efforts to eradicate the Asiatic Longhorned Beetle and the Emerald Ash Borer have led to the destruction of millions of trees, which have been cut down and chipped into mulch. Bugs that bore into trees are particularly hard to control.

But look what has happened with the Gypsy Moth. In years past, we used very toxic, broad-spectrum insecticides that killed the caterpillars and just about any other insect they touched, including beneficial species. Now we have biological controls -- parasitic wasps and such -- and a microbe-based insecticide, Bacillus thuringensis -- that kills the Gypsy Moth caterpillar and just about nothing else.

And the same sorts of biological agents are available to control the Forest Tent Caterpillar.

The Sugar Maple has always been the backbone of our northern Pennsylvania timber industry. We ship maple to furniture makers across America. The Sugar Maple is the tree with the fiery fall foliage that draws thousands of tourists -- we call 'em "leaf peepers" -- to our state each year. And the tree, of course, is the basis of our maple sugar industry.

There's yet another reason why I think the Commonwealth should act to protect the Sugar Maple. The number of viable tree species in our Pennsylvania forests has been shrinking for at least a century.

- The American Chestnut -- a superb timber tree -- is just a memory today, the victim of a blight introduced from Asia around 1905.
- The American Elm, another fine hardwood, is essentially extinct as a forest tree thanks to a fungus that came here from Europe in the late 1920s.
- White Ash trees, a major source of hardwood lumber in our region, are succumbing to something called "ash dieback," which has yet to be explained.
- The American Beech is slowly being wiped out by "beech bark disease." I have several hundred beeches on my 65 acres and, as best I can tell, every one of them has this blight.

I just don't think we can afford to lose one more tree species from Penn's Woods, certainly not the Sugar Maple.

Thank you.

Forest tent caterpillars threaten trees in Wayne

Peter Wynne

June 1, 2006

The forest tent caterpillar — a nasty little creature that did big damage to sugar maple stands in northern Wayne County in the mid-1990s — is on the march again.

Landowners in Wayne and neighboring Lackawanna County are reporting the worms are defoliating their trees, sometimes extensively, said Jackson Gearhart of the state Department of Conservation and Natural Resources' Bureau of Forestry. Mr. Gearhart is service forester for both counties, a post he held when the forest tent caterpillar devastated tens of thousands of woodland acres in Wayne County between 1993 and 1995.

"I'm really worried about this outbreak," he said. "Any place in this region with a substantial area of sugar maples is at risk, and anyone with sugar maples or 'hard maples' on their land should get out as soon as possible and start checking their trees." What's alarming foresters is the thought that landowners may treat this outbreak as just one more gypsy moth invasion, one of which is going on right now in the region.

Oak trees defoliated by gypsy moth caterpillars typically leaf out again and recover, but sugar maples stripped bare by forest tent caterpillars usually have a sorrier fate: In two episodes in this region over the last quarter century, just about every denuded tree succumbed.

Tree farmer Bruce Edwards of Starrucca was forester for Mallery Lumber in Hancock, N.Y., in 1982 and 1983, when thousands of Mallery-owned acres in New York's Delaware and Broome counties were hit by the forest tent caterpillar.

"We were caught completely off guard," Mr. Edwards said. "The state forestry people told us not to worry, that the worms would go away. But they didn't. The caterpillars completely defoliated the sugar maples, and the trees all died. We lost millions and millions of board feet of hardwood lumber. Later, old-timers came by and told us that the same thing had happened in the 1940s and '50s."

Right now, the defoliation of sugar maples is spotty across the county, and tree farmer and forester Craig Olver of Honesdale sees parallels here to the situation in the 1990s, when he was forestry specialist for the Wayne County Conservation District.

"In 1993-94 there were just a few hotspots," Mr. Olver recalled. "In most other areas, the damage was light to moderate. But by the time the outbreak was over in 1995, some 30,000 acres in the county had been destroyed."