

ENVIRONMENTAL MONITORING AND MANAGEMENT ON THE AT

While the primary activities discussed in association with the Appalachian Trail tend to be maintenance, border monitoring or hiking, there is much more going on. During a recent presentation at the Southern Regional Partnership Meeting, some special features of the AT were identified. There are 250,000 acres of unique, high elevation ecosystems; more rare, threatened and endangered species than any other national park service unit; trail lands protect headwater streams for major east coast watersheds; and the AT corridor acts as an ecological connector linking otherwise disconnected conservation lands. The importance of monitoring the natural resources of the AT corridor is due to constant threats to its unique ecology by invasive exotic species, climate change, pollution, recreational impacts, development, poaching, and/or the effects of historical land use.

Invasive exotic plant management is broken into 4 categories:

Inventory – survey the trail to document invasive plant infestations

Evaluate – determine priorities for control efforts (Early Detection Rapid Response)

Control – remove invasive exotic plants using various control methods (manual, mechanical, chemical, and biological)

Monitor – evaluate the effectiveness of control efforts and determine if additional work is needed

During May or June, there will be an invasive species management project implemented in the Humpback Rocks area of our trail section. If you are interested in more information, contact Josh Kloehn, VARO Field Tech at jkloehn@appalachiantrail.org

Rare plant monitoring is another ecological management program coordinated by ATC staff. There are over 80 globally rare species found from Virginia southward. Rare plant occurrences are prioritized annually based on: global and state rarity, date of the last monitoring visit, and documented threats. Threats can include invasive plants, trampling, trail maintenance, insects/disease, or deer browsing. A training session on rare plant monitoring is scheduled in Lexington Va tentatively June 14. For more information, contact Josh Kloehn at email address above.

AT Seasons Phenology Monitoring is a third ecological management program. Phenology is the study of the recurring plant and animal life cycles, such as bud-break, flowering, fall leaf color, insect emergence, or migration. Complex ecological relationships are highly dependent on phenology: flowering and pollinator emergence; fruiting and bird migration; mast production and hibernation. If species respond differently to a changing climate, biological relationships may be disrupted. Workshops will be offered in the Virginia region May 19 - McAfee Knob workshop, June 9 – James River workshop, and June 21 – Old Settlers Museum workshop. For more information, contact Josh Kloehn at email address above.

Additional information on these various topics can be found at the following web sites:

Invasive Exotic Plant Management – www.appalachiantrail.org/invasive

Rare Plant Monitoring - www.appalachiantrail.org/rareplants

Phenology Monitoring – www.appalachiantrail.org/phenology

Note – Information for this article taken from presentation given by John Odell, ATC Resource Management Coordinator, SORO office