Natural Heritage &
Endangