



Native Plant Society of British Columbia

Salvaging Native Plants

The ethics of salvaging

The salvaging of native plants should be done with respect and consideration for the conservation of the species and the habitats in which they are found. Collecting seeds and cuttings is preferred over salvaging whole plants and normally, people are encouraged to use plants propagated in nurseries from seeds and cuttings. **Plant salvage is not a substitute for conservation and should be done only under special circumstances:** if the habitat is disturbed and under certain threat of destruction. Plants found in such sites may be carefully removed and reused in appropriate places.

How to salvage native plants

Step 1: Finding plants

Plants should first be identified as to their species. This will be important to determining which should be salvaged and where they should be replanted. Please note there may be some invasive, introduced species at your site that should not be removed and replanted.

Plant suitable for salvage should be chosen according to the conditions of the sites where they will be replanted. These conditions include sun/shade exposure, soil moisture and soil nutrients.

The success of transplanting in large part depends on the intact removal of the plant's root structure. The best plants to choose are those growing in isolation or the ones that are easy to separate from surrounding plants. Trees and shrubs growing in clumps are not as easy to divide; perennials and ferns can be divided simply using a sharp thrust of the spade.

The dominant coniferous tree species and deciduous understory trees and shrubs, if removed in smaller sizes, are more likely than broadleaf evergreens to survive. Broadleaf evergreens may not initially show regrowth above ground after transplanting though their roots can continue to grow. Most herbaceous perennials and ferns should transplant fairly easily.

Removal of bulk moss, woody debris and soil as well as stumps, logs, and large trees is **not** permitted.

Step 2: Digging plants

Plants should be carefully dug using a sharp spade and retaining as much of the original root structure as possible; under no circumstances should plants be ripped from the ground as this will damage the roots and also cause the soil to separate from the root ball. Roots of adjacent plants should be clipped free with pruning shears or cut with a pruning saw. Though it may be

difficult to keep the root ball intact because of the loose texture of the top organic layer of soil, additional soil can still be included with each plant.

Native species have specific relationships with soil microorganisms, in particular, fungi called mycorrhizae -- that live on roots and help the plant absorb moisture and nutrients. These microorganisms may not be as plentiful in disturbed and developed sites that are being replanted with the salvaged plants. Retaining as much soil from the salvage site is an essential part of the microhabitat of the individual plant and will help to ensure it survives and successfully reestablishes itself in a new site.

Trees selected for removal should preferably not be pruned; individual specimens should be an appropriate size for removal and transport. Most shrubs can be pruned and the old fronds on ferns can be partially cut back before digging. Dug plants should be placed on moistened burlap or on wet newspaper inside plastic bags. The burlap or bags can then be drawn around the root ball and secured with twine. Take care that twine does not rub on the plants or remove the bark -- which can provide an entry point for insects and disease. Smaller plants can be placed in pots.

Step 3: Transporting plants

Plants should be carefully positioned in a vehicle to ensure that they won't move around and suffer damage. Roots should be kept moist at all times. If plants are carried in the back of an open truck, they should be completely covered to prevent moisture loss. The air flowing over the plants will rapidly dry the roots, stressing the plants and reducing the likelihood of their survival. Plants should also not be kept in closed vehicles in the sun as they can rapidly suffer heat stress. They should be removed as soon as possible to a suitable temporary storage area.

Step 4: Storing plants

Plants should be put in the ground as soon as possible after salvaging. If they cannot be used immediately, they should be stored in a cool, moist and shady location, protected from the sun and wind. Plastic bags should be removed to ensure proper air circulation, otherwise the roots could suffer from fungal and other disease problems. Plants should be watered to ensure the root balls are moist, but not wet, at all times. They can also be temporarily planted and lifted from the ground when needed.

Step 5: Replanting

Plants should in general be used in sites with conditions similar to the original habitat. Replanting sites should have soil high in organic matter: a mulch of woody debris typical of what is found in the original forest is beneficial. Native plants do not need to be fertilized after transplanting. They will be adapted to the native soils and may burn if soil nitrogen is too high.

Most native plants can take one to two years to reestablish in a new location; broadleaf evergreens can take up to four years. During the summer for the first two years, plants should be watered about once or twice a week to ensure their roots do not completely dry out. Most plants, if placed in the appropriate conditions, do not need watering after they become established and they will be relatively pest and disease free.