

# Exotic plants and cultivated landscapes in the mountain national parks: *a growing concern*

Yoho  
Lake Louise  
Kootenay

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- Invasion of the habitat snatchers
- Non-native plants to avoid in gardening
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## Protecting habitat through shared stewardship

National park residents enjoy spectacular and rich surroundings that other Canadians can only dream of visiting. Parks Canada is committed to protecting and maintaining the beauty and integrity of the Central Rockies ecosystem represented in the mountain parks. We need your help.

The purpose of this pamphlet is to provide recommendations to leaseholders and park residents about which plants should or should not be grown within the mountain national parks.

## Invasion of the habitat snatchers

The plants and animal communities living here have evolved together as a dynamic system for thousands of years. The resiliency and future adaptability of this unique ecosystem is threatened today by innocent-looking invaders: non-native or exotic plants. Easy to overlook, non-native plants blend right in, often adding a touch of colour we humans appreciate. But the effects many of these invaders have on our native plant communities can be downright ugly.

Non-native plants often become invasive because their natural predators (e.g., insects) and diseases are absent from the area they are invading. This gives them a competitive edge allowing them to spread rapidly by aggressively reproducing and growing. They simply out-compete native plants.

Ultimately the **structure and composition** of our native plant communities is changed. This in turn, exerts a ripple effect throughout the local plant and animal communities and the larger ecosystem affecting birds, mammals and even fish that depend on native plant communities for habitat requirements such as food, cover or nesting. Silently, almost invisibly, habitat is lost.

The prevention and removal of non-native plant species is an important aspect of ecosystem management which attempts to protect and restore **natural ecosystem processes**. To fight invasive, non-native plants, Parks Canada has established an *integrated pest management program* which plans and uses a variety of techniques: the most important being prevention.

## Plants discouraged for use in cultivated landscapes

Parks Canada policy states that “*All practical efforts will be made to prevent the introduction of exotic plants and animals into national parks, and to eliminate or contain them where they already exist.*” Programs to eliminate or contain exotic plants are very time consuming, labour intensive and costly. The most effective way to control non-native plants is to prevent their establishment. That’s where you come in.

Personal gardens and other types of human built landscapes are entry points for many kinds of non-native plants. Focusing our efforts here can help prevent the introduction of invasive plants. Your understanding and cooperation as a leaseholder and park resident is vital to help protect habitat and biodiversity.

Tansy (*Tanacetum vulgare*), also called Golden-buttons, is a good example of a common garden plant that is now an invasive species in the mountain national parks. It’s become common in the roadside ditches and park staff spend a large

- **structure:** the way both living and non-living parts of an ecosystem are spatially arranged. An old growth forest has a different physical structure than a young forest, while a grassland has a different structure than an alpine meadow.

- **composition:** the various kinds of species composing a plant community or ecosystem.

- **Ecosystem processes:** define how the parts of an ecosystem, living and non-living, interact with each other, e.g. grazing and browsing, soil formation, nutrient cycling, migration, pollination, predation, natural disturbances such as fire and floods, succession, and evolution.

amount of time and energy trying to get rid of this weed. The Icelandic poppy (*Papaver nudicale*) is another familiar garden plant invading park ecosystems. This beautiful flower may seem harmless in the garden plot, but it has the potential to become a serious threat to biodiversity when it escapes its bounds.

## Priority invasive, non-native weeds

Below is a prioritized list of plants discouraged for use in landscaping. A high priority indicates a noxious weed that should be completely avoided. You may recognize some plants on this list as common garden plants. Though not always obvious, apparently harmless garden varieties have great invasive ability as they can disperse their seeds over incredible distances with the help of wind or birds.

Priority one species are highly invasive and detrimental to native plant communities. Fortunately most of these species have a limited distribution which offers a good chance for control. These plants should not be used in landscaping within park boundaries. If they're currently growing on your lease, they should be removed.

At present, priority two and three species will be tolerated on private leases, but the purchase and propagation of additional plants is discouraged. Leaseholders, please be aware that once a non-native plant escapes to areas outside your lease, measures must be taken to control its spread.



