CHICAGO BOTANIC GARDEN

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 those, we have species which we consider our Top Priority Species, and also some that we are collecting both for the seed bank, and as part of a Restoration Gardens research program.

Those to be collected for the Restoration Gardens, as well as those collected for the Forest Service Region 9 (which is a separate list), should be collected along maternal lines.

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
- Collect Restoration Garden and Forest Service species along maternal lines.
- 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 ripe seed is collected from the population on a single day
- Collection contains **10,000+ seed**
- 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 labeled 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 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 *Symphyotrichum lanceolatum* (PLANTS Code = SYLA6)

SYLA6_CBG-419_**A**.jpg
SYLA6_CBG-419_**B**.jpg
SYLA6_CBG-419_**C**.jpg

4. Herbarium Vouchers: Collect **three entire plants** (some collecting permits will only allow 2) to be deposited at: 1. U.S. National Herbarium, 2. a regional herbarium, and 3. Chicago Botanic Garden herbarium.

Shipping and Cleaning: Send seed, herbarium vouchers, DNA samples and photos to the Seed Bank Coordinator or Seed Bank Manager (see Contacts for address) for cleaning and processing. Please notify them that seeds will be shipped and always send the seeds overnight mail or with FedEx. Include a copy of the completed field data forms documenting the collection with all shipments of seed; material will not be cleaned without this documentation.

Resources at the CBG Seed Bank and Seeds of Success Websites: www.cbgseedbank.org and www.nps.gov/plants/sos

Contacts Ship to coordinator or manager at:
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