



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife
1 Rabbit Hill Road, Westborough, MA 01581
tel: (508) 389-6360, fax: (508) 389-7891
www.nhesp.org

Prickly Pear

Opuntia humifusa (Raf.) Raf.

State Status: Endangered

Federal Status: None

Description: Prickly Pear is a native perennial in the Cactus family (Cactaceae) that spreads along the ground and grows to 0.5 m tall. The pads (stem segments) are glossy green and have areolas (areas where spines are attached) with minute, barbed, deciduous spines called glochids. Some plants also have two longer spines. The flowers are large and showy, with yellow tepals (petals and sepals that are similar); the fruit is fleshy and green initially, becoming pinkish-red as it matures. This species can reproduce by seed or vegetatively by detachment of the pads.

Aids to Identification: Prickly Pear can be observed any time of year, though it is easiest to find in summer when the showy yellow flowers are present. The pads are oblong-ovate, about 5 to 17.5 cm × 4 to 12 cm in size, and dark to shiny green with areolas arranged in a diagonal pattern. The areolas have whitish-brownish glochids that are about 4 mm in length, with or without stout, longer spines. The pale to bright yellow flowers are 20 to 30 mm across. The fleshy fruits are cylindrical, 30 to 50 mm long × 12 to 20 mm wide, and taper slightly toward the base. The sour, green pulp ripens to reddish and becomes sweet and edible. Numerous seeds within the fruit are roundish and 3.5 to 4.5 mm, with a 1 mm ridge.



Prickly Pear flowers (top left), fruit (top right), and characteristic spreading growth form (bottom). Top photos by Bruce Sorrie; bottom photo by Bill Nichols.



Similar species: Other Prickly Pear species are not known from Massachusetts; this species differs from other closely related *Opuntia* species by its strictly yellow tepals. Prairie Prickly Pear (*Opuntia macrorhiza*) flowers have a reddish center and Little Prickly Pear (*Opuntia fragilis*) has greenish-yellow flowers. Eastern Prickly Pear only occasionally has long spines, whereas other species frequently have two or more long spines at most areolas.

Flowering in Massachusetts

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Population Status in Massachusetts: Prickly Pear is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale, and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. Prickly Pear is currently known from Barnstable, Plymouth, Dukes, and Nantucket Counties. It is native in Dukes and Nantucket Counties, and thought to have been introduced to Plymouth, Middlesex, and Barnstable Counties. Historical records from Hampden and Essex Counties likely represent introduced plants. Prickly Pear was known to grow in coastal dune communities as early as the 1830s. It has been documented at Native American archaeological sites in the eastern U.S., presumably because of its sweet, edible fruits. It is unknown whether Native Americans may have introduced this species to Massachusetts.

Range: Massachusetts is at the northern range limit for Prickly Pear. It is found from Massachusetts south to Florida and west to Wisconsin and southern Ontario; it is not known to occur naturally in Rhode Island.

Habitat: Prickly Pear occurs in coastal Massachusetts in open dunes, low sandy knolls, grasslands and heathlands, and in sunny openings in pine barrens and maritime woodlands. Associated species often include Red Cedar (*Juniperus virginiana*), Bayberry (*Morella pensylvanica*), Dunegrass (*Ammophila breviligulata*), Seaside Goldenrod (*Solidago sempervirens*), and Poison Ivy (*Toxicodendron radicans*). Prickly Pear has also been found under power lines and in sandy lawns and cemeteries, and it is occasionally planted near dwellings.

Threats and Management Recommendations: Roads and other development in the coastal region should avoid populations of Prickly Pear. Fencing and re-directing of trails and ORV roads may help to protect known populations. Caution is needed to avoid plants during mowing. Invasive species removal and control of encroaching native vegetation may be necessary to prevent shading and competition. Natural threats such as storm surges may not be avoidable but plants in eroding areas may be moved or introduced to safer locations with appropriate habitat. Introduction to new locations may be done vegetatively by detached pads or by seeds. All active management of rare plant populations (including invasive species removal) is subject to review under the Massachusetts Endangered Species Act, and should be planned in close consultation with the Massachusetts Natural Heritage & Endangered Species Program.

References and Additional Information:

Gleason, H. A., and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 2nd edition. The New York Botanical Garden, Bronx, NY.

Haines, A. 2011. *Flora Novae Angliae – a Manual for the Identification of Native and Naturalized Higher Vascular Plants of New England*. New England Wildflower Society, Yale Univ. Press, New Haven, CT.

Wallace, R. S., and D. E. Fairbrothers. 1987. The New England distribution of *Opuntia humifusa* (Raf.) Raf. *Rhodora* 89: 327-332.

Updated 2012
Map Updated 2012