**Common tansy**

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*The most effective way to control non-native plants is to prevent their establishment.*

### Priority 1 Species: restricted or noxious under provincial and/or federal legislation.

Latin Name	Common Name	Latin Name	Common Name
<i>Anthemis tinctoria</i>	Yellow chamomile	<i>Hypericum perforatum</i>	St. John's Wort
<i>Centaurea diffusa</i>	Diffuse knapweed*	<i>Linaria dalmatica</i>	Dalmatian toadflax*
<i>Centaurea maculosa</i>	Spotted knapweed*	<i>Linaria vulgaris</i>	Toadflax*
<i>Cirsium arvense</i>	Canada thistle*	<i>Matricaria perforata</i>	Scentsless chamomile*
<i>Euphorbia esula</i>	Leafy spurge*	<i>Tanacetum vulgare</i>	Common tansy

\* The BC Weed Control Act imposes a duty on all land owners to control designated noxious plants. "Noxious weed" is a legal term referring to a non-native plant that poses a serious threat to agriculture and wildlife.

\*\* Highly noxious weeds.

### Priority 2 Species: species with a low distribution and perceived as having either a moderate or an unknown invasive potential

Latin Name	Common Name	Latin Name	Common Name
<i>Agrostis stolonifera</i>	Red top	<i>Galeopsis tetrahit</i>	Hemp nettle
<i>Arabis glabra</i>	Tower mustard	<i>Humulus lupulus</i>	Hops
<i>Brassica campestris</i>	Rapeseed	<i>Lactuca serriola</i>	Prickly lettuce
<i>Bromus inermis</i>	Smooth brome	<i>Lepidium campetsre</i>	Field peppergrass
<i>Campanula rapunculoides</i>	Creeping bellflower	<i>Lynchnis chalconica</i>	Campion
<i>Capsella bursa-pastoris</i>	Shepherd's purse	<i>Medicago lupulina</i>	Black medic

<i>Clematis tangutica</i>	Yellow clematis	<i>Medicago sativa</i>	Alfalfa
<i>Cynoglossum officinale</i>	Hound's tongue*	<i>Polygonum arenastrum</i>	Knotweed
<i>Descurainia sophia</i>	Flaxweed	<i>Sonchus uliginosus</i>	Perennial sowthistle
<i>Erucastrum gallicum</i>	Dog mustard	<i>Thlaspi arvense</i>	Stinkweed
<i>Erysimum cheiranthoides</i>	Wormseed mustard	<i>Tragopogon dubius</i>	Goat's beard
<i>Festuca rubra</i>	Red fescue	<i>Verbascum thapsus</i>	Woolly mullein

**Priority 3 Species:** have either a high or low distribution and a low invasive potential.

Latin Name	Common Name	Latin Name	Common Name
<i>Agropyron pectiniforme</i>	Crested Wheatgrass	<i>Nepeta cataria</i>	Catnip
<i>Agropyron repens</i>	Quack grass	<i>Papaver nudicale</i>	Iceland Poppy
<i>Artemesia absinthium</i>	Absinthe	<i>Phleum pratense</i>	Timothy
<i>Bromus tectorum</i>	Cheatgrass	<i>Poa anna</i>	Annual bluegrass
<i>Cerastium vulgatum</i>	Field chickweed**	<i>Poa pratensis</i>	Kentucky bluegrass
<i>Chenopodium album</i>	Lamb's quarters	<i>Ranunculus acris</i>	Tall buttercup**
<i>Chrysanthemum leucanthemum</i>	Ox-eye daisy**	<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Cichorium intybus</i>	Chicory	<i>Rumex crispus</i>	Curly dock
<i>Cirsium vulgare</i>	Bull thistle**	<i>Setaria viridis</i>	Green foxtail
<i>Crepsis tectorum</i>	Annual hawksbeard	<i>Sisymbrium altissimum</i>	Tumbling mustard
<i>Galium aparine</i>	Cleavers	<i>Sonchus arvensis</i>	Perennial sowthistle*
<i>Hieracium aurantiacum</i>	Orange hawkweed*	<i>Taraxacum officianale</i>	Dandelion**
<i>Hordeum vulgare</i>	Barley	<i>Trifolium aureum</i>	Hop clover
<i>Lappula squarrose</i>	Bluebur	<i>Trifolium hybridum</i>	Alsike clover**
<i>Matricaria matricarioides</i>	Pineapple weed**	<i>Trifolium pratense</i>	Red clover**
<i>Melilotus alba</i>	White sweetclover**	<i>Trifolium repense</i>	White clover**
<i>Melilotus officianalis</i>	Yellow sweetclover**	<i>Vicia cracca</i>	Bird vetch

