



Growing Wild Lupine

A DNR factsheet supporting Wisconsin's Statewide
Karner Blue Butterfly Habitat Conservation Plan



GENERAL CHARACTERISTICS OF WILD LUPINE

Wild lupine (*Lupinus perennis*) grows best in sandy soils and full sun where competition from tall grasses and shrubs is minimal. It spreads quickly under favorable conditions, particularly in areas recently cleared by fire, logging, grazing or other disturbance. In Wisconsin, this perennial is most common in the Central and Northwest Sands regions, in dry prairie and open oak or pine barrens. As brush, tree saplings or tall grasses begin to shade its habitat, wild lupine will cease flowering or disappear entirely.

A member of the legume family, wild lupine germinates in mid-April, and its 8 to 18-inch spikes of violet-blue flowers bloom by mid to late May.

Wild lupine leaves are the only larval food source of the federally endangered Karner blue butterfly.

SEED COLLECTION

Wild lupine seed pods develop quickly and mature to brown or black in early summer as the seed matures. After the pod blackens and dries, it splits with a sudden twist that propels the seed several feet away. Seed pods must be collected after they blacken but before they split, or the seed will be lost. The best time to collect seed pods is late June or early July. Plants growing in drier, sunnier areas will mature faster.

Collected seed pods should be placed on screen-covered drying racks with plenty of air circulation. Mature pods will burst within a few days, releasing fresh seed. Fresh seeds should be air dried for at least three weeks, and then stored in paper bags in a cool, dry location.

Avoid collecting more than 30% of the lupine seed from an area, and avoid collecting in areas known to support Karner blue butterflies. Check permit requirements before collecting seed on public land.

Different types of wild lupine seed are available for purchase, but only the native Wisconsin ecotype is likely to support the Karner blue butterfly. Contact the U.S. Fish and Wildlife Service landowner assistance program (608-221-1206, ext. 21) for advice regarding seed purchase and planting.

PLANTING SEED

Fresh lupine seed will germinate, but lupine tends to grow best when planted in the late fall, before the ground freezes. Fall-planted, air-dried seed does not need to be scarified or inoculated. It will germinate in the spring, when soil moisture is ideal and temperatures are just above freezing.

Seed can be lightly raked into bare patches of soil cleared of most competitive plants and weeds. Sites should have sandy, well-drained soil and full sun.

If existing vegetation requires control, herbicide should be applied to the site in the spring and again in the fall. Seeds can then be planted into the dead thatch with a no-till drill or by hand.



Del Monte staff people monitor a wild lupine plot (photo: Ursula Petersen)

Lupine is heavy-seeded at 35 seeds per gram, or about 16,000 seeds per pound. A seeding rate of one pound of lupine seed per acre will produce a fairly dense stand. Under favorable conditions, lupine will spread on its own once established.

Lupine tends to persist in areas where regular disturbance activities (e.g., mowing, burning, or selective cutting) limit competition and shade. A long-term management plan including periodic disturbance may be necessary to maintain a large lupine stand. Because wild lupine patches often support the Karner blue butterfly, these activities should be planned with help from the Wisconsin DNR or the U.S. Fish and Wildlife Service.