



Delaware Native Plant Society

*Guidelines and Ethics of Collecting
Seed from Native Plants*

- Before you start, get permission from the landowner, or State agency, and know what to collect, when to collect, and how to collect. Consult one or more references.
- Be sure you have properly identified the species. This is usually easiest to do when the plant is in bloom.
- Never over collect seed from a wild population, collect only what you need. If few seeds are available from natural populations, locate a commercial source of the desired plant.
- To maintain genetic diversity, it is advisable to collect from several different populations if possible.
- Never collect seed from rare or uncommon plant species.
- Collect seed at the right time. If the seed is collected too early, it will not be viable. As a general rule, most seeds start to ripen when the pods or capsules change color, or when the seed heads start to open.
- Seeds should be collected when they are thoroughly dry, using paper bags or paper envelopes. Don't use plastic bags for gathering seeds. If seeds must be collected when they are wet, they should be spread out in shallow boxes to air-dry indoors.
- Plants that have berries or fleshy fruits should be collected when they are obviously ripe and all the fleshy parts should be removed. These seeds should then be air-dried before planting or storage.
- To dry seeds, put them in paper bags indoors, leaving the bags open at the top. This will allow good air circulation and prevent the seeds from becoming moldy.
- Once dry, seeds can be stored in paper bags, paper envelopes, cans, or glass vials. Seeds stored in glass jars or coffee-cans can be placed in the refrigerator until planting time, or they can be left outdoors in a protected spot during the winter. The alternate freezing and thawing of outdoor temperatures actually increases the percentage of germination of some seeds.
- Always label your collections with the name of the plant (scientific name is preferred because common names are not standardized), the location where you collected it, and the date of collection. This should be done while still in the field so the information is accurate.

WHY DO SEEDS DISPERSE TO FORM NEW PLANTS?

If the seeds simply fell and grew beneath the parent plants they would be too overcrowded and would be starved of nutrients. So it is important that the seeds are dispersed over a wide area where they stand a better chance of finding the right condition to grow.

HOW DO THE SEEDS DISPERSE TO FORM NEW PLANTS?

Wind Dispersal

Some seeds are carried to a new place by the wind. These seeds are very light. The seeds of the orchid are almost as fine as dust. Many have hairy growths that act like little parachutes and carry the seeds far away from the parent plant. The seeds of the dandelion are an example of ones carried by the wind.

Water Dispersal

Fruits which float such as those of the water lily and the coconut palm are carried by water. Coconuts can travel for thousands of kilometers across seas and oceans. The original coconut palms on South Sea islands grew from fruits that were carried there from the mainland by ocean currents.

Animal Dispersal

Some plants have juicy fruit that animals like to eat. The animal eats the fruit but only the juicy part is digested. The stones and pips pass through the animal's digestive system and are excreted to form new plants. This can be far away from the parent plant. Blackberry, cherry and apple seeds are dispersed in this way. Birds also like to eat fruit and they help to disperse seeds to other areas through their droppings.

Mistletoe has sticky fruits that are attractive to birds. The sticky seeds stick to the bird's beak. They then rub their beaks clean on the bark of trees. The sticky seeds are left on the bark to grow into new mistletoe plants - mistletoe is a parasitic plant.