## Tackling the problem



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Over 100 non-native species occur in the mountain national parks, consequently our list of invasive, non-native plants is selective and doesn't include all non-native plants. Species that don't appear on the list don't pose a serious threat at this time. Though not a high priority, they're still discouraged as there may be negative influences that are currently unknown. It's not a big problem if you have certain non-natives as long as they are restricted to your lease and are not listed above.

We recommend that invasive plants be removed manually instead of using chemical herbicide. This protects the local environment from the polluting effects of some commonly used products. If spraying is the only option for removal of a large infestation, please contact a park warden office for a list of acceptable herbicides and information about their safe application. Please note: herbicide use within a national park requires a Restricted Activity Permit.

Keep in mind that any plant with the ability to seed itself every year can potentially become invasive, e.g. poppies. We strongly recommend that you either not grow these types of plants or not allow them to go to seed.

## Tolerated non-native plant species

We don't expect all non-native plants to be removed from your garden plots; not all non-native species are invasive or harmful to our mountain ecosystems. For instance, many non-natives are unable to reproduce, either because they are not adapted to the local area or they are sterile, hybrid cultivars.

Sterile hybrids are plants bred by horticulturalists to be suitable for landscaping and gardening, but in the process have lost the ability to produce viable seed. Although most sterile plants are thought to be safe and not invasive, the odd plant can unexpectedly surprise you and begin reproducing. Be wary of any plant that can sustain itself from year to year via natural seeding: it has the potential to spread.

## Plants encouraged for use in cultivated landscapes

The best alternative to growing non-native plants is to use **native plants**. Native plants are those which were naturally occurring in and adapted to an area during pre-Columbian times.

### Advantages to using native plants:

1. They're part of the natural local ecosystem and support the integrity of the natural areas within parks.
2. They're already adapted to the soils and climate of this region and require little care once established.
3. Certain native plants can be used to attract or deter certain wildlife once the ecological characteristics of these species are known.
4. They will not add to the relative abundance of non-native to native plants within park boundaries.
5. Once established, native plants may prevent the invasion of non-native plants to disturbed sites.

A great variety of beautiful native plants can be grown horticulturally. The increasing popularity of landscaping with native plants has encouraged local nurseries to increase their stocks of these plants.

Native plants can be selected for certain sites according to the environmental conditions that best suit them. Many native plants grow under conditions that are quite different than those of the average home garden. By paying close attention to these conditions, it's possible to establish a more "naturalized" garden which requires less care and maintenance. Nursery managers and gardening books on water-efficient gardening offer advice on plants best suited for particular locations.

Although some native plants may thrive under cultivated conditions, others may not. The following native plant list includes plants that are easily cultivated and known to be provided by local nurseries.

## Plant disposal

Some plants have an amazing ability to reproduce after seemingly harsh treatments.

The only safe way to ensure that seeds and plant parts have been killed is to expose them to extreme heat. Composting or outdoor burning is not enough.

We recommend that priority one weeds be placed in a plastic bag and given to the park wardens. They'll be taken to an industrial burner where fire temperatures are hot enough to destroy all plant material.

## Should I dig up my lawn?

Lawn grasses are not a particular threat to park biodiversity, so you need not worry about removing your front lawn! However, if you are planning to seed or sod a disturbed area and wish to experiment with native varieties, there are mixes available consisting of native grasses suitable for forming sod (see Prairie Seeds Company under supplier list).

## What about vegetable gardens?

Most vegetable plants don't pose a threat as invasive species, but they may have potential to become invasive if they go to seed. Please don't allow these plants to go to seed, except of course for crops which are eaten in their seed form, e.g., beans and peas. Plants such as spinach or chives should be harvested before they seed or immediately composted if they have gone to seed.



## Native Plants for the garden

COMMON NAME	LATIN NAME	ECOREGION
<b>TREES</b>		
		<b>MSA</b>
subalpine fir	<i>Abies lasiocarpa</i>	-X-
Douglas maple	<i>Acer glabrum</i>	XX-
white birch	<i>Betula papyrifera</i>	XX-
Engelmann spruce	<i>Picea engelmannii</i>	-X-
white spruce	<i>Picea glauca</i>	XX-
lodgepole pine	<i>Pinus contorta (var. latifolia)</i>	XX-
trembling aspen	<i>Populus tremuloides</i>	X--
Douglas fir	<i>Pseudotsuga menzesii</i>	X--
<b>SHRUBS</b>		
		<b>MSA</b>
green alder	<i>Alnus crispa</i>	-X-
saskatoon	<i>Amelanchier alnifolia</i>	X--
bearberry	<i>Arctostaphylos uva-ursi</i>	XX-
dwarf birch	<i>Betula pumila</i>	-X-
red osier dogwood	<i>Cornus stolonifera</i>	X--
wolf willow	<i>Elaeagnus commutata</i>	-X-
ground / common juniper	<i>Juniperus communis</i>	-X-
creeping juniper	<i>Juniperus horizontalis</i>	X--
Rocky Mountain juniper	<i>Juniperus scopulorum</i>	-X-
labrador tea	<i>Ledum groenlandicum</i>	-X-
shrubby cinquefoil	<i>Potentilla fructicosa</i>	XX-
prickly rose	<i>Rosa acicularis</i>	XXX
wild rose	<i>Rosa woodsii</i>	X--
arctic willow	<i>Salix arctica</i>	--X
red elderberry	<i>Sambucus racemosa</i>	--X
Canadian buffalo-berry	<i>Shepherdia canadensis</i>	XX-
snowberry	<i>Symphoricarpos albus</i>	X--
western snowberry	<i>Symphoricarpos occidentalis</i>	X--
tall blueberry	<i>Vaccinium membranaceum</i>	XX-
common blueberry	<i>Vaccinium myrtilloides</i>	-X-
cow-berry	<i>Vaccinium vitis-idaea</i>	-X-

### Ecoregions

Three ecoregions exist in the Rocky Mountain natural region and reflect marked differences in climate from low to high elevations.

#### Montane Ecoregion (M):

Warmest and driest, occurring at lower elevations and valley bottoms.

#### Subalpine Ecoregion (S):

Most extensive ecoregion in the parks. Temperatures are cooler than in the Montane and there's more rain and snow. Lake Louise and Field are both located in the subalpine.

#### Alpine Ecoregion (A):

Higher, colder, and receives more rain and snow than any other subregion. Low shrub and small plant communities exist here; tree growth is prevented by harsh weather conditions.

COMMON NAME	LATIN NAME	ECOREGION
GRASSES		MSA
northern wheat grass	<i>Agropyron dasystachyum</i>	X - -
western wheat grass	<i>Agropyron smithii</i>	X - -
bluebunch wheat grass	<i>Agropyron spicatum</i>	X - -
slender / awned wheat grass	<i>Agropyron trachycaulum</i>	X - -
mountain brome	<i>Bromus carinatus</i>	X X -
fringed brome	<i>Bromus ciliatus</i>	X X -
northern awnless brome	<i>Bromus pumpellianus</i>	X X -
plains reed grass	<i>Calamagrostis montanensis</i>	X - -
purple reed grass	<i>Calamagrostis purpurascens</i>	X X X
nodding sedge	<i>Carex raymondii</i>	- X -
California oat grass	<i>Danthonia californica</i>	X X -
tufted hair grass	<i>Deschampsia cespitosa</i>	- X -
smooth wild rye	<i>Elymus glaucus</i>	X - -
hairy wild rye	<i>Elymus innovatus</i>	X X -
rough fescue	<i>Festuca campestris</i>	X X X
Idaho fescue	<i>Festuca idahoensis</i>	X X -
Rocky Mountain fescue	<i>Festuca saximontana</i>	X - X
Hooker's oat grass	<i>Helictotrichon hookerii</i>	X - -
sweet grass	<i>Hierchloe odorata</i>	- X X
june grass	<i>Koelaria macrantha</i>	X X -
white-grained mountain rice grass	<i>Oryzopsis asperifolia</i>	X - -
alpine bluegrass	<i>Poa alpina</i>	- X X
early bluegrass	<i>Poa cusickii</i>	X X -
Richardson needlegrass	<i>Stipa richardsonii</i>	X X -
green needle grass	<i>Stipa viridula</i>	X - -

