

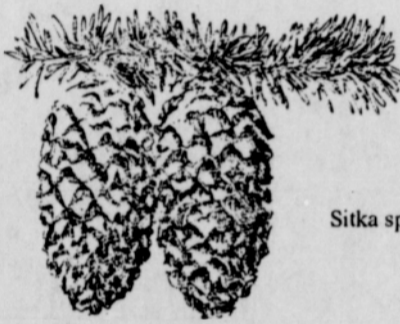


JUNE'S GARDEN

Plants on the Sandy Margins

by Douglas Deur

Where the sand begins, life grows tougher for plants: here, plants must contend with salt spray, hard winds, and the low fertility and poor water retention which plague sandy soils. Most plants which occupy this zone are hardy. Many grown low to the ground or have tough tissues, minimizing battering from driving sands and severe, salty coastal winds. Others have been able to occupy the unfertile edges of the sandy beach, with nitrogen-producing bacteria contained in nodules on their roots. Many have become semi-succulent to conserve water. In evolutionary terms, plants have made the sacrifices required to occupy the coastal margins because of a lack of competition from other plants (particularly for sunlight). Given a chance, many of these plants would grow better in well-drained clearings far from the stresses of the seashore. Despite the profound environmental challenges (which would send lesser plants packing) there are many plants to be found in the coastal margins; I have walked along stretches of sandy shoreline in Cannon Beach and produced a list of most of the highly-visible plants that occupy this zone.



Sitka spruce

Walking down to the beach, leaving the fragmented forests of Sitka spruce (*Picea sitchensis*) which occupy the last gaps between houses and streets, one enters a zone of stunted spruce, gnarled by salt, sand, and wind. Here, at the landward end of the beach vegetation zone, one finds the occasional shore pine (*Pinus contorta*), sparse, oval-leaved thickets of Hooker's Willow (*Salix hookeriana*), and dense thickets of Salal (*Gaultheria shallon*), with waxy, dark-green oval leaves; Salal bushes are covered with pinkish, dangling, urn-shaped flowers in the spring, and plump, tasty, dark-purple berries in the summer. Nearby, one often finds shrubs of Evergreen Huckleberry (*Vaccinium ovatum*) with small, shiny, dark-green leaves; these bushes are covered with pink, bell-shaped flowers in the spring, and very small, round, purplish-black berries in the summer. You can usually find Blackberry bushes in this area too, particularly the introduced Himalayan Blackberry (*Rubus discolor*, introduced from India, via England), which has pinkish-white flowers in the spring, and clusters of juicy, dark, tasty blackberries in the summer.



Himalayan Blackberry

Standing alongside these sturdy trees and bushes, several plants thrive, largely protected from the wind and salt spray. Here, one often finds Black Twinberry (*Lonicera involucrata*) a shrubby, oval-leaved honeysuckle, which is dotted by pairs of tube-shaped yellow flowers in the spring, and pairs of black berries in the summer. One also encounters clusters of plants with bamboo-like stalks, huge leaves, and clusters of tiny white flowers on top; these are Knotweeds (*Polygonum* spp.), introduced from northeast Asia. Here and there, this fringe zone is scattered with sturdy, smaller plants (many of them "weeds" introduced from Europe and Asia). There are several types of thistles -- prickly plants with

Funny how things work here on the Edge. June Kroft, former neighbor and current columnist stopped us on our way home the other day, and allowed as how she was working on her column and it was beginning to get out of hand. A friend had asked, "June, are you writing an article or a book?" So we said, "Can we serialize it over a couple of months?" She allowed as how that might work, if we consider Christmas an option. So, then we get this call, and she says Doug Deur is over at her house, and they get to talking. Doug is a nice young ethnobotanist who does stuff for the Smithsonian, and is over there because he knows a lot about the first people who lived here. June, who is a quilter as well as a gardener, names her quilts after places hereabouts, and, being part first people herself, is curious about the old names of her places, now that she lives with this land. So, as we said, they get to talking, and June remembers this letter she got a while back, okay, last year. Larry A Beaulaurier wrote and asked about the plants that grew out on the beach, what were they, and how do they manage out there? Well, Doug said that, yes, he could answer that question. What follows is his answer. We illustrated it from Sally Lackaff's "Wildlife on the Edge," and it looks like this might be an ongoing dialogue of the Garden and Wild. So, June will be back next month with the beginning of her several part series about how it takes a village to raise a garden.

pinkish-purple flowers -- and a number of "dandelions" (which include several yellow-flowered members of the aster family), both native and introduced; one also finds introduced clovers, including the white-flowered White Clover (*Trifolium repens*). Here, there are also a few native Asters (*Aster* spp.) which do not look like dandelions, but have purple, daisy-like flowers. Long, bushy clusters of purple flowers, perched atop stalks of leafy stalks indicate Hardhack (*Spiraea douglasii*), which sometimes punctuates this high shoreline vegetation. Morning-Glory (*Convolvulus arvensis*) -- an introduced, invasive climbing plant with arrow-shaped leaves and big, showy, funnel-shaped white flowers -- slithers through the oceanfront trees and shrubs. In places, small clusters of domesticated montbrecia (*Crocasmia* spp., a native of southern Africa) have escaped from yards or yard debris, lending showy patches of color to the sandy margins, with their sword-shaped leaves and rows of reddish-orange, tubular flowers on branched, 1 to 3 foot-high stems.



Salal

Where shrubs and trees are largely absent, but the sandy soil retains a small amount of water, one finds Pacific Silverweed (*Potentilla anserina* ssp. *pacifica*) a common plant with a yellow, buttercup-like flower and symmetrical rows of shiny, bright-green leaves with serrated edges. One also finds the Springbank Clover (*Trifolium wormskjoldii*), looking like other clovers, but with bright pinkish-purple flowers and narrow, oval leaves (often with a reddish leaf fringe). (The roots of both Pacific Silverweed and Springbank clover were important staple

foods to local Native Americans; among the Tillamook, the tidelands of Cannon Beach were recognized as good places to gather these roots.) Looking like the tall, big-boned cousin of Queen Anne's Lace, Angelica (*Angelica lucida*), stands tall above these smaller plants with compound leaves, and flat clusters of tiny, white flowers atop a thick, hollow stalk. Scattered around these plants, one often finds Dock (*Rumex* spp.) with large oval leaves, and tall, reddish-brown seed stalks, the spindly Horsetail (*Equisetum* spp.), and tall, light green stalks and lacy foliage of Bracken Fern (*Pteridium aquilinum*).

Lower on the beach slope, amidst the broad-leaved Dunegrass (*Elymus mollis*) and the introduced, narrow-leaved European Beachgrass (*Ammophila arenaria*), one finds a number of attractive, flowering plants, including yarrow (*Achillea millefolium*), with lacy, fern-like leaves and flat-topped clusters of cream-colored flowers, and Pearly Everlasting (*Anaphalis margaritacea*), with thin leaves and a cluster of small, dry, pearly-white flowers with yellow centers. With

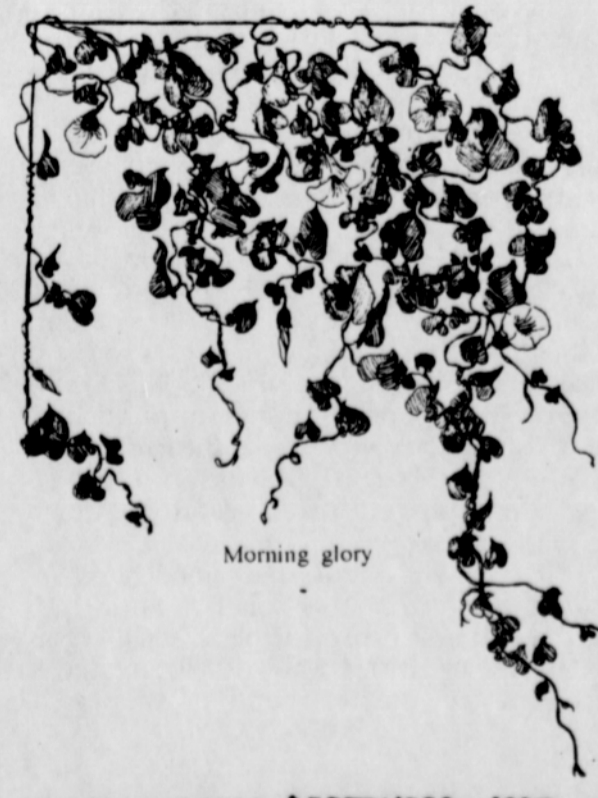


Horsetail

nitrogen-producing root nodules, some members of the pea family can survive quite well in these sandy areas: these include the Beach Pea (*Lathyrus japonicus*), with trailing stems, oval leaves, curling tendrils, dark pink to blue pea flowers, and long seed pods. The Seashore Lupine (*Lupinus littoralis*), is another member of the pea family, characterized by small, hairy, palm-like leaves and pea-like blue-and-white flowers encircling short stalks.

Lower still, one finds Dune Tansy (*Tanacetum bipinnatum*) with lacy, fern-like leaves and a cluster of yellow, button-like flowers without petals [similar flowers are found on a smaller, less leafy relative of this plant, Brass Buttons (*Cotula coronopifolia*) which occupies local beaches and mudflats]. Occasionally, one will stumble across the waxy leaves and white, rose-like flowers of the creeping Coast Strawberry (*Fragaria chiloensis*) which produces tasty, tiny strawberries. In areas without heavy salt spray, one finds the creeping Kinnickinnick (*Arctostaphylos uva-ursi*) with small, waxy, oval leaves, pink, urn-shaped flowers, and opaque, bright red berries. (Kinnickinnick means "smoke" in Chinook jargon - the leaves of this plant were smoked by most local Native American peoples of the coast prior to the introduction of tobacco.) Large, flat, foredune slopes are sometimes covered with the Large-Headed Sedge (*Carex macrocephala*), a grassy sedge with short, wide, yellow-green leaves, and a large, bristly, cone-like spike. This area is also commonly home to the native Knotweeds (*Polygonum* spp.), lanky, creeping plants with lance-shaped leaves and oblong spikes of small, densely-packed, pink flowers. On rare occasion, one might see the Beach Morning-Glory (*Convolvulus soldanella*),

see *Plants*, page 6



Morning glory