

Tug Hill depends on you.

Tug Hill © The Nature Conservancy

CREATING A CLIMATE RESILIENT FOREST

In recent years, the Tug Hill Plateau, New York's third largest forest system, has had a few curve balls thrown its way. Beech bark disease arrived, and invasive pests like hemlock woolly adelgid and emerald ash borer moved closer to the region. While the forests of Tug Hill are large, well-connected and relatively un-fragmented, decades of heavy selective cutting have weakened them. This leaves forests vulnerable to climate change impacts and threatens the region's future economic security.

WHAT'S AT STAKE?

Healthy lands and forests provide clean water, clean air, carbon storage, wildlife habitat and opportunities that sustain local economies. Tug Hill is a mosaic of public and private lands and a critical link between the Adirondacks to the northeast and the Appalachian Mountains to the south. Black bears, fishers, American martens and forest birds roam freely here, and the forest filters streams that pour clean water into the Mohawk River and Lake Ontario. The forest is also important to local recreation and timber industries. Recognizing its value to nature and people, The Nature Conservancy is using our scientific expertise to keep Tug Hill strong in the face of these changes.

4 - 6° F

Amount the Tug Hill region is expected to warm by 2050



Snowshoeing in Tug Hill © TNC/Mat Levine

HOW WE'RE HELPING

The Nature Conservancy was awarded a \$166,925 grant from the Wildlife Conservation Society (WCS) to collaborate with **Cornell Cooperative Extension-Onondaga County** and the **State University of New York College of Environmental Science and Forestry** to apply sustainable forestry techniques and establish a more climate-resilient forest on Tug Hill. The project goals are to re-establish a strong and diverse forest able to weather a changing climate, maintain corridors for wildlife movement, and ensure that ecosystem services like clean air, water and timber are generated for people. The lessons learned here will be applied to similar hardwood forests across the Northeast.

OUR STRATEGY

- **Replant** a recently cut 125-acre forest to ensure the forest that emerges has a diverse mix of native species adapted to future climate conditions. We will also remove undesirable competing vegetation and create a viable seed bed for climate-adapted seedlings.
- **Apply** traditional silvicultural techniques to build other characteristics, like snags and coarse woody debris, that help a forest adapt to change.
- **Engage** private landowners, Master Forest Owner volunteers, protected land managers and foresters in creating a healthy forest across the region and in other Northern hardwood forests.
- **Monitor** results — including annual snowpack, structural and micro-habitats, and forest regeneration — to ensure that the project is successful from land managers' and woodlot owners' perspectives.