

The Appalachian Trail as a Continental Transect

- Traversing through mostly protected land over some of the tallest ridgelines of the eastern United States, the A.T. winds its way through some of the most diverse ecosystems in the world
- The A.T. provides a window to the overall health of Eastern U.S. forest ecosystems
- This continuous corridor of diversity has the ability to provide valuable information to the overall health of the eastern U.S. that could potentially influence broader scientific knowledge and thereby influence social change



Rare Threatened and Endangered Plant Monitoring



- Inventories have documented over 2,050 occurrences of rare, threatened and endangered species on 515 natural heritage sites within the A.T. corridor
- The number of RTE occurrences within the AT corridor is believed to be the greatest of any park unit
- The A.T. Natural Heritage Monitoring Program focuses on protecting vulnerable species in the Appalachian Trail corridor
- RT&E species monitoring is carried out by dedicated volunteers who report their findings to ATC and the National Park Service

Forest Health Monitoring

- The A.T. effectively creates an ecological north-south transect through the most prevalent forests in the eastern U.S.
- These ridges often separate slopes with different forest types, thus the A.T. is often an ecotonal area between different plant communities on either side of the trail
- Monitoring the condition of forests along the AT will provide two primary benefits:
 1. an estimate of the condition of forests and trails that will help land owners, managers, and policy makers develop strategies to maintain or improve the condition of the A.T.
 2. a biological monitoring system for one of the first places in the Eastern United States to show effects from landscape-scale stressors like air pollution or climate change



Water Quality Monitoring



- The water quality monitoring program seeks to gather information about the general condition of surface water sources all along the A.T.
- The A.T. crosses hundreds of streams and rivers and passes many ponds and lakes along the 2,175-mile traverse
- Our monitoring goal is twofold:
 1. identify anomalies or problems such as acidic conditions or excess nutrients
 2. share information with Trail managers, other conservation groups and the general public.
- The program is also designed to help detect and illustrate changes in water quality over time, which may have implications beyond the A.T. corridor