

Alberta Native Plant Council

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Alberta Native Plant Council Plant Collection Guidelines for Wildcrafters

Introduction

Wildcrafting is the collecting of plant materials from the wild to use for various purposes. Plant parts or seeds may be collected for food, medicine, and craft and may be for individual use, or collected and sold. Indiscriminate collecting can substantially decrease the number of plants in harvested populations. Conscientious wildcrafters should strive to have minimal impacts on wild populations. Entire plants should not be harvested, unless it is for weed management.

These ANPC guidelines reflect our current understanding of the use of native plants in the fields of conservation, reclamation, and horticulture. The guidelines will continue to evolve as our understanding of ecological and genetic processes and the role of native vegetation in maintaining these processes develops.

Acknowledgements

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Some Definitions

<u>Native plant species</u> are those that are indigenous to a particular region; plants that were in the landscape prior to Euro-American settlement. Native species are recognized for their intrinsic value as part of natural ecosystems.

Alien plant species are plants not native to Alberta. They may have been purposely brought into the province as agricultural or horticultural species, or they may have been accidentally introduced. There are hundreds of introduced plant species, and of these some are also invasive. Once established in an area, invasive aliens can replace native plants by aggressive competition for resources or by direct chemical antagonism (allelopathy). Co-evolved predators and pathogens are often absent, and can allow populations to grow rapidly. Some alien invaders have significant impacts on natural habitats. To learn more, check out http://www.anpc.ab.ca/rogues.pdf.



Rare plants are native species that have either a small population in Alberta, or occur only in a small portion of the province, often both. Generally, a rare plant is defined here as a species on the Alberta Natural Heritage Information Centre (ANHIC) Tracking And Watch Lists - Vascular Plants, Mosses, Liverworts And Hornworts (check the ANHIC website www.cd.gov.ab.ca/preserving/parks/anhic/flashindex.asp for the most current update). Tracking lists include elements of high priority because the taxa are rare or of conservation concern in some other way. While species on this list do not necessarily have any legal status, some plants have been legally designated under provincial legislation. These can be viewed at http://www3.gov.ab.ca/srd/fw/speciesatrisk or by contacting the Alberta Sustainable Resource Development, Species at Risk Program. Some plant species are also protected by federal legislation under the Species at Risk Act. Information on these can be viewed at http://www.cosewic.gc.ca/index.htm or contact COSEWIC Secretariat, c/o Canadian Wildlife Service, Environment Canada. Ottawa, Ontario K1A 0H3 (Tel.: (819) 953-3215 or Fax: (819) 994-3684).

Guidelines for Wild Harvesting Plant Materials

If not done in an ethical manner, wild harvesting to collect commercial quantities of plant material, or even occasional collecting for things like decorative arrangements, can have serious impacts on both the target plant species and the surrounding habitat. It is important not to collect from plant communities or plants whose viability may be adversely affected by collection. It is also important to minimize your impacts as you collect.

Several wildcrafting organizations are attempting to protect and/or increase populations of sensitive species (e.g. United Plant Savers, Rainforest Alliance). It is the responsibility of wildcrafters to ensure that they collect in a conscientious and ethical manner. The following is a list of suggestions designed to help wildcrafters self-regulate their collecting:

Where to Collect

- Where possible, collect from areas that will be developed or where vegetation will be removed or otherwise destroyed in the near future.
- Avoid protected lands such as national, provincial, and municipal parks and protected natural areas. Please note it is illegal to collect from many of these areas.
- Avoid rare or fragile habitats such as sand dunes or wetlands.
- Roadsides are disturbed habitats, so collecting here will generally have little impact. The following should be considered when doing roadside collecting:
 - Park and walk with care, as roadside collecting can be dangerous.
 - Vegetation adjacent to roads with heavy traffic may be coated with dust, contaminated with heavy metals, or affected by other air emissions.
 Wildcrafters harvesting medicinal or edible plants should avoid these areas.
 - In some areas, efforts are being made to establish native wildflowers in ditches. Avoid areas where native species have been planted in an effort to reestablish natural vegetation or beautify the landscape.



- Avoid areas that are visited by large numbers of people, such as urban trails and roadways. If hundreds of people pass through an area and each take 1 plant in 100, it doesn't take long to remove thousands of plants and decimate a healthy population.
- Collecting on public lands outside of protected areas can be done, but see the following information on getting permission.

Getting Permission

- On private or leased land, permission to collect native plant materials must be obtained from the landowner or lessee.
- When collecting commercially, it is necessary to get a Temporary Field Authorization (TFA) for collecting on publicly owned land. Contact the local Public Lands office for more information (you can call a government office toll-free anywhere in Alberta by calling Service Alberta at 310-0000. You will have the option of entering the number you need or holding/pressing zero for operator assistance. Ask to be connected to the Public Lands office in your location of interest). A plan must be submitted to the appropriate agency, with details about the area to be harvested, method of harvesting, timing of harvesting, and target species. After harvesting, a report must be submitted to the appropriate field office identifying the actual area harvested (on a map or GPS readings) and the approximate amount of seed or plant parts harvested.
- Indian reserves are considered private land. Permission must be obtained from the band office.

