

# Seed Collection Checklist

**Program Goals:** The goal of the Dixon National Tallgrass Prairie Seed Bank is to establish high quality, accurately identified, genetically representative and well documented native plant seed collections. This material will be used to support the development of geographically appropriate native plant materials for restoration and emergency fire rehabilitation. As a founding partner in the national Seeds of Success program, we follow the SOS collecting protocols.

**Targeted Species:** Today, the collection focus of the Dixon National Tallgrass Prairie Seed Bank and the national Seeds of Success program is on species needed for restoration and rehabilitation projects, from our “restoration list.” Of the 545 species targeted, we consider 155 our top priority species and the other 390 of secondary importance.

## Sampling Protocol Checklist:

- Only collect from naturally occurring wild populations.
- Sample from **at least 50 individuals**, document the number of individuals sampled on the Field Data Form.
- Material collected on multiple dates can be added to the same accession throughout an entire growing season, so long as no more than 20% of the mature seed is collected from the population on a single day.
- Collection contains **10,000+ seeds**.
- Different populations are kept as separate accessions.
- Materials collected from the same population during multiple growing seasons should be kept as separate accessions.

## FIELD DOCUMENTATION CHECKLIST:

1. **The SOS Field Data Form:** Use the Field Data Form for each seed collection and fill out all data fields. Keep one copy of the completed forms for your records and send one whenever you ship seed or vouchers associated with the collection.
2. **DNA Voucher:** A **piece of leaf tissue** (roughly 1 x 5 cm) should be removed from one leaf (a younger leaf is better than a senescing one) and place it inside the labelled small paper envelope, and fill out the information on the paper envelope label.
3. **Photographs:** **Three digital photographs** for each collection shall be sent to the SOS National Coordinating Office. They should be of **A.** the material collected (seed); **B.** the individual plant; and **C.** the plant population (landscape level). These can be sent along with the collection forms or all on a single CD or DVD at the end of the collection season.

Digital Image File Naming convention:  
PLANTS Code\_Collection Number\_Picture Number.

Example: a collection of *Symphotrichum lanceolatum* (PLANTS Code = SYLA6)

SYLA6\_CBG-419\_**A**.jpg  
SYLA6\_CBG-419\_**B**.jpg  
SYLA6\_CBG-419\_**C**.jpg

4. **Herbarium Vouchers:** Collect two entire plants if allowed by the owner or if the root is important for identification purposes. Vouchers will be deposited at 1. US National Herbarium, 2. Chicago Botanic Garden herbarium.

**Shipping and Cleaning:** Seeds, herbarium vouchers, DNA samples and photos to the Seed Bank Manager (see contact for address) for cleaning and processing. Please notify us that seeds will be shipped and always send the seeds by Fed Ex Overnight (least expensive rate). Include a copy of the completed field data forms documenting the collection with all shipments of seed.

Resources at the CBG Seed Bank and Seeds of Success Websites:

[www.sciencecollections.org](http://www.sciencecollections.org)

and <https://www.blm.gov/programs/natural-resources/native-plant-communities/native-plant-and-seed-material-development/collection>

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