Carbon CO2alition
New Hampshire Citizens for a Responsible Energy Policy

New Hampshire and Carbon Pollution

FACT SHEET

Fact Sheet #2: Climate Change and Forest Health

Compiled by the Society for the Protection of New Hampshire Forests

During the past century, the state's annual average temperature has increased 1.8 degrees F – a trend paralleled by pollution emissions, according to the National Climate Data Center. The frequency of forest-damaging severe storms and extreme weather events has also increased in recent years across the state and region. Below are some specific facts on how changes in New Hampshire's climate impact forest health and wood-dependent industries.

- Trees and forests are adapted to specific climate conditions; as the climate warms, species that now thrive in New Hampshire will struggle, prompting a dramatic change in the character of our forests. The sugar maple, for instance, is among the most sensitive of trees to warming and is likely to be pushed northwards as temperatures increase.
- Forests now dominated by maple, beech and birch will give way to forests dominated by oaks and conifers that are more tolerant of higher temperatures – and more typical of forests in the Mid-Atlantic states.
- High elevation spruce and fir forests, which support a large variety of songbirds, will also be reduced. The American Bird Conservancy has already noted northward shifts in many of the warbler species that summer in the northern forests.
- Milder winters will increase the vulnerability of forests to insect pests, including the eastern spruce budworm, gypsy moth, pine bark beetle and hemlock wooly adelgid. Commercial forestry could be seriously affected.
- Climate change may act with other forest stresses, including acid rain, ozone pollution, pests and severe drought, to reduce forest productivity.

The organization that compiled this fact sheet is part of the Carbon Coalition, a nonpartisan group of citizens and organizations that agree the country needs an energy policy that significantly reduces carbon dioxide pollution and is founded upon energy conservation and the development of sustainable, renewable energy sources. Visit www.carboncoalition.org.