## Latin names

Latin names may seem bewildering to use versus common names; however, the world of botany is full of common names where one plant may have many common names, and more than one plant may share the same common name.

Using the Latin name helps avoid confusion. Each plant species has a unique Latin name consisting of two words that are written in *italics* or underlined.

The first word of the name is always capitalized and refers to the genus, basically a group of similar species. The second word is not capitalized and indicates the species within that genus.



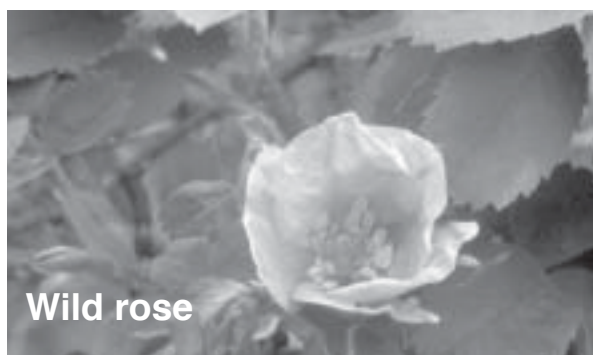
## Xeriscaping

An odd sounding term for “water-efficient landscaping.” This word directly translates to “dry landscape” and leads to the misconception that these landscapes consist only of gravel and cacti.

Xeriscaping actually includes a wide variety of plants ranging from more water demanding turf-grasses to more drought-tolerant plants.

Design is the key to success in xeriscaping. It can decrease water consumption by half. This is significant considering that 40% to 60% of treated drinking water is used to irrigate landscapes and gardens.

Examples of xeriscaping can be found at the Calgary Zoo's rock garden and prehistoric park, and the Burns Memorial Gardens near SAIT (Southern Alberta Institute of Technology).



## Landscaping with native plants: where to start?

Learn more about the native plants of your area and tell others.

Start in your own backyard: remove the non-native plants and plant some native ones. With some planning you can provide habitat for birds, insects and even amphibians, while deterring larger animals such as elk and bears.

If you see a non-native, invasive species of plant “invading” your yard, dig it out and properly dispose of all reproductive plant parts (see “plant disposal”).

Try to create a landscape that approximates the natural state of your surrounding region.

Don't let non-native plants in your garden seed themselves.



## Native wildflower seed packages

It's tempting to buy packages of seeds that promise a variety of colourful, native wildflowers. However, these packages often contain species that are not actually native to our particular area. They may even be from the other side of the continent!

If uncertain, please check with the supplier or the park vegetation specialist.

