

DORMANT CUTTINGS

Dormant cuttings are the primary plant material used in revegetation techniques including: live staking, brush layering, live siltation, brush mat and bundles (fascines). Dormant cuttings are harvested from living woody plants in a dormant (not actively growing) state. The cuttings are collected from plants that can root easily, without special treatment, such as certain willow species, poplar and cottonwood (see *Plant Species Selection Lists*, *Shrubs and Trees*) suited for dormant cuttings. Dormant cuttings may also be purchased from vendors (See ADNR website in *Contacts* section).

Locate a harvest site and obtain permission to collect cuttings. Harvest sites are easier to identify when leaves are present. It is beneficial to locate harvest sites in the spring/summer or by utilizing an Alaska Willow guidebook (Collet, 2002). Do not over harvest site. The site should contain at least 3 times the needed harvest material or you should harvest from several sites.

Collect cuttings during winter/early spring before leaves appear, preferably before March 31, if they are to be used for spring and early summer plantings. For fall plantings, collect cuttings in the early fall of the same year, after plants have gone dormant (at least 50% of the leaves have changed color or have dropped). Cuttings may be tied in bundles with colored twine for ease in identification and carrying. Label each bundle with species, date collected, and number of cuttings.

Select cuttings with leaf buds near the top of each cut line. Avoid flower buds ("pussy willows") if possible; these buds typically occur at the tips of branches produced during the last growing season. These branch tips tend to be smaller than 1/4 inch in diameter.

Select branches 1/2 to 2 inches in diameter and at least 3 to 4 feet long. If necessary, branches can be cut to a shorter length at the time of installation. The potential for drying during storage is reduced when the cuttings are stored in longer pieces.

Store cuttings properly to maintain viability. If collection occurs while daytime temperatures remain below freezing, freeze at no colder than $0^{\circ}F$ or refrigerate the cuttings until planting. If daytime temperatures are above freezing during collection, cuttings should be refrigerated between $31^{\circ}F$ to $40^{\circ}F$ and 60 to 70 percent humidity. Frozen cuttings can be stored with a small amount of snow to help reduce drying. No water or burlap should be added to stored frozen cuttings. Monitor the condition of the cuttings regularly to detect problems such as drying, sprouting or mold.

Only the plant material required for each day should be removed from storage, and placed in water, particularly if the weather is windy and/or warm at the revegetation site. Cuttings may be soaked in cool/cold water from 24-48 hours directly before planting to improve survivability. On site, the cuttings should be stored away from direct sunlight, heeled into moist soil, or stored in water until planting. Do not have cuttings in water for more than 4 days.

Plant dormant cuttings as soon as the soil has thawed and no later than July 1 or plant in late summer/fall before the ground freezes. The ability of plantings to become established and resume growth the following spring declines quickly for plantings made after July 1. Do not use cuttings if they have begun to root, mold, appear dry or leaf out. If the project is delayed and rescheduled for fall, do not try to store the cuttings that were collected in the spring until fall. Plan on preparing new cuttings once the plants have gone dormant.