Plant Data Sheet

Species (common name, Latin name):
Salal, *Gaultheria shallon*, Pursh

Range
Pacific Coast inland to west slope of the Cascades and Coast Ranges, from southeast Alaska and central British Columbia south to southern California. (FEIS database)

Climate, elevation
Cool humid, mesothermal climate. Snow accumulation can limit plant.
In California, occurs at elevations below 763 m; in northern British Columbia occurs below 200 m.
(FEIS database)

Local occurrence (where, how common)
Locally, salal grows as an understory dominant in coastal coniferous forests commonly dominated by western hemlock, western redcedar, Port-Orford cedar, Sitka spruce, lodgepole pine, and Alaska cedar. (FEIS database)

Habitat preferences
Warm, moist to dry, montane to lowland conifer forests, sun or shade.
Habitats include:
Coastal shrub communities
Shore pine and spruce woodlands
Western hemlock forest communities (warm, dry)
Coastal Douglas-fir forest communities (dry to wet)
Silver fir forests communities (warm, dry)
(FEIS database)

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)
Colonizer, aggressively spreads by vegetative reproduction in openings. Persistent in mature communities also. (FEIS database)

Associated species
Common associates are douglas-fir, western hemlock, red alder, salmonberry, swordfern, deerfern, dwarf Oregon grape, pacific dogwood, oceanspray, and rhododendrons in western hemlock forest communities and douglas-fir forests. (FEIS database)

May be collected as: (seed, layered, divisions, etc.)
May be collected as seed, divisions, cuttings, young sprouts or layered. (Huffman, et al)

Collection restrictions or guidelines
Fruit ripens from August through October. Strip or comb seeds from branches. (Huffman, et al)

Seed germination (needs dormancy breaking?)
Begin germinating within 30-45 days after sowing. Seeds do not require stratification, but do require at least 8 hours of light for germination. Some evidence suggests that acid wash treatment might be beneficial as digestion by bears seems to increase germination rates. (FEIS database; Huffman, et al)

Seed life (can be stored, short shelf-life, long shelf-life)
Seed are viable for moderate periods in storage; seeds have been found to be viable (73% germination rate) after storage for 3 years at 40 degrees F (4 C). (Huffman, et al)

Recommended seed storage conditions
Store in cool, dry conditions (some success at 40 degrees F (4 C). (Huffman, et al)

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)
Separate seeds after drying collected fruits. Seeds can be sown in the fall without stratification in outdoor nursery beds under shadecloth. In the Northwest, salal is primarily propagated by rhizome cuttings. (Huffman, et al)

Soil or medium requirements (inoculum necessary?)
Prefers rich, acidic, moist soils, but will grow in shallow rocky soils, sandy soils, glacial till, and peat.
(Huffman, et al)

Installation form (form, potential for successful outcomes, cost)
Seedling survival under natural conditions is limited, therefore, growing from seed and planting containerized material is recommended. Layering and planting established divisions, sprouts, or cuttings are other options.
(Huffman, et al)

Recommended planting density
2' to 3' centers depending on final cover desired.

Care requirements after installed (water weekly, water once etc.)
Regular watering in summer months until established. (FEIS database)

Normal rate of growth or spread; lifespan
Slow early growth; 3 years to reach 3-5 inches (5-10 cm). Seedlings begin to spread vegetatively by age 4-6. Rhizome expansion rates of 44 cm (17 in) per year have been reported for salal. (Huffman, et al)

Sources cited
FEIS database: Accessed on 4/8/03, www.fs.fed.us/database/feis/plants/shrub/gausha

Huffman, David W., John C. Zasada, and William I. Stein. Gaultheria, L.: Winterberry. Accessed on 4/8/03 from USDA Woody Plants Seed Manual: http://wpsm.net

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