

Searching for Orchids

The best time of year to look for orchids is mid-June, when most of the species are in bloom throughout most of the summer. Searching for orchids is a wonderful way to explore the Cypress Hills, but please take care not to disturb these fragile and unique plants in their habitats. Orchids rarely survive transplanting, and picking the flowers will prevent orchids from reproducing. If you find an orchid, the best way to preserve it is with a photograph. Without care and respect, orchids may disappear from their refuge in the hills.

Have you seen an Orchid in our Park?

If so, please contact the Visitor Centre! We are currently recording sightings in order to help catalog these beautiful and unique flowers.

For more information,

please contact the Visitor Centre

403-893-3833 ext. 5

www.albertaparks.ca/parks/south/cypress-hills-pp/

Orchids

Cypress Hills Interprovincial Park



The diversity and abundance of orchids found in the Cypress Hills cannot be matched anywhere else in the prairies. Many of these fragile and beautiful flowers can be found while hiking in early summer, making this area an orchid-lover's haven. Use this fact sheet to help you discover and identify the orchids of the Cypress Hills.



Ice Age Remnant: At the end of the last Ice Age, forests stretched across the plains from the Cypress Hills to the Rocky Mountains. As the climate warmed, grasses took over, leaving an isolated remnant of this ancient forest in the higher elevations of the Cypress Hills. With a wetter, cooler climate than the surrounding prairies, the hills are now a refuge for many forest plants far from their normal ranges.

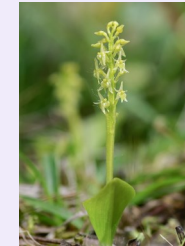
A Refuge for Orchids: Orchids are among the rarest and most interesting plants that have found refuge in the Cypress Hills. At least 18 species and 2 varieties of orchids have been reported in the hills of Alberta and Saskatchewan. Some are uncommon in the rest of Canada, but are quite abundant here. Other rare species have only recently been reported. Careful research may reveal even more unreported species and varieties. Provincial Parks, like the Cypress Hills, now protect the habitat of these remarkable flowers.

Orchid Description: Found throughout the world, most orchids are tropical species and grow on trees. In North America, orchids are generally quite small and grow on the ground, obtaining nutrients from decaying organic matter. To germinate and grow, orchid seeds need to be invaded by a fungus. The most distinctive aspect of orchids are their flowers, consisting of three separate *sepals*, often resembling petals, and two *lateral petals*. A third, lower petal usually forms an elaborate and unusually shaped *lip*, often bearing a backward-projecting *spur*. In the center of the flower a complex structure called the *column* holds the reproductive organs.



White Adder's Mouth *Malaxis brachypoda*

- ◆ Greenish to yellowish sepals and petals, greenish to yellowish drooping, oval-shaped lip tapering to a point, 2-3mm long; no spur
- ◆ Prefer damp woods, banks and bogs
- ◆ Bloom in June
- ◆ Rare
- ◆ First reported in the Alberta Cypress Hills in 1988; considered a rare species elsewhere in Alberta



Frog Orchid *Dactylorhiza viridis*

- ◆ Green sepals; greenish-white thread-like petals; greenish-white 2-3 lobed lip sometimes streaked with purple, 1cm long; sac-like spur; numerous flowers in a long, loose spike
- ◆ Prefer damp soil in meadows in pine and aspen woods
- ◆ Bloom mid-June/mid-August
- ◆ Uncommon but locally abundant





- Striped Coralroot*
Corallorhiza striata
- ◆ White sepals and petals with three purple stripes; white to maroon lip with five dark purple stripes, 1.3cm; no spur; 15-25 flowers
 - ◆ Prefer dry to damp soil in woods.
 - ◆ Bloom mid-May/early August
 - ◆ Fairly common and abundant
 - ◆ A rare orchid in North America; an extremely rare non-striped variety is found only in the Cypress Hills



- Yellow Coralroot*
Corallorhiza trifida
- ◆ Greenish-yellow sepals and petals; 3-lobed whitish lip spotted with purple, 0.5cm long; no spur; 3-12 flowers
 - ◆ Prefer moist, wooded areas
 - ◆ Bloom mid-May/early August
 - ◆ Fairly common but not abundant



- Spotted Coralroot*
Corrallorhiza maculata
- ◆ White petals with purple spots and 3-lobed lip, 0.6cm long; pale green-yellow sepals with purple trim; conspicuous yellow spur; 10-40 flowers per plant
 - ◆ Prefer drier soils in aspen woodlands and open pine woods
 - ◆ Bloom late June/early August
 - ◆ Fairly common and abundant
 - ◆ All coral-root orchids lack green color in stalks



- Small Round-Leaved Orchid*
Galearis rotundifolia
- ◆ Pale pink sepals and petals; 3-lobed white lip, spotted with purple, 0.8cm long; stout, curved spur; 3-6 flowers
 - ◆ Prefer moss covered, springy wet soil along streams in mature spruce forests
 - ◆ Bloom late May/early July
 - ◆ Uncommon but fairly abundant in remote undisturbed valleys
 - ◆ A very rare variety with a purple striped lip is known only from the Cypress Hills and a few locations in Ontario



- Tall White Bog*
Platanthera dilatata
- ◆ White to yellow-white or green-white sepals and petals; white lanced-shaped lip waxy, 5-10mm long; sharp, slender spur; numerous small flowers
 - ◆ Prefer rich soils in wet coniferous woods, bogs, thickets, and meadows
 - ◆ Bloom early June/early August
 - ◆ Rare in Saskatchewan; not reported in Alberta portion
 - ◆ Strong fragrance of cloves or vanilla



- Northern Green Bog Orchid*
Platanthera huronensis
- ◆ Yellow-green sepals and petals; pale green tongue-shaped lip; 0.6cm long; club-shaped spur; numerous flowers in a long, dense spike
 - ◆ Prefer to grow long creeks and ponds, springy areas in moist coniferous woods
 - ◆ Bloom late May/early August
 - ◆ Fairly common and abundant on the Alberta side; rare in Saskatchewan



- Blunt-Leaved Bog Orchid*
Platanthera obtusata
- ◆ Green sepals and petals; pale greenish-white, narrow, tapering lip with downward bend, 1cm long; slender, tapering spur; a few flowers in short, loose spike
 - ◆ Prefer boggy areas in spruce woods
 - ◆ Bloom mid-June/early August
 - ◆ Uncommon in Saskatchewan



- Northern Green Bog Orchid*
Platanthera aquilonis
- ◆ Yellow-green sepals and petals; pale green tongue-shaped lip; 0.6cm long; club-shaped spur; numerous flowers in a long, dense spike
 - ◆ Prefer to grow long creeks and ponds, springy areas in moist coniferous woods
 - ◆ Bloom late May/early August
 - ◆ Fairly common and abundant in Saskatchewan
 - ◆ on the Alberta side; rare in Saskatchewan



- Western Rattlesnake-Plantain*
Goodyera oblongifolia
- ◆ Greenish-white sepals and petals, forming hood; greenish-white spout-like tip, 6-9mm long; no spur; numerous flowers in a single, long spiral spike
 - ◆ Prefer drier, cool soil in coniferous woods
 - ◆ Bloom late July/mid-August
 - ◆ Uncommon but locally abundant
 - ◆ A second species, *Goodyera repens*, has also been reported



- Hooded Ladies' Tresses*
Spiranthes romanzoffiana
- ◆ Creamy white sepals and petals, forming a hood; creamy white fiddle-shaped lip and bent downward, 0.6cm long; no spur; numerous flowers in a short twisted spike
 - ◆ Prefer bogs, open woods, meadows, moist depressions in fescue grasslands
 - ◆ Bloom late July/August
 - ◆ Fairly common and locally abundant in Alberta; rare in Saskatchewan
 - ◆ Last orchid to bloom each summer



- Heartleaved Twayblade*
Neottia cordata
- ◆ Purplish to yellowish green sepals and petals; 2 lobed lip purplish-green, 4-5mm long; no spur, 4-20 tiny flowers
 - ◆ Prefer acidic soils in mossy woods, thickets and bogs
 - ◆ Bloom early June/early August
 - ◆ Rare in Saskatchewan; not recorded in Alberta



- Northern Twayblade*
Neottia borealis
- ◆ Awl-shaped sepals and green petals; translucent pale green 2-lobed lip with central dark green stripe, 1.3cm long; no spur; several flowers on loose spike
 - ◆ Prefer wet, cold, moss-covered soil in mature spruce woods
 - ◆ Bloom late May/early August
 - ◆ Rare; confined to remote, boggy valleys



- Fairy-slipper Orchid*
Calypso bulbosa
- ◆ Pink, purple, and some yellow sepals and petals; large pinkish sac-like lip with purple streaks and yellow hairs; a single flower is 1.3-2.5cm long.
 - ◆ Prefer drier soil in pine woods
 - ◆ Bloom Mid-May/early June
 - ◆ Common and abundant in Alberta; very rare in Saskatchewan
 - ◆ Most common and striking orchid on the Alberta side of the Cypress Hills; decreasing in abundance throughout North America due to logging and picking.



- Sparrow's Egg Lady Slipper*
Cypripedium passerinum
- ◆ Green sepals, pure white petals; white or pale lilac pouch-shaped translucent lip, spotted with purple; 1cm long; no spur
 - ◆ Prefer margins of ponds, streams and bogs in mossy spruce forests
 - ◆ Bloom mid-June/early August
 - ◆ Rare but locally abundant.



- Yellow Lady's Slipper*
Cypripedium parviflorum
- ◆ Yellowish or greenish sepals, striped with purple, 3-5cm long; yellow pouch-shaped lip marked with purple; 1.5-4cm long; 1 flower
 - ◆ Prefer moist, open areas in woods along banks and ditches
 - ◆ Bloom in June
 - ◆ Very rare in Saskatchewan hills; not reported in Alberta



- Mountain's Lady Slipper*
Cypripedium montanum
- ◆ Greenish-brown to purple-brown sepals and petals, twisted, 4-6 cm long; 1-3 flowers
 - ◆ Prefer moist woods
 - ◆ Bloom late May/July
 - ◆ Known from one location in Saskatchewan Cypress Hills
 - ◆ First reported from hills in 1984; a rare species