Seeding Red-Cockaded Woodpecker Habitat at Broxton Rocks Preserve

GOS Groundcover Restoration Planting Project Report
Submitted to the Georgia Ornithological Society, June 26, 2024

After timber thinning was complete in early 2023, The Nature Conservancy staff identified priority areas (Photo 1) to target for groundcover restoration within the harvest footprint. In general, these areas lacked abundant pre-existing groundcover and would benefit the most from groundcover restoration from a fire and habitat management perspective. In the fall of 2023, TNC staff and partners assisted on burning over 1,000 acres across Broxton Rocks Preserve to prepare for the seed bed for planting.

With the provided funds, we were able to purchase 360 pounds of native seed from Roundstone Native Seed (Upton, KY) which included little bluestem (*Schizachyrium scoparium*), big bluesteam (*Andropogon gerardii*), splitbeard bluestem (*Andropogon ternarius*), purple top (*Tridens flavus*), Indian grass (*Sorghastrum nutans*), and partridge pea (*Cassia fasciculata*). These species coincided with species already present on the landscape, as well as being desirable grass species that contribute fuel for prescribed fires. In addition to the purchased seed, we acquired approximately 250 pounds of wiregrass (*Aristida beyrichiana*) seed that had been locally harvested from Moody Forest Preserve (Baxley, GA) and The Orianne Society's Indigo Snake Preserve (Lumber City, GA).

Groundcover restoration began on November 30th, 2023, using a Grasslander™ no-til seeder loaded with purchased seed from Roundstone and locally harvested wiregrass (Photos 2 and 3) as our primary method of planting. We also used a gas-powdered hay blower (Photo 4) to broadcast seed – this was done the day before a rain event to aid with seed reaching mineral soil. By December 27th, 2023, we had completed 86 acres planted with the Grasslander™, and 18 acres planted with the hay blower. On February 13th, 2024, we returned with Student Conservation Association interns to treat 6 acres by broadcasting seed by hand (Photo 5) to bolster the range of existing groundcover in adjacent areas or to target specific areas with heavy slash that made access with heavy equipment difficult. This brought our total area of native groundcover seed planted to 110 acres (Photo 6), achieving our goal of 100 acres.

The timing of the project went very well, as on March 7th, 2024, we had completed a separate planting project with the planting of 307,000 coastal plain longleaf pine seedlings across Broxton Rocks Preserve in areas that had been thinned, burned, and planted with native

groundcover. This combined and complete effort has considerably accelerated our efforts to create and restore suitable habitat for red-cockaded woodpeckers and other longleaf pine associated species.

Photo 1: Identifying ideal groundcover planting sites after timber thinning and prescribed fire operations were completed.

Photo 2: Inside hopper view of the Grasslander™ - cleaner seed is placed purchased from Roundstone is placed in the small hopper (left), while our harvested and fluffier wiregrass seed is placed in the larger hopper (right).

Photo 3: As the tractor passes through carrying the Grasslander™, metal tines lightly scratch the surface of the ground. As the tires move forward, a set of gears engage an agitator in the hopper that disperses the seed below, then the tires run over the seed to ensure good seed to soil contact.

Photo 4: Crewmember on a platform with a hay blower borrowed from our partners at Georgia Department of Natural Resources. The hay blower receives seed into a large hopper and uses a gas-powered motor to propel seed in the desired direction.

Photo 5: Three interns from the Student Conservation Association assist with broadcast planting seed by hand in select areas

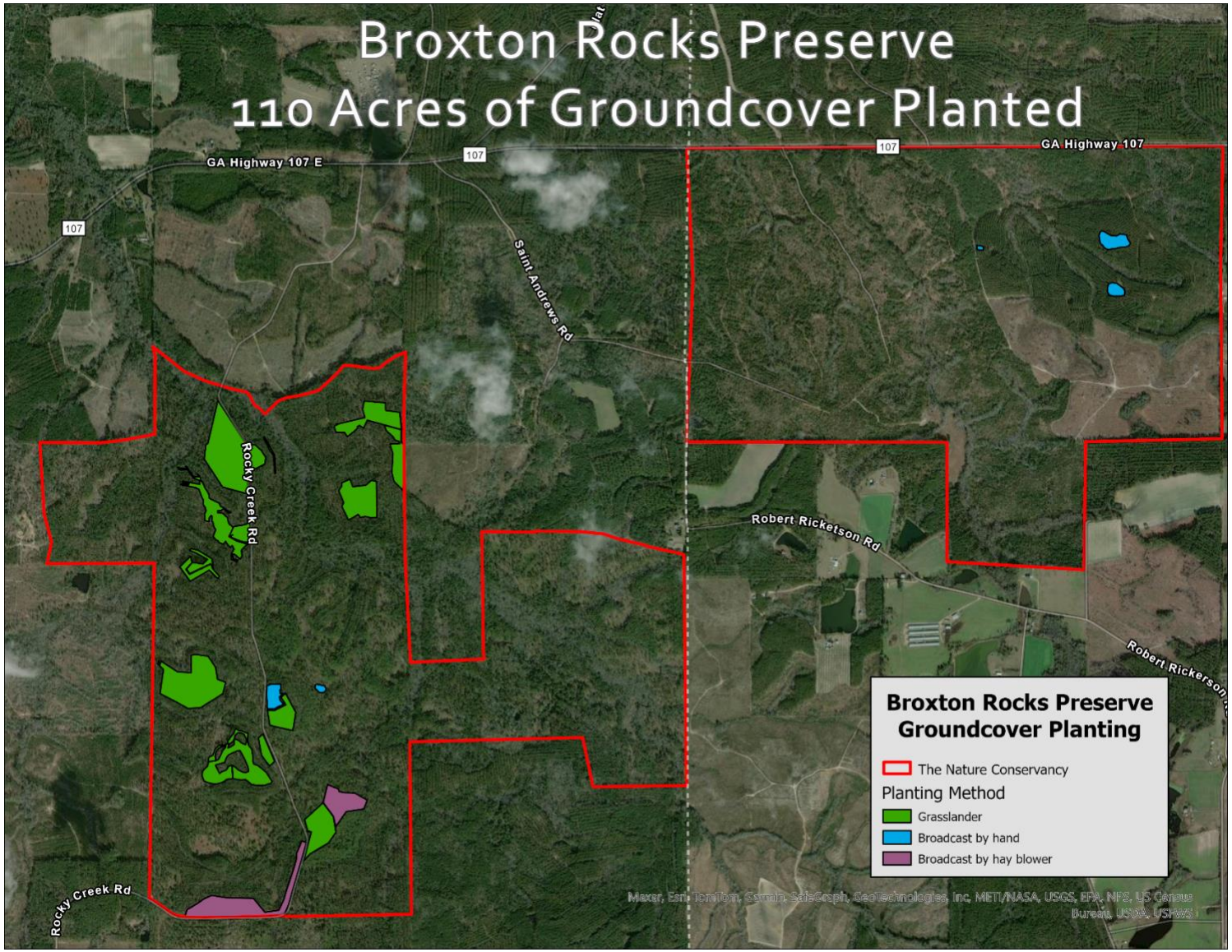

Photo 6: Groundcover planting map across the Broxton Rocks Preserve landscape, totaling 110 acres with three methods of planting: Grasslander™, broadcast by hand, and broadcast by hay blower.