

Wildlife Smart Landscaping in Whistler

A Guide for Professionals

In Whistler, there is a strong focus on improving and creating wildlife habitat in backyards and green spaces. Wildscaping undoubtedly has positive ecological value; but in our area, improving wildlife habitat can also mean attracting bears into conflict situations. This guide will help you manage such considerations without negatively impacting landscape design and the ecological integrity of your project.

While bears are a part of Whistler's natural environment, enticing them close to our homes either with food sources like garbage or birdseed, or landscaping that provides food for bears, may create conflict and be detrimental not just for bears, but for the community as well. Landscapers, landscape architects, arborists, nursery suppliers, and developers all play key roles in ensuring that we don't draw bears into commercial, residential or developed areas.

Like us, bears learn from their experiences. Once bears learn where food is, they are likely to keep coming back. This kind of learning is called "food conditioning". Animals that become conditioned to accessing food in human-use areas are at greater risk of getting into conflict and being killed to protect people and their property. While the risk of human injury by a bear in a backyard, green space or developed area is relatively small, it makes sense not to gamble with safety.

Fruit-bearing trees and shrubs, like mountain-ash in particular, are an easy source of calories for a bear, and are of concern in landscaped areas of Whistler. Bears are driven by the biological need to accumulate weight before they den in the fall, entering a state of hyperphagia (a hyper-active feeding mode). Mountain-ash berries ripen during this time when most other berries have been depleted at lower elevations. The large clumps of mountain-ash berries provide for quick and easy feeding making them a prime choice for bears. The berries are also more nutritious after they have been frost affected maintaining their appeal throughout the winter and even the following spring. While this provides a prolonged and plentiful food supplies for bears, the plants are often found in undesirable places. The Get Bear Smart Society has been actively helping to remove mountain-ash in high conflict areas over the last few years, and has replaced them with non fruit bearing native species. The mountain-ash is then transplanted (when possible) to more suitable bear habitat well away from areas where bears can come into conflict with people. This helps draw bears out of the Valley bottom and away from developed areas. Areas where landscaped bear foods have been removed have experienced a significant decrease in human-bear conflict and property damage.

"Our mountain-ash trees at the base of Blackcomb compromised our conservation principals by encouraging bears into high traffic areas. Removal of these trees was the only suitable resolve".

Arthur DeJong, Environmental Resource Manager,
Whistler Blackcomb Mountains

There are several factors that need to be taken into account when determining the attractiveness of landscaping to bears:

- ripening season i.e. berries that ripen during a season when other wild foods are plentiful are of less concern
- crop abundance i.e. the more abundant the production of berries, the more attractive the plant is to bears; clumped berries are far more attractive than those that are widely spread over the branches
- planting density i.e. if planted alone, bushes like red-osier dogwood are not that attractive to bears; if however, they are planted in high densities, for example to form a hedge, they will be much more attractive
- location of plant i.e. is it next to a building entrance-way, beside a window/door, near children's play set; beside a driveway, path, road or other high use human area?

- amount of human use in the area i.e. the quieter the area, the more likely a bear will investigate
- proximity to cover or wild space; plants adjacent to wild spaces and tall trees that bears can use for security cover might not be as much of an issue

We recommend that you use a common sense approach to landscaping, taking into account all wildlife and environmental considerations. It is possible to find a middle ground that addresses most issues of concern. For example, birds prefer sour berries to sweet ones and most love juniper berries; while bears like the sweet ones and don't like juniper berries. This is just one example of how we can still provide food for birds while discouraging bears at the same time.

There are many native plant species that don't attract bears and are a great addition to any backyard, green space, or development. Native plant species enhance biological diversity; provide refuge and habitat for wildlife; compensate for land lost to urban sprawl and land conversion, and sequesters carbon to offset CO2 emissions. Vegetation also plays a critical role along streams where the plants can filter runoff; aid in flood control; and provide wildlife corridors.

These plants are NOT recommended due to their attractiveness to bears: mountain-ash varieties, rowan tree (*Sorbus spp.*), black and red huckleberries, blueberries (*Vaccinium spp.*), saskatoon berry (*Amelanchier alnifolia*), salmonberry (*Rubus spectabilis*), soapberry (*Shepherdia canadensis*), wild rose (*Rosa pisocarpa*), red-osier dogwood (*Cornus stolonifera*), choke cherry (*Prunus virginiana*), kinnikinnick (*Arctostaphylos uva-ursi*), and salal (*Gaultheria shallon*).

All bear attracting plant species identified on the above list are rated as "high". Many other plants also attract bears (such as domestic crops of fruit, berries, and many other native species) A complete list including plants that are rated as medium and low attractants can be found on www.bearsmart.com under Habitat Management or Bear Smart Whistler - Brochures.

The list below suggests some great native plants that enhance wildlife values but do not attract bears. These are just a few examples; there are many other options. All sites are different and have different requirements.

These plants ARE recommended as alternatives as they are not known to attract bears: Douglas maple (*Acer glabrum*), mock orange (*Philadelphus lewisii*), Davidson's penstemon (*Penstemon davidsonii*), Pacific ninebark (*Physocarpus capitatus*), sweet gale (*Myrica gale*), large leafed lupine (*Lupinus polyphyllus*), snowbrush (*Ceanothus velutinosus*), goats beard (*Aruncus sylvester/ dioicus*), hardhack (*Spirea douglasii*), willow species (*Salix spp.*), falsebox (*Pachystima myrsinites*), foam flower (*Tiarella trifoliata*) and red columbine (*Aquilegia formosa*).

For additional information on native plant species in Whistler, please refer to:

Plants of Coastal British Columbia, J. Pojar and A. MacKinnon, 1994

Whistler Biodiversity Project www.whistlerbiodiversity.ca under species list - plants native

Plants of the Whistler Region, Varner, C. 2002

Resort Municipality of Whistler - Landscape & Horticulture Department

Are you landscaping/contracting for a private property? Take things a step further by considering these tips for reducing bear visits to your client's backyard:

- Remove plants that bears like to eat, especially ones located in areas where we don't want to find bears feeding i.e. next to building entrance-ways, beside windows/doors, near children's play sets; beside driveways, paths, roads and other high use human areas. Plants located away from houses or at the edge of properties may be removed at the client's discretion, depending on the site's potential for human-bear conflict (for the clients and their neighbours). If you or your clients are in doubt, we would be happy to do a site visit and make recommendations.

- Do not apply bone meal or fish fertilizer to gardens – instead use compost or composted manure.
- Avoid seeding with clover, especially along roadways. Cut grass often and keep the lawn free of dandelions – a favourite food for bears.
- Recommend electric fencing to effectively deter bears from orchards, gardens and compost; or suggest that produce is harvested when ripe.
- In cases where fruit trees may be "relict" or antique representing increasingly rare genetic stock; ensure that fruit is removed as it ripens and is not left to rot on the ground. Prune back branches as much as possible.
- Remind your client that Whistler's Solid Waste Bylaw No. 2139, 2017 makes it illegal to "provide" any substance that could reasonably be expected to attract wildlife.

Other tips for wildlife-smart gardening:

- Avoid the use of invasive plant species¹ which outcompete native species and contribute to decreased biodiversity. Native species provide richer habitat for wildlife.
- Avoid using herbicides, pesticides and fungicides. These products often have detrimental effects on untargeted living organisms (for example, snail bait can also kill other invertebrates). Use mechanical methods to remove unwanted vegetation – in Whistler it is actually the law! Check out RMOW Bylaw 1822, 2007 that regulates cosmetic non-essential pesticides.
- Avoid using synthetic fertilizers. Animals have been known to ingest synthetic fertilizers resulting in liver damage and even death (including pet dogs and cats). These fertilizers also contribute to high nitrogen levels in lakes and streams. This can be detrimental to aquatic life. Instead, use manure, compost and bark mulch.
- Do not use a chemical spray to thin or abort fruit from forming on trees and berry bushes. These sprays can be deadly for bees and other invertebrates.

Additional resources:

Get Bear Smart Society: See our website at www.bearsmart.com/becoming-bear-smart/home/managing-attractants

www.bearsmart.com e: info@bearsmart.com

Peel's Nursery (Native Plant Material) peelsnurseries.com

Sea to Sky Invasive Species Council ssisc.ca

City Farmer (vermicomposting) www.cityfarmer.org/wormcomp61.html



Brought to you by:

Get Bear Smart Society
www.bearsmart.com
 e: info@bearsmart.com

*Be the leader you know you can be,
 by having a wildlife smart back yard,
 and encouraging your neighbors to do the same!*



¹ Examples of invasive species that are often planted in backyard landscaping include: scotch broom, foxglove, Japanese knotweed, yellow flag iris, lamium, yellow loosestrife, purple loosestrife, curled pondweed (submerged aquatic), Himalayan blackberry, periwinkle, policeman's helmet and English ivy.