# NPSO ETHICAL GUIDELINES FOR COLLECTING, GROWING, AND DISPLAYING NATIVE PLANTS

#### Introduction

The Native Plant Society of Oregon<sup>1</sup> is "dedicated to the enjoyment, conservation, and study of Oregon's native plants and habitats." These activities often involve collecting plants for research or educational purposes (*e.g.*, field trips, display in wildflower shows) and for growing native plants in gardens. Below is a set of guidelines for responsibly and ethically using our native plant species and communities for those purposes. The first rule of all ethical behavior is to "do no harm."

## I. COLLECTING PLANTS<sup>2</sup>

Scientists collect specimens for a variety of reasons: to document species ranges, to describe new taxa, and to study medicinal, horticultural or culinary properties. Students may be required to make a plant collection to learn taxonomic characteristics or because some species are difficult to identify in the field. Plant enthusiasts collect specimens to display in wildflower shows.

### A. General guidelines:

- 1. Avoid indiscriminate collecting; collect only what is necessary for documentation or identification.
- 2. Encourage activities that do not involve collecting, such as photography and drawing.
- 3. Respect the habitat as a whole. Be sensitive to the potential for the human footprint to damage soils, plants and wildlife (for example, nesting birds).
- 4. If you discover a new record of a rare plant (*e.g.*, taxon or location), complete the Oregon Biodiversity Information Center (ORBIC) "Rare Plant Field Survey Form." It is available online at <a href="http://inr.oregonstate.edu/orbic/">http://inr.oregonstate.edu/orbic/</a>; under "Products and Resources," click on "Rare, Threatened, and Endangered Species of Oregon," and scroll to locate the form.
- 5. New records of invasive species that threaten native plant habitats can be reported to:
  - a) The Oregon Invasive Species hotline. Call 1-866-INVADER, or go to <a href="http://oregoninvasiveshotline.org">http://oregoninvasiveshotline.org</a> and click on "Report an Invader."
  - b) The Oregon Weed Board. Click on the "Report and Identification Form" at http://www.oregon.gov/ODA/programs/Weeds/Pages/WeedBoard.aspx
- 6. Compile lists of plants observed on field trips, and report the information to the Oregon Flora Project Atlas, which documents the distributions of native and naturalized vascular plants in the state. An "Atlas Submission Template" is available online at <a href="http://www.oregonflora.org/atlas.php">http://www.oregonflora.org/atlas.php</a> and may be submitted electronically to the OFP.

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<sup>1</sup> http://www.npsoregon.org

<sup>&</sup>lt;sup>2</sup>Collecting for commercial purposes from State or Federal lands requires a permit and is not dealt with in this document.

- B. Where is it acceptable to collect plants?
  - 1. Never collect native plants in parks (city, county, state, or national).
  - 2. It is acceptable to collect natives on one's own private property. It is never acceptable to trespass on private property; ask the landowner for permission.
  - 3. Small scale collecting of common species is acceptable on public lands (*e.g.*, national and state forests, BLM parcels). A permit should be obtained by groups or individuals engaged in collecting for such purposes as scientific research or educational field trips.
  - 4. Collecting common natives is acceptable along public roadside rights-of-way. However, rare and protected species may occur along roadsides in habitats that represent the last refuges of once widespread native populations. Thus, do not assume that all vegetation along roadsides is safe to collect.
  - 5. Wherever you collect, do so discreetly. Explain what you're doing if asked and emphasize conservation.
- C. How do I know what plants may be collected and which ones should not be collected?
  - 1. Inform yourself about legal procedures and state and federal rules for collecting plants:
    - a) Oregon Endangered Species Act (https://www.oregonlegislature.gov/bills\_laws/lawsstatutes/2013ors564. html).
    - b) Federal Endangered Species Act (http://epw.senate.gov/esa73.pdf); for a digest of the law, go to http://www.fws.gov/laws/lawsdigest/esact.html).
    - c) U.S. Forest Service, Region 6: Collecting specimens in Primitive, Wilderness, Research Natural, Botanical, or Scenic Areas or Forest Service Campgrounds or Picnic Areas is prohibited
  - 2. Inform yourself about which taxa are locally and nationally protected. The list "Rare, Threatened, and Endangered Species of Oregon" is maintained by the Oregon Biodiversity Information Center (ORBIC) at Portland State University (http://inr.oregonstate.edu/orbic/rare-species/rare-species-oregon-publications). Xerox the section of this document pertaining to plants, and keep a copy with you when collecting in the field. Whenever possible, identify a plant in the field without uprooting it, and check it against this list.
  - 3. As a general rule, do not collect the following, which tend to include rare and protected species:
    - a) Clubmosses (Lycopodiaceae)
    - b) Orchids (*Orchidaceae*)
    - c) Insectivorous plants, e.g., cobra lilies (*Sarraceniaceae*) and sundews (*Droseraceae*)
    - d) "Showy monocots," especially genera in the families *Liliaceae*, *Iridaceae*, and *Melanthiaceae*: e.g., *Calochortus* (mariposa lily),

- Erythronium (fawn lily), Fritillaria (chocolate lily or fritillary), Lilium (lily), Olysinium (grass widows), Iris, and Trillium (wake robin).
- e) Plants without chlorophyll, including parasites<sup>3</sup> and mycoheterotrophs<sup>4</sup>: parasites include the broomrapes (*Orobanche*); mycoheterotraphs include members of the subfamily *Monotropoidae* of the family *Ericaceae* (e.g., the ghost plant *Monotropa*, pine drops *Pterospera*, and gnome plant *Hemitomes*).
- D. Once I have determined that I may collect from a population of a common species, how do I calculate how much plant material it is acceptable to collect?
  - 1. Ideally, try to collect only from populations of 100 or more plants.
  - 2. When collecting common taxa, follow the "1-in-20 Rule."<sup>5</sup>
    - a) Do not collect *one* plant *until* you have found at least *twenty*. Only after twenty are found should you consider collecting one plant. And forty should be present before two are taken, and so on.
    - b) Although it is important to have below-ground parts for identification of some species, if parts of plants are sufficient for identification, do not collect whole plants; for example, remove no more than five percent (one-twentieth) of a shrub, one fern frond from a clump of twenty, or 5% of a patch of moss from a plant.
    - c) Do not collect more than 5% of the seeds from any one plant or 20% of the seeds from a population of plants.

## II. NATIVE PLANTS IN GARDENS<sup>6</sup>

Gardening with natives offers many ecological and aesthetic benefits. Native plants are a beautiful part of our natural heritage. They attract native insect pollinators, seed dispersers and other native fauna. Natives are adapted to local soil and climate conditions, so they require minimal water and fertilizer and can be easier to maintain than non-natives. Planting natives reduces the risk of introducing non-native invasive plants into our communities.

- A. Selecting plants for your garden:
  - 1. Contact your local NPSO chapter for information on sources for natives in your area and recommendations for suitable plant materials. Obtain plants from nurseries or native plant sales, not wild populations. Plant sales are often sponsored by Conservation Districts, NPSO chapters, or non-profits (*e.g.*, Friends of Tryon Creek, Mt. Pisgah Arboretum).
  - 2. Use plants that are native to your ecoregion; <sup>7</sup> *e.g.*, the Willamette Valley, Columbia Plateau, Klamath Mountains.

<sup>&</sup>lt;sup>3</sup> Parasitic plants derive some or all of their nutrients from other living plants.

<sup>&</sup>lt;sup>4</sup> Mycoheterotrophs are non-photosynthetic plants that obtain their nutrients from mycorrhizal fungi attached to the roots of photosynthetic plants.

<sup>&</sup>lt;sup>5</sup> Excerpted from: http://www.oregonflora.org/ofn/OFNvIn3.pdf, p. 13

<sup>&</sup>lt;sup>6</sup> http://www.npsoregon.org/bulletin/2001/NPSO 0103.PDF (March 2001, pp. 33-35)

<sup>&</sup>lt;sup>7</sup> https://en.wikipedia.org/wiki/List of ecoregions in Oregon

- 3. Choose plants that grow well in the particular conditions you have in your garden. For example, for moist, shady spots, select natives that grow naturally in moist or riparian environments.
- 4. Select healthy looking plants, *i.e.*, those with vigorous growth and good foliage color and without insect damage and leaf spots indicative of fungal, bacterial or viral infection.
- 5. Take care that the soil, in which purchased plants are growing, is not contaminated with weeds. Monitor your garden for weeds that may germinate from seeds in the soil.
- 6. Except for salvage, do not dig whole plants from the wild.
- B. When purchasing plants from nurseries:
  - 1. Patronize growers who exercise discretion in collecting seeds and cuttings to avoid damaging native plant populations.
  - 2. Do not buy from growers who dig plants from the wild. Natives sold in nurseries should have been propagated from seeds or cuttings.
  - 3. Chapters may recommend local growers that use non-destructive practices as sources for native plant materials.
  - 4. Try to ascertain the geographic source of the material and, if possible, select plants that originated near your home (*i.e.*, plants that are locally native).
  - 5. Try to ascertain that plants have not been obtained from locations known to harbor their pathogens; for example, do not purchase Oregon white oaks from locations infested with sudden oak death.

### III. NATIVE PLANTS IN WILDFLOWER SHOWS AND NATIVE PLANT SALES

Wildflower shows and native plant sales are typically sponsored by local NPSO chapters, Conservation Districts, and non-profits, such as the Friends of Tryon Creek, Audubon Society, Mt. Pisgah Arboretum, and the Glide Wildflower Show. They are excellent ways to educate the public about the value of native plants and to build a constituency that supports NPSO goals of enjoying, studying, and conserving native plants and their habitats. Thus, such events should make maximum use of their educational potential.

#### A. Suggestions for public education:

- 1. Prepare a press release for distribution to the local media and invite representatives to attend the event.
- 2. Clearly state the goals of NPSO.
- 3. Explain the guidelines that your chapter follows in collecting specimens for the show or sale. How native plants were collected or grown should be stated clearly, either on labels or posted nearby.
- 4. Consider supplementing wild-collected plants with other educational options, such as a digital presentation and displays of artwork, publications, and herbarium collections.
- 5. Consider donating display materials after the show, for example to schools or libraries.

- B. Native plant species, which are collected from wild populations for sale, should be obtained by salvage, seeds, or cuttings.
  - 1. The harvest or collection of native plants must never threaten their populations.
  - 2. Salvage of native plants means rescuing plants that would otherwise be destroyed: along roadsides to be graded; at quarries, mines, or dams; at building or road construction sites, etc.
  - 3. Except for salvage, whole plants should never be dug up.
- C. Exotic plant species<sup>8</sup>, particularly noxious weeds and invasive plants such as broom and butterfly bush, should never be sold at native plant sales.

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<sup>&</sup>lt;sup>8</sup> http://plants.usda.gov/java/noxious?rptType=State&statefips=41. To view profiles of Oregon noxious weeds, visit http://www.oregon.gov/ODA/programs/Weeds/Pages/WeedBoard.aspx