

Abstract: Diverse native plant communities provide many essential benefits, including filtration and purification of stormwater, climate regulation, and vital resources for pollinators and other wildlife. Although native plant materials are increasingly in demand for public and private revegetation and restoration projects in Arkansas, locally sourced seed is not readily available. Restorationists and land managers must resort to laborious and expensive wild harvesting of local seed or purchase commercial seed of non-local or even unknown origin. Non-local native seeds are not necessarily well-adapted to local environmental conditions and may be less likely to establish and survive. Use of these materials also risks incorporating non-local genes into native populations that have the potential to reduce the fitness of those populations over time.

The Arkansas Native Seed Program, a collaborative effort of several state, federal, and private conservation partners led by the Arkansas Natural Heritage Commission, seeks to address these issues by developing a native seed industry to produce ecologically appropriate, ecoregionally sourced native plant materials for large-scale revegetation and restoration projects. Natural areas, especially remnant grasslands, provide the best, and in some cases the last potential sources of these plant materials.

The program has convened ecologists and biologists to determine demand for seed, delineate appropriate seed zones, compile target species lists of high value species for collection, and identify appropriate plant community remnants from which to collect seed. We engage volunteers to harvest seed from approved collection sites, partner with nurseries to clean the seed and propagate plants from that seed, and work with local farmers to grow those plants in an agricultural setting and harvest seed for commercial distribution. Though still in its early stages, the program is gaining much momentum with the release of a statewide Native Seed Plan, and seed is now being produced in several ecoregions.



Theo Witsell, Ecologist/ Chief of Research, Arkansas natural Heritage Commission

Theo Witsell is Ecologist and Chief of Research for the Arkansas Natural Heritage Commission and the Curator of the ANHC Herbarium. He has also worked as a contract botanist and ecologist for a number of government agencies and private organizations including the U.S. Forest Service, the National Park Service, the Department of Defense, the U.S. Army Corps of Engineers, the Tennessee Valley Authority, NatureServe, and The Nature Conservancy. He is co-editor of *Atlas of the Vascular Plants of Arkansas*, co-author of the forthcoming field guide *Trees, Shrubs, and Woody Vines of Arkansas*, and has authored or co-authored more than 30 scientific publications and book chapters. He is

co-founder of and Chief Ecologist for the Southeastern Grasslands Initiative, headquartered at the Center of Excellence for Field Biology (Austin Peay State University, Clarksville, TN) and serves as a regional reviewer for the Flora of North America Project.



Jennifer Ogle Arkansas Native Seed Program Coordinator/Collections Manager University of Arkansas Herbarium

Jennifer Ogle is the Collections Manager of the University of Arkansas Herbarium and Coordinator of the Arkansas Native Seed Project, a collaboration of several state, federal, and non-profit partners working to develop a native seed industry in the state using ecologically appropriate, ecoregionally-sourced native plant materials for large-scale revegetation and restoration projects. She is co-editor of *Atlas of the Vascular Plants of Arkansas* and co-author of the forthcoming field guide *Trees, Shrubs, and Woody Vines of Arkansas*. In her spare time, Jennifer serves on the boards and committees of organizations focused on urban land conservation and the protection of native plants and plant communities.

Additional Resources:

Native Seed Program Takes Root

Native seed program moves forward

Partners work to restore native plants in Northwest Arkansas with locally sourced plants



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