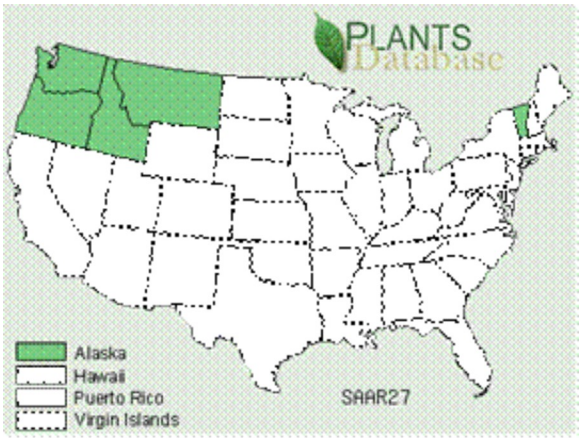
Plant Data Sheet

Species (common name, Latin name)
Arctic Willow, *Salix arctica*



.....Various plant forms of *Salix arctica* (4).....



Range
S. arctica is a circumpolar species found from Alaska south to Montana, Idaho, and Oregon and east to Newfoundland. (2)

Climate, elevation
Alpine meadows, 2000m+ elevation.

Local occurrence (where, how common)
Common in the alpine meadows of the N. Cascades.

.....Salix arctica range (2).....

Habitat preferences
Alpine meadows

Plant strategy type/successional stage (stress-tolerator, competitor,
Stress-tolerator, climax species

Associated species (PNW)
Associated with alpine grasses such as; altai fescue, mountain sagewort, bellard's kobresia, alpine sweetgrass, one-headed pussytoes, mountain harebell, glaucous gentian, spiked woodrush, diverse-leaved cinquefoil and small-awned sedge.

Associated with some dwarf shrubs such as; four-angled mountain-heather, dwarf snow willow, polar willow,

white mountain-heather, mountain-avens, bog blueberry, partridgefoot and lingonberry.

Also associated with various mosses and lichens including; awned haircap moss, broom moss, common coral, as well as, Cetraria, Cladonia and Peltigera lichens.

May be collected as: (seed, layered, divisions, etc.)
Seed, Spring semi-softwood stem tip cuttings (1,2)

Collection restrictions or guidelines
Seed is collected when capsules open in late August and early September. Seed is light tan at maturity. (2)
Semi-softwood stem tip cuttings are collected when leaf buds have just begun to break dormancy after snowmelt at high elevations. (2)

Seed germination (needs dormancy breaking?)
Physiological dormancy, need a 5 month cold-moist stratification. (3)

Seed life (can be stored, short shelf-life, long shelf-life)
Seed can be stored for longer than one year at 0°C (2)

Recommended seed storage conditions
Seeds store at 0°C. (3)
Cuttings should be kept moist and under refrigeration (2)

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)
Seeds can be surface sown in flats after collection in the fall and given a 5 month cold-moist stratification. (3)
Cuttings should be 4 to 6 cm in length and 5 mm in caliper and be treated with 1000 ppm IBA powder. (1,2)

Soil or medium requirements (inoculum necessary?)
Well drained sandy soils.

Installation form (form, potential for successful outcomes, cost)
Cuttings recommended, very cheap but require treatment with IBA, see protocol. (2)

Recommended planting density
36-48 in. (1)

Care requirements after installed (water weekly, water once etc.)
Average Water Needs; Water regularly; do not overwater
Requires consistently moist soil; do not let dry out between waterings (1)

Normal rate of growth or spread; lifespan
Grows as a shrub that rarely exceeds more than 60 centimeters in height and forms dense mats.

Sources cited

1. http://plants.usda.gov/cgi_bin/topics.cgi?earl=plant_profile.cgi&symbol=SAAR27

2. Baskin, Carol C.; Baskin, Jerry M. 2002. Propagation protocol for production of container Salix arctica

Pall. plants; University of Kentucky, Lexington, Kentucky. In: Native Plant Network. URL: http://www.nativeplantnetwork.org (accessed 26 April 2005). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery. http://www.nativeplantnetwork.org/network/view.asp?protocol_id=169,1450.

3. Evans, Jeff. 2001. Propagation protocol for vegetative production of container Salix arctica Pall. plants (800 ml containers); Glacier National Park, West Glacier, Montana. In: Native Plant Network. URL: http://www.nativeplantnetwork.org (accessed 26 April 2005). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.

4.http://elib.cs.berkeley.edu/cgi/img_query?text_only=0&display1=image+ID+num&where-calrecnum=7261.

5. Standards for broad terrestrial ecosystem classification and mapping for British Columbia found at http://srmwww.gov.bc.ca/risc/pubs/teecolo/bei/bei_1998.htm#p4_0.

Data compiled by (student name and date)

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