Collecting Native Seed

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Why Collect Seed?

• Save money
• Plant selection for your environment
• Hard-to-find species
• Scientific exploration
• Genetic diversity or preservation

Photo by Janet Mackey
Topics

- Plant types
- Location & Species
- Characteristics of Seeds to Collect
- Techniques
  - Gathering
  - Cleaning
  - Storing
- Suggested Species for Seed Collecting

Types of Seeds

**Annual**
- Bears seeds the year they are planted
- Most likely will **not** overwinter
- *Impatiens capensis* (orange jewelweed)

**Biennial**
- Bear edible fruit the first year they are planted, flowers and seeds in the 2nd year
- *Oenothera biennis* (common primrose)

**Perennial**
- Grows year-after-year from established root system
- May grow more slowly in the first 1-2 years
Before Starting:

1. Select species based on location or project
2. What is the purpose?
3. Collection/propagation techniques will be dependent on genus
4. Takes patience and time!

Location

- Select the right species for your project or purpose
- **Identify the species** don’t wait until seed head stage!
  - Mark plants in bloom
- Permission of property owner or entity
  - Avoid public parks or spaces
  - Private property easiest
- Large population size
  - Genetic diversity
  - Ethics

Above: *H. moscheutos* in bloom
Below: *H. moscheutos* seed head
Ethics Note: Wild Collecting

- Take no more than 5-10% of a wild population
  - 20 Rule
- You must have permission from landowner/entity
- Do not take seeds from rare, threatened, and endangered plants
- Do not collect seed from public parks, recreation areas, or other public regions
- Do not collect from small populations
  - Larger populations best for both ethics and genetics

Marking and Protecting Seeds

Columbine

Native Azalea
Collecting Seed

- Determine location
  - Garden, roadside, wild, etc.
- What you need:
  - Pruners, loppers, or scissors
  - Gloves for stripping
  - Paper bags, pillow cases, wide buckets, tarp
  - Labels or marker
  - Optional: Organza sachets, hand lens
- Selecting specimens
- Look for dry seed heads 6-8 weeks after bloom period

Preparing and Cleaning Seed

- Paper bags for collection
  - Seed heads should face down, with stems upward
  - Can be stored here for 1-2 weeks while seeds dry
- Remove “extra” plant material
  - Chaff, stems, leaves, etc.
- Mesh sieves (not necessary)
- Winnowing & debearding
- Organization helps
  - Storing bags in boxes, envelopes upright in smaller boxes
Cleaning Seed

- Line work area with newspaper, keep bucket on-hand
- Work with a single type of seed at a time
  - Small seeds can be tricky!
- Some may need several rounds of cleaning
- “Threshing” with pillow cases, rolling pin
- Use mesh sieves to separate chaff

Easy-to-Collect Seeds

- Sallow Sedge
  - Carex lurida
- Blue flag iris
  - Iris Versicolor
- Columbine
  - Aquilegia canadensis
More Easy-to-Collect Seeds:

- *Aquilegia canadensis* - wild columbine (summer)
- *Iris versicolor* - blueflag iris (late summer-fall)
- *Panicum virgatum* - switchgrass* (fall)
- *Asclepias* spp. - milkweed species* (fall)
- *Verbena hastata* - blue vervain (fall)
- *Hibiscus moscheutos* - marsh mallow, hibiscus (fall)
- *Chasmanthium latifolium* - northern sea oats* (fall)

*indicates prolific behavior

Seeds Requiring Special Techniques

- Swamp Milkweed
- Pawpaw
Seeds with Pappus

Golden Groundsel

Seed Heads
Taking Care of Collected Seed

- Coin envelopes are a good size for most seeds
- Mix with damp sand in plastic baggie for stratification
- LABEL the seed envelopes
  - WHAT the plant is (common name and botanical name)
  - WHERE it was collected
  - DATE collected (at least the year)
- Store them properly
  - Dry
  - Away from insect pests or animals
  - Out of the light

What Seeds Should I Collect?
Hard-to-Find Species

Pink Fuzzy Bean
Strophostyles umbellata

Genetic Variation

Photo Credit: Park Seeds
Genetic Variation

Great Blue Lobelia
*Lobelia siphilitica*

White Variation

Other Methods…
Propagation Methods: Transplant

Virginia Sweetspire
Itea virginica

Propagation Methods: Layering
Propagation Methods: Cuttings & Dividing

Blue-eyed grass
*Sisyrinchium scoparium*

Foamflower
*Tiarella cordifolia*

Self-Seeding Types
What should you collect?

- Easy to collect
- Easy to clean
- Easy to grow

Grasses

Bottlebrush Grass
*Elymus hystrix*

Splitbeard bluestem
*Andropogon ternarius*
Most do not need stratification—**but it doesn’t hurt!**

- Dry, brown seeds (hand lens)
- Will germinate at temperatures >70 degrees
- Warm-season vs. cool-season
- Bearded seeds
  - *May need “de-bearding”*
  - *Can be difficult to clean*

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**Sedges**

Fringed sedge (*Carex crinita*), Sallow sedge (*C. lurida*), and Frank's sedge (*C. frankii*)
■ Some Carex are “hydrophilic”
■ Sow immediately, or store in damp sand (plastic bag)
■ Cold stratification is good
■ Have papery coating- can be removed for better germination

James H. Miller, hosted by the USDA-NRCS PLANTS Database

Flowering Perennials
MB2  Need photo of sedge seeds under microscope, with and without perigynium
Mikaela Boley, 9/23/2020

MB3  Need picture of seeds/seedhead
Mikaela Boley, 9/23/2020
Foxglove Beardtongue - *Penstemon digitalis*

- More variation in treatment and collecting
- *Most* require stratification (cold)
- *Some* require scarification
- Watch for hybridization (species)
- Lots of variability
Resources

- Xerces Society- Collecting and Using Your Own Wildflower Seed

- Tallgrass Prairie Seed Collecting Guide

- Pleasant Valley Conservancy seed collecting chart
  - [https://pleasantvalleyconservancy.org/seedcollectingtimes.html](https://pleasantvalleyconservancy.org/seedcollectingtimes.html)

Talbot County Free Seed Library

[https://www.facebook.com/talbotcountyfreeseedlibrary](https://www.facebook.com/talbotcountyfreeseedlibrary)
COLLECTING seeds is not enough!

Seeds need a purpose!
Winter Sowing

“Sowing Native Seeds”

Friday, November 13th at 1:00 PM
Registration:
https://go.umd.edu/nativeseeds
Name: Boley, Mikaela
Date: September 30th, 2020
Topic: Master Gardener

https://go.umd.edu/ENRTEACH