WILDFLOWERS		MSA
common yarrow	<i>Achillea millefolium</i>	X X -
false dandelion	<i>Agoseris glauca</i>	X X -
nodding onion	<i>Allium cernuum</i>	X X -
long-fruited anemone	<i>Anemone cylindrica</i>	X - -
Drummond's anemone	<i>Anemone lithophila</i>	- - X
cut-leaved anemone	<i>Anemone multifida</i>	X X X
prairie crocus	<i>Anemone patens</i>	X - -
low everlasting	<i>Antennaria aprica</i>	- X -
showy everlasting	<i>Antennaria pulcherrima</i>	- X -
pasture sagewort	<i>Artemesia frigida</i>	X - -
alpine aster	<i>Aster alpinus</i>	X X X
Lindley's aster	<i>Aster ciliolatus</i>	X - -
showy aster	<i>Aster conspicuus</i>	X - -
smooth aster	<i>Aster laevis</i>	X X -
Indian milk vetch	<i>Astragalus aboriginum</i>	X X -
American milk vetch	<i>Astragalus americanus</i>	X - -
buffalo bean	<i>Astragalus crassicaarpus</i>	- X -
balsam-root	<i>Balsamorhiza sagittata</i>	X - -
harebell	<i>Campanula rotundifolia</i>	X X -
common red paint-brush	<i>Castilleja miniata</i>	X - -
lance-leaved paint brush	<i>Calstilleja occidentalis</i>	X - -
bunchberry	<i>Cornus canadensis</i>	- X -
low larkspur	<i>Delphinium bicolor</i>	- X
mountain shooting star	<i>Dodecatheon conjugens</i>	X X -
yellow mountain aven	<i>Dryas drummondii</i>	- - X
fireweed	<i>Epilobium angustifolium</i>	X X -
tufted fleabane	<i>Erigeron caespitosus</i>	X - -
compound fleabane	<i>Erigeron compositus</i>	X - -
smooth fleabane	<i>Erigeron glabellus</i>	X X -
showy fleabane	<i>Erigeron speciosus</i>	X - -
wild strawberry	<i>Fragaria virginiana / glauca</i>	X X -
blanket flower	<i>Gaillardia aristata</i>	X X -
northern bedstraw	<i>Galium boreale</i>	X X -
northern gentian	<i>Gentianella amarella</i>	X X -



sticky purple geranium	<i>Geranium viscosissimum</i>	X X -
purple avens	<i>Geum aleppicum</i>	- X -
old mans' whiskers	<i>Geum triflorum</i>	X X -
American sweet vetch	<i>Hedysarum alpinum</i>	X X X
norther sweetvetch	<i>Hedysarum boreale</i>	X - -
yellow sweetvetch	<i>Hedysarum suphurescens</i>	X X X
cow parsnip	<i>Heracleum lanatum</i>	X - -
cream-coloured pea vine	<i>Lathyrus ochroleucus</i>	X X -
wild blue flax	<i>Linum lewisii</i>	X X -
stone-seed	<i>Lithospermum ruderae</i>	- X -
long-fruited parsley	<i>Lomatium macrocarpum</i>	X - -
silvery lupine	<i>Lupinus argenteus</i>	X - -
silky lupine	<i>Lupinus sericeus</i>	X X -
tall bluebells	<i>Mertensia paniculata</i>	X X -
horse mint	<i>Monarda fistulosa</i>	X X -
late yellow locoweed	<i>Oxytropis monticola</i>	X X -
early yellow locoweed	<i>Oxytropis sericea</i>	X X -
showy locoweed	<i>Oxytropis splendens</i>	X X -
viscid locoweed	<i>Oxytropis viscida</i>	X X -
western lousewort	<i>Pedicularis bracteosa</i>	- - X
yellow beard-tongue	<i>Penstemon confertus</i>	X X -
smooth blue beard-tongue	<i>Penstemon nitidus</i>	X X -
slender blue beard-tongue	<i>Penstemon procerus</i>	X X -
white prairie clover	<i>Petalostemon candidum</i>	X - -
purple prairie clover	<i>Petalostemon purpureum</i>	X - -
graceful cinquefoil	<i>Potentilla gracilis</i>	X X -
prairie cinquefoil	<i>Potentilla pensylvanica</i>	- X -
dwarf raspberry	<i>Rubus arcticus</i>	- X -
prairie groundsel	<i>Senecio canus</i>	X - -
blue-eyed grass	<i>Sisyrinchium montanum</i>	- X -
Canada goldenrod	<i>Solidago canadensis</i>	- X -
veiny meadow rue	<i>Thalictrum venulosum</i>	X X -
globe flower	<i>Trollius albiflorus</i>	- - X
American vetch	<i>Vicia sparsifolia / americanus</i>	X - -
white camas	<i>Zigadenus elegans</i>	X - -
meadow parsnip	<i>Zizia aptera</i>	- X -

## Notes:



## Wildlife and landscaping

People and wildlife sharing the same habitat can result in unexpected consequences and thus requires special consideration in landscaping and gardening. Valley bottoms contain high quality wildlife habitat. They also contain our townsites, campgrounds and transportation corridors.

Wild animals, such as deer and elk foraging adjacent to places of high human activity such as townsites, may become “habituated” or lose their fear of people. At best, these animals are likely to become a serious nuisance and at worst, dangerous when unsuspecting people get too close to these seemingly “tame” animals. Animals may have to be destroyed if they become aggressive. The key is to prevent habituation.



Invasive, exotic plants such as tansy, toadflax, knapweed, and leafy spurge squeeze out native plants that provide critical winter forage for elk and other wildlife.

For this reason, plants that are especially attractive to wildlife should not be planted or should be protected through the use of high fences or black-plastic netting. Another way to reduce browsing and grazing is to avoid over watering and over fertilizing. Studies have shown that heavily fertilized and watered plant are eaten much more frequently than plants grown with natural rainfall and without fertilizers.

Bears quickly key in on potential food sources or attractants such as compost and ripe fruit. Extra attention to gardening activities and plants (e.g., berry and fruit trees) that might attract bears is vital. Your understanding and vigilance helps protect both bears and people.

## Sources for native plants

Local, wild vegetation often serves as a source of native plants, but removing plants from their natural environment can damage plant and animal communities. Besides this, the chances of successfully transplanting well-established native plants from the wild are very low. National park policy and regulations prohibits the removal of any natural materials from within park boundaries; the collection of seeds, cuttings and plants is prohibited without a special permit. However, there are sometimes opportunities to collect trees and shrubs from fire breaks and powerline right of ways during times when these areas are being cleared. For more information about these opportunities, contact your local warden office.

The most ethical and simplest way to obtain native plants and seeds is through the various local nurseries that cultivate them from local seed. Following is a list of some of these suppliers. Remember that every nursery has a different supply of seed and plants and that stocks are always changing. If you are looking for a particular plant, it would be wise to call ahead or order a supply catalog.

It's best to find a supplier that obtains its seeds and plants from an area that is close to your own. Some native plants occur over a wide ranging area, and the same species that grows here may also be found as far away as the United States. Locally collected plants are preferable as they're most likely to be adapted to the environmental conditions of our area.

Beware of cultivar varieties of native plants. They have the same common name as the local natives, but they've been domesticated and changed from

their natural state through years of genetic manipulation. These cultivars have been hybridized to suit cultivation, but have lost their genetic diversity and ability to adapt to changing environments.

## Seeds versus plants?

There are pros and cons to ordering either seeds or plants. Seeds can be ordered from distant nurseries and will keep for a long time. However, certain nurseries may have collected the seeds from a region very different to ours, and the plant may not be as well adapted. Also, many native seeds must undergo specific treatments, such as scratching or cold temperature, before they will germinate. Buying plants may be more expensive and they usually must be bought in person, but there is a much higher probability of success in establishing these in your landscape or garden.

## Native seed & plant suppliers

### Alberta

<b>ALCLA Native Plant Restoration Incorporated</b> 3208 Bears paw Dr. N.W., Calgary, AB. T2L 1T2	<b>403.282.6516</b>
<b>Bow Point Nursery</b> Box 16, Site 23, RR 12, Calgary, AB. T3E 6W3 E-mail: bowpoint@agt.net	<b>403.686.4434</b>
<b>Eastern Slopes Rangeland Seeds Ltd.</b> Box 273, Cremona, AB. T0M 0R0	<b>403.637.2473</b>
<b>Eagle Lake Nurseries Ltd.</b> Box 2340, Strathmore, AB. T1P 1K3	<b>403.934.3622</b>
<b>Foothills Nurseries</b> 2626-48 St. S.E., Calgary, AB. T2B 1M4	<b>403.203.3338</b>
<b>Greenview Nurseries</b> Box 12, Site 16, RR 7, Calgary, AB. T2P 4G7	<b>403.936.5936</b>
<b>Parkland Nurseries</b> RR 2, Red Deer, AB. T4N 5E2	<b>403.346.5613</b>
<b>Prairie Seeds Incorporated</b> 1805 8th St., Nisku, AB. (Box 428, T0C 2G0)	<b>1.800.222.6443</b>
<b>The Professional Gardener Company Ltd.</b> 915-23 Ave. S.E., Calgary, AB. T2G 1P1 E-mail: progar@telusplanet.net	<b>403.263.4200</b>

### British Columbia

<b>Byland's Nurseries</b> 1600 Byland Road, Kelowna, BC. V1Z 1H6 www.bylandsgardencentre.com	<b>250.769.4466</b>
<b>Linnaea Nursery (wholesale only)</b> 3666-224th Street, Langley, BC. V2Z 2G7	<b>604.533.8281</b>
<b>Nature's Garden</b> PO Box 4012, 905 Gordon St., Victoria, BC. V8W 3N3	<b>250.595.2062</b>
<b>Rocky Mountain Seed Service, Duane Amundrud</b> Box 141, Golden, B.C. V0A 1H0	



### Warden office phone numbers:

#### Kootenay

250.347.9361

#### Lake Louise

403.522.1220

#### Yoho

250.343.6829

# Further information

## Books

Frankton, C and G.A. Mulligan. 1993. **Weeds of Canada.** Agriculture Canada.

Gerling, H.S., M.G. Willoughby, A. Schoepf, K.E. Tannas and C.A. Tannas. 1996. **A Guide to Using Native Plants on Disturbed Lands.** Alberta Agriculture, Food and Rural Development and Alberta Environmental Protection. 247 pages.

Kershaw, L., A. Mackinnon and J. Pojar. 1998. **Plants of the Rocky Mountains.** Lone Pine Publishing. Edmonton, AB.

Knopf, J. 1991. **The Xeriscape Flower Gardener: a waterwise guide for the Rocky Mountain Region.** Johnson Publishing Company. Boulder, Colorado.

Pearman, M. and T. Pike. 2000. **Naturescape Alberta: creating and caring for wildlife habitat at home.** Federation of Alberta Naturalists. Edmonton, AB.

Scotter, G.W. and H. Flygare. 1986. **Wildflowers of the Canadian Rockies.** Hurtig Publishing Ltd. Edmonton, AB.

Taylor, R.J. 1990. **Northwest Weeds: The Ugly and Beautiful Villains of Fields, Gardens, and Roadsides.** Mountain Press Publishing Company. Missoula, Montana.

White, D.J., E. Haber and C. Heddy. 1993. **Invasive plants of natural habitats in Canada.** Canadian Wildlife Service, Environment Canada and Canadian Museum of Nature. Ottawa, ON.

## Other Sources

**The Native Plant Society of BC**  
E-mail: [npsbc@hotmail.com](mailto:npsbc@hotmail.com)  
Ph: 604.255.5719 / 604.885.9769

**Alberta Native Plant Council**  
<http://www.anpc.ab.ca>

Naturescape Alberta  
<http://www.naturescape.ab.ca/>  
Ph: 780.427.8124

**Naturescape British Columbia**  
[www.elp.gov.bc.ca/hctf/nature.htm](http://www.elp.gov.bc.ca/hctf/nature.htm)  
Ph: 1.800.387.9853

*note: a naturescape kit for the East Kootenay region of British Columbia is now available.*

**Invasive Plants of Canada Project web site**  
<http://infoweb.magi.com/~ehaber/ipcan.html>

**British Columbia Ministry of Forests: Noxious Weeds web site**  
<http://www.for.gov.bc.ca/hfp/noxweeds/index.html>



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Parks Canada: Lake Louise, Yoho and Kootenay Field Unit, 2001  
E-mail: [ll\\_info@pch.gc.ca](mailto:ll_info@pch.gc.ca), [yoho\\_info@pch.gc.ca](mailto:yoho_info@pch.gc.ca), or [kootenay\\_reception@pch.gc.ca](mailto:kootenay_reception@pch.gc.ca)  
Web: [www.parkscanada.gc.ca/kootenay](http://www.parkscanada.gc.ca/kootenay) [www.parkscanada.gc.ca/yoho](http://www.parkscanada.gc.ca/yoho) [www.parkscanada.gc.ca/banff](http://www.parkscanada.gc.ca/banff)