



# Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)

**Description:** One of 200 orchid species in North America, this member of genus *Platanthera* is identified by white, uniformly-colored, three-parted and conspicuously fringed labellum (lowermost petal). It can be distinguished from the closely related *P. lacera* by examination of the spur and lateral petals. *P. leucophaea* has a 2-4 cm spur and toothed lateral petals. *P. lacera* has a 1.4-2.1 cm long spur and entire lateral petals. This plant is 8 to 40 inches tall and has an upright leafy stem with a flower cluster called an inflorescence. The 3 to 8 inch lance-shaped leaves sheath the stem. Each plant has one single flower spike composed of 5 to 40 creamy white flowers.

This orchid is a perennial herb that grows from an underground tuber. Flowering begins from late June to early July, and lasts for 7 to 10 days. Blossoms often rise just above the height of the surrounding grasses and sedges. The more exposed flower clusters are more likely to be visited by the hawkmoth pollinators. Seed capsules mature over the growing season and are dispersed by the wind from late August through September. Plants may only flower once every few years. This is one of Maine's rarest plants, and fewer than 20 plants are found each year.

**Habitat:** In Maine, the eastern prairie fringed orchid is believed to occur at just a single location; a circumneutral (calcareous) fen. It requires full sun for optimum growth and reproduction. Elsewhere in its range in the Midwestern U.S., it occurs in tallgrass silt-



loam or sand prairies, sedge meadows, fens, and occasionally sphagnum bogs. It seems to be adapted to disturbance. The Maine location was periodically burned by fires set by steam locomotives from a nearby railroad. Populations require reproduction from seed, which is accomplished only with pollination by hawkmoths. Seedlings require development of mycorrhizae with soil-inhabiting fungi and nearby host plants.

**Occurrence in Maine:** The eastern prairie fringed orchid occurs at a single location, The Nature Conservancy's Crystal Bog preserve in Aroostook County.