



2027 SYMPOSIA

Seed Science and Ecology to Inform Seed-Based Restoration

Facilitated by U.S. Forest Service and International Network for Seed-Based Restoration

Restoration efforts are often necessary to facilitate ecosystem recovery after large-scale disturbance and degradation events. Native plant materials are crucial for restoration, as they are adapted to local climate and soils and provide the foundational biological interactions necessary to support healthy, diverse, and ecologically resilient native plant communities. Many native plants experience local adaptation, where populations possess traits that benefit them in their environment of origin often at the expense of reduced flexibility to thriving under novel conditions. Given the broad geographic and ecological range of many native species, it is necessary to consider how to source seed for optimal restoration success. Current research aims to identify seed sourcing practices that ensure both genetic suitability and the diversity required to adapt to variability in environmental conditions or future environmental shifts. This session will present current research that informs seed sourcing for restoration, with perspectives from different regions and ecosystems. It will also highlight how different seed traits (e.g., seed germination) or phases within the native plant materials development cycle (e.g., seed cleaning, storage) may shape restoration outcomes. In the face of increasing natural and anthropogenic disturbances, informed seed sourcing decisions are vital to restoring resilient landscapes that provide enduring ecosystem services.

Resilient Roots: Legislation and Advocacy for Native Seed Systems

Facilitated by The Xerces Society and Native Seed Advocacy Working Group

Join members of the National Native Seed Advocacy Working Group to learn about progress toward groundbreaking legislation to advance the supply and use of native seeds in major restoration efforts. Legislation at national and state levels plays a key role in sustained societal commitment and public funding to support best practices in the supply and use of native seeds. For more than ten years, scientists, practitioners, conservationists, and elected officials have been working toward legislation and policies that codify the recommendations of the 2015 National Seed Strategy and the 2023 National Academies report, *An Assessment of Native Seed Needs and the Capacity for Their Supply*. The working group is a diverse coalition of conservation non-profits, tribes, and native seed growers who are informally organized around advocacy for native seeds at the federal government level in the United States.



Lessons Learned and New Developments Across Different Regional Native Seed Networks

Facilitated by Denver Botanic Gardens

Creating a strong native seed industry involves robust networks between seed producers, seed users, and those coordinating partnerships between these groups. Networks built within regional boundaries (i.e. state or wider geographic or climatic regions) can improve the persistent problem of balancing seed supply and demand. However, networks of seed partners across the continent have experienced varied successes and exist in different stages of development. While unique regional challenges exist, so do shared challenges across the seed supply chain, from sourcing ecotypic seed to production to certification to restoration. Sharing successes and failures across regions can help strengthen individual networks. Newer networks can learn from more experienced ones, and existing networks can improve based on lessons learned and frameworks from other regions. This panel will bring together key members from different seed networks that span the U.S. and represent networks at different stages of development. Invited panelists will present experiences addressing the challenges of establishing networks, and how their networks have been shaped by the particular seed industry priorities within a given region. Each panelist will have a unique yet complimentary set of expertise that they bring to their role in creating solutions in their respective regions. In addition to lessons learned, this session will dive into the nuts and bolts of building and sustaining robust networks, including initiating partnerships, sustainably funding coordinator positions, governance structures, and managing communication. Bringing these experts together to speak, in-person, in the same session will be informative and constructive for audience members and speakers alike.

Going Big: Implementing the National Native Seed Strategy to Provide Plant Materials at the Landscape Scale

Facilitated by Utah Division of Wildlife

Landscape-scale degradation across wild and working lands has created an urgent need for large-scale restoration and with it, rapidly increasing demands for native seed in both quantity and species diversity. While the National Seed Strategy provides a valuable conceptual model for providing the needed seed, implementation involves a number of considerations that are nuanced, context-dependent, and often project-specific. This symposium will explore some of these considerations, including: differing restoration demands and needs, the economics and industry supporting seed based restoration, and perspectives on the art and science of the selection and increase of native plant materials. In addition to hearing from experts in these fields, the objective of the symposium is to challenge, stimulate, and elicit dialog and networking in the hope of expanding the knowledge and availability of native plant materials to support restoration practitioners.



Seeds of Success

Facilitated by Chicago Botanic Garden

Seeds of Success (SOS) is the national native seed collection program, led by the Bureau of Land Management in partnership with the National Park Service, U.S. Fish and Wildlife Service, and non-federal organizations. SOS's mission is to collect wild native seeds for research, development, germplasm conservation, and ecosystem restoration. Since its inception in 2000, SOS has made more than 32,000 collections, trained thousands of seed collectors, and contributed to increasing the quantity and quality of locally adapted seeds. This symposium will highlight recent SOS program expansions, highlight collaborations among federal and non-federal agencies and explore how SOS is being leveraged to address national native seed needs.

Launching the Mid-Atlantic Seed Partnership

Facilitated by University of Maryland Extension

This symposium will officially launch the Mid-Atlantic Seed Partnership at the National Native Seed Conference and share a practical roadmap for building a regional, collaborative native seed network. We will describe how the Partnership formed, the partners and capacities we brought to the table, and the shared need that unified our work: increasing the supply of diverse, source-identified seed and plant materials for restoration, conservation, and sustainable land management.

Native Seed Kinship and Reciprocity

Facilitated by National Wildlife Federation

This symposium centers Indigenous approaches to native seed harvesting, propagation, and storage through the voices and experiences of Indigenous practitioners, knowledge holders, researchers, and land stewards. All speakers will be members of the Intertribal Native Plant and Seed Working Group. This symposium centers perspectives rooted in cultural relationships with native plants and seeds. Presentations will explore traditional ecological knowledge, seed stewardship practices, and the importance of restoring and protecting native plant relatives for future generations.

Indigenous Approaches to Land Restoration

Facilitated by National Wildlife Federation

This symposium centers Indigenous approaches to ecological restoration through the revitalization of culturally significant plant species across Turtle Island. Led by speakers from the Intertribal Native Plant and Seed Working Group, the session will highlight restoration efforts rooted in traditional ecological knowledge, cultural responsibility, and reciprocal relationships with the land.



Speakers will share experiences restoring species such as rivercane, native grasses, medicinal plants, and other culturally important relatives that support biodiversity, cultural lifeways, and ecosystem resilience.

Traditional Plant Knowledge and Lifeways

Facilitated by National Wildlife Federation

This symposium explores the vital role native plants and seeds play in the continuity of Indigenous cultural lifeways across North America. Led by speakers from the Intertribal Native Plant and Seed Working Group, the session will center Indigenous knowledge systems surrounding the cultural, medicinal, and traditional uses of native plants. Speakers will share experiences and teachings related to plant-based medicines, basket making materials, natural dyes, foodways, ceremony, and other culturally significant practices that remain deeply interwoven within Indigenous communities.

Native Seed and Restoration: Insights from the Seed Industry

Facilitated by the American Seed Trade Association

Join leaders from the native seed industry for an engaging discussion and exchange of ideas on the key considerations for planning successful restoration projects. The panel will discuss seed selection, advanced planning and timing, regulatory compliance, and the importance of choosing the right vendors and project partners.

Collection and Seed Cleaning Equipment: Right Tool, Right Place

Facilitated by Center for Natural Lands Management

Farm equipment has long been specialized, and native seed equipment even more so. A panel of farmers ranging from small-scale to commercial will discuss what equipment they use to produce native seeds. A presentation on the tools and equipment these farmers use for field, harvest, seed cleaning, and seed germination will be followed by a floor discussion where the audience can ask questions or contribute their own recommendations.

Advancing Aridland Forb Restoration with Improved Seed Sourcing and Genetics

Facilitated by University of Nevada, Reno

Native forbs are a critical component of healthy aridland communities, providing critical resources for pollinators, wildlife, and species of conservation concern. Despite their ecological importance, forbs remain underused in post-fire restoration. High seed cost, complex dormancy, unpredictable germination, and limited availability have long kept them out of standard seeding treatments in favor of more readily available grasses and shrubs. As demand grows for restoration that supports



pollinators and rebuilds diverse plant communities, the tools and knowledge needed to actually get forbs on the ground have not kept pace. This symposium brings together researchers and practitioners working to make forbs easier to understand, source, and use. Speakers will cover the genetic complexity of aridland forbs and what it means for seed sourcing and transfer zones, germination syndromes and the dormancy that complicates propagation, and the functional strategies and local adaptation patterns that determine where forbs establish. We will also share efforts to pull this knowledge into practical resources, including the Western Forbs Manual, and practical work attempting to seed native forbs at scale. Our aim is to close the gap between what we know about forbs and how we use them, so they become a dependable part of restoration rather than a recurring obstacle.