

# Climate change affects forest

November 23, 2008 — Christopher Reeves

By **BRIAN NEARING** | Times Union

TUPPER LAKE — What if we looked at the Adirondacks as more than just a 6-million-acre forest? What if we also viewed it as a kind of living factory in the fight against global warming, a mechanism capable of sucking up tons of carbon dioxide from the atmosphere every day?

In an era increasingly defined by the search for ways to control carbon, how much is the Adirondack region worth to the state, the nation or even the planet? And could that value somehow turn into cash that both protects the forest and supports the people who live there?

Those were among the questions raised at a conference last week on how climate change is altering the Adirondacks. More than 190 people crowded into The Wild Center, a natural history museum devoted to the region, to hear about both challenges and solutions.

“It is easy to get gloomy. Our landscape is at risk,” said Jerry Jenkins, a Washington County botanist who co-authored an Adirondack climate report released by the center and the Wildlife Conservation Society.

“The Adirondacks are warmer and wetter, with longer springs and falls and shorter winters. We have new birds, less snow, different seasons and colors, new diseases,” said Jenkins, who has studied climate change for more than 20 years. “Thus far, these are not threatening. If the climate models are right, the warning signs of larger changes could be very threatening.”

The Adirondacks are the southernmost outpost of a colder boreal climate found in Canada, Jenkins said. It is winter that is receding most rapidly, with average winter temperature rising 5 degrees over the past century — more than double the rise in spring and summer temperatures.

Frosts arriving a week later in the fall and departing a week earlier in the spring have added some two weeks to the growing season, said Tom Tucker, whose family has farmed since the 1860s in Gabriels, Franklin County, a hamlet about 20 miles north of Lake Placid.

Even if CO<sub>2</sub> emissions are brought down now, global temperatures will rise, up to another 6 degrees by the end of the century because of a lag in climatic systems. A hotter Adirondacks might not be helpful to Tucker’s signature potato crop, which prefers cool temperatures.

Even the best scenario will bring the Adirondacks a climate more akin to the mountains of West Virginia, and lead to severe declines in classic Adirondack trees like hemlock, white pine, sugar maple and white ash, Jenkins said. During the winter, the number of days with snow cover will be cut by a third to a half.

If emissions keep climbing unchecked, temperatures could jump by 8 to 11 degrees — moving the Adirondacks into the temperature zones currently found in the North Carolina mountains, or even the highlands of northern Georgia.

That could leave only the highest Adirondack peaks with traces of snow, ending the region’s tradition of winter sports like skiing, ice climbing, snowshoeing and snowmobiling. Iconic animals like the moose and loon would retreat north, and up to half of Adirondack forest species of trees, plants, animals and insects could gradually disappear.

“We have to do all that we can to limit the change to 6 degrees or less,” Jenkins said.