

The deceptively dainty sundew
dines on unsuspecting prey

Lovely but deadly

By Frances Backhouse

Sundews, Canada's most widespread carnivorous plants, look like something Dr. Seuss might have dreamed up. You have to get down low to fully appreciate them. Pull out your Junior Scientist magnifying glass for a closer look and you'll see a mosquito's nightmare: a thicket of red tentacles protruding from each leaf, designed to trap and devour.

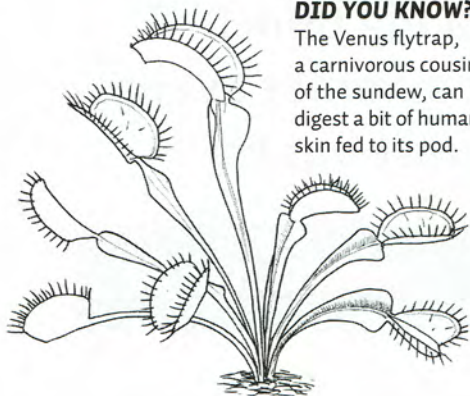


DECEPTIVE DEW The West is home to three *Drosera* species, named for the shape of their ground-hugging foliage: the round-leaved, the slender-leaved, and the long-leaved sundew (a.k.a. the great sundew). The term "sundew" comes from the Saxon word *sin-dew*, meaning "always dewy." The glistening droplets are actually sticky mucilage, produced by glands at the tip of each tentacle.

GOTCHA! When an insect lands on a sundew, the glandular glue grabs hold. Within minutes, the plant's tentacles start bending inward to further entangle the quarry. "They're like a small octopus," says University of Saskatchewan botanist Hugo Cota-Sánchez. In some sundews, including the round-leaved variety, the leaf blade also responds, gradually enfolding the hapless prey. Large insects sometimes escape; smaller ones, such as mosquitoes, midges, and gnats, are doomed.

DID YOU KNOW?

The Venus flytrap, a carnivorous cousin of the sundew, can digest a bit of human skin fed to its pod.



NUTRITIONAL SUPPLEMENTS Sundews thrive in damp areas with acidic soil and plenty of sunshine, such as bogs and fens. Though the soils lack sufficient nitrogen, phosphorus, and other elements essential for most plants, sundews compensate by preying on insects. Once a victim is subdued, glands on the tips of the sundew's tentacles release enzymes that break down the insect's body into absorbable nutrients.

MAKE LOVE, NOT LUNCH Sundews need insects for pollination as well as for food. To protect pollinators from its tentacles, the plant hoists its tiny white flowers on stalks that are five to 25 cm tall, high above the danger zone. The flowers open fully only in bright sunlight, unfurling their petals in mid-morning and closing about five hours later.

STRANGE BREW In Europe and Britain, sundew leaves historically were used to curdle milk for cheese and were steeped with spices to make a liqueur. Sundew sap also has antibiotic properties. Both North American First Nations and European healers used sundews to treat respiratory tract ailments and to remove corns, warts, and bunions. (Don't try this at home.)

SUNDEW DEVOTION Famed naturalist Charles Darwin once declared, "At this present moment I care more about *Drosera* than the origin of all the species in the world."

WHERE IN THE WEST? Sundews occur in scattered locations throughout the Western provinces, but they are "very picky and need pristine environments," says Cota-Sánchez. Cottagers may find them in marshes, bogs, wet meadows, and swamps. Boardwalk trails can help to protect their fragile habitat. 🐾



135

Estimated number of sundew species worldwide

7

Number of North American sundew species

1/78,000

Lightest weight, in grains (one grain equals 65 mg), needed to stimulate a sundew's tentacles—as calculated by Charles Darwin

3–20

Minutes it takes for the tentacles to start bending inward after an unlucky insect makes contact

24–48

Time, in hours, for a round-leaved sundew to fully envelop its prey

0

Chance of a mosquito surviving if it lands on a sundew leaf

What looks like dew on the red tentacles of a round-leaved sundew is a sticky glue designed to trap insects for food, like these unlucky damselflies (opposite).