Know Your Plant Species

Know the flora of the area before you collect. Be aware of the collecting guidelines and of the rare plants in your region. Understand the biology of the plant and it's method of reproduction, so that you can make knowledgeable decisions about what to collect and how much to collect.

Here are some ideas to consider:

- Identify the plants before collecting. A list of books that you may find helpful in learning the species new to you is given in the reference section.
- Know which plants are likely to be over-harvested by other wildcrafters.
- Know which species are sensitive to harvesting (lilies, orchids etc.).
- If you encounter a plant with which you are unfamiliar and you really want to identify it, assume it is rare and exercise one of the following options:
 - Ask a rare plant specialist to identify it in the field.
 - Small population (fewer than 50 plants), easy to return to: photograph the
 plant for identification and return for collecting only if the collection would
 add significantly to scientific knowledge.
 - Small population (fewer than 50 plants), difficult to return to: collect only a single specimen. Be careful not to collect any species you know to be locally, provincially or nationally rare. For information about rare species, check Kershaw et al. (2001) or visit the following website; http://www.cd.gov.ab.ca/preserving/parks/anhic/flashindex.asp



- Large population (1000 or more plants): follow general guidelines.
- If a species is a noxious weed, feel free to remove as many plants as you like. This may even apply in a park or reserve; **but** you need to check with the site manager to ensure they understand that you are assisting them in site management. When collecting introduced or invasive species, take care not to facilitate their further spread by distributing their seeds or cuttings. Plants should be bagged and then burned. For further information, contact the Agriculture Fieldman in your area; see the list of fieldmen by region at: http://www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/rsv5531.

Collecting Plant Material

Collecting the full plant, including the roots, can rapidly reduce the population of that plant, so try to take only a part of the plant, if possible. Of course, if you are sure it is an alien species (especially an invasive alien) collecting full plants, roots and all, may be helpful to reduce its spread. Otherwise this should be avoided. Understand the biology of the plant and it's method of reproduction, so that you can make knowledgeable decisions about what to collect and how much to collect.

Here are some considerations when determining how sensitive a species may be to collecting:

- Is the plant fast or slow growing? The slower a plant grows the more sensitive it will be to collecting, especially to the removal of the full plant.
- How does it reproduce? By seeds, rhizomes, stolons, bulbs, or otherwise?
 - A portion of the available seeds, cuttings or bulblets (above-ground) can often be taken without seriously affecting the survival of the parent plant.
 - If a plant produces rhizomes or stolons, it may be possible to remove small rooted shoots without seriously damaging the parent.
 - Plants with bulbs or corms are much more sensitive to collection of rooted specimens, because it is often necessary to remove the entire plant to get a viable shoot.
 - Aboriginal communities, who have collected bulbs from the same populations for generations, maintain or increase the populations by carefully replanting the small bulbs.
 - An annual is almost entirely dependent on being able to flower then set and disperse seed for the population to continue, so these species may be particularly sensitive to the loss of flowering or fruiting individuals.
- If you collect in an area periodically, note the vigour and size of the stand each time you visit. Is the stand growing, shrinking, or staying the same size? It is often necessary to leave an area to rest for one or more growing seasons between collections.
- Growing conditions can vary from year to year, if a population looks stressed or very few individuals are blooming or setting seed, avoid collecting in this area.



Even common plants with healthy populations can be impacted by over harvesting. In areas that may be subjected to further collecting by the general public or where activities such as grazing, mowing or heavy traffic reduces natural regeneration, collecting should be minimal. Take no more than 1 in 50 plants. It may also be helpful to record population levels so that over-harvesting can be documented.

For populations under 1000 plants or clumps, ANPC is suggesting a 1 in 50 "rule of thumb", unless the species is especially sensitive to collection.

- For species that grow as clumps, count each clump as a single plant.
- No more than 1 plant (or clump) should be collected for every 50 that are present in a population.
- If only a small percentage of the population is flowering or fruiting, collect only one in 50 flowers or fruits. These may be critical to the continued vigour of the population.
- Do not collect from small populations (less than 1000) of sensitive species (annuals; perennials with bulbs such as onions; non-vascular plants such as mosses; lichens).
- Generally, avoid small populations with fewer than 50 plants and <u>never</u> collect the only plant in an area.
- The exceptions to these rules are alien (introduced) plants (e.g. dandelion, lamb's quarters, purslane). If you are sure that a species is introduced and is now growing wild, take all you want, but be careful not to spread seeds and try not to create additional habitat for weeds by leaving disturbed ground.

For bigger populations (over 1000 plants or clumps), the suggested rule of thumb is collecting no more than 1 in 10.

- Collect seeds or cuttings rather than entire plants.
- Leave 9 of every 10 plants unharmed (including 90% of the flowers, seeds, berries, etc.) to allow natural propagation, and to provide food and habitat for insects, birds, and mammals.
- For sensitive species (annuals; perennials with bulbs such as onions; non-vascular plants such as mosses; lichens), a collection from a large population is acceptable, but at a very minimal rate. We suggest taking at most 1 in 500.

Overall, it is best to collect only parts of common plants with large populations (i.e. 1000 or more plants). Avoid collecting rare or endangered species, and ensure that your harvesting will not affect any such plants that are growing nearby. The most important message is to collect in a sustainable way that doesn't reduce the health or abundance of native plants for the long-term.



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