



# THE CENTRAL APPALACHIAN SPRUCE RESTORATION INITIATIVE

The Central Appalachian  
Spruce Restoration Initiative

## 2017 Highlights

### YEAR-END REVIEW

*We are pleased to share highlights of the Central Appalachian Spruce Restoration Initiative!*

CASRI is a diverse partnership of private, state, and federal organizations who share a common goal of restoring historic red spruce-northern hardwood ecosystems across the Central Appalachians.

CASRI envisions a functioning red spruce-northern hardwood forest ecosystem with the scale, connectivity, and maturity to support the natural communities dependent upon this ecosystem. To achieve this landscape scale restoration, CASRI works on both public and private lands, promoting the health of forested, riparian, and agricultural lands, as well the multitude of plant and animal species which make their home in the central Appalachian mountains.



Students receive spruce seedlings to plant on Spruce Knob.



### MAJOR HIGHLIGHTS

*2017 proved to be yet another year of impressive accomplishments for CASRI:*

- Over 1,451 acres of high-elevation lands placed on a trajectory to develop into functioning red spruce ecosystems, bringing our restoration total to over 7,245 acres.
- 60,000 red spruce seedlings and 53,564 native plants planted on high-priority conservation and restoration sites.
- 195 acres of red spruce forest protected from damage by livestock use.
- Over 480 acres of non-native invasive species treated in high-elevation red spruce systems.
- Over 264 volunteers dedicated their time to restoring red spruce habitat and planted more than 10,100 seedlings.
- Over 80,000 red spruce seedlings grown.





*A volunteer plants a seedling of a native plant on the Mower Tract.*

- **U.S. Fish and Wildlife Services** in cooperation with **Trout Unlimited** constructed live stock exclusion fences on two farms protecting more than 195 acres of spruce habitat from livestock grazing practices.
- **Canaan Valley National Wildlife Refuge** constructed an underpass on a trail to increase Cheat Mountain Salamander habitat connectivity and built a 3 mile trail to support wildlife crossings in the red spruce forest.
- **U.S. Forest Service** Greenbrier Ranger District hosted two educational and tree planting days on the Mower Tract, teaching 90 students ranging in age from elementary to college about ecological restoration of red spruce habitat.
- **CASRI partners** engaged in valuable research including new findings on canopy gap dynamics, spruce genetic connectivity in Central Appalachia, and habitat selection of the Virginia Northern Flying Squirrel.

## SPRUCING THINGS UP

*CASRI includes a diverse group of partners, each addressing spruce restoration from their own angle.*

- **Green Forests Work** in partnership with **U.S. Forest Service** and **Natural Resource Conservation Service** restored 96 acres of reclaimed mine land, planting more than 76,000 native plants on the Mower Tract in the Greenbrier Ranger District
- **The Nature Conservancy's Ecological Restoration Team** released understory red spruce on 575 acres of land on the Upper Greenbrier North work area amounting to roughly 150,000 trees.
- Together the **West Virginia Division of Forestry**, **West Virginia Division of Natural Resources**, **The Nature Conservancy**, and **U.S. Forest Service** planted 1,950 red spruce seedlings in a recently clear cut area in Kumbrow State Forest.



*Volunteers pose for a picture after a day of planting in Canaan Valley National Wildlife Refuge.*

**To learn more about CASRI and view the complete 2017 annual report, visit:**

<http://www.restoredredspruce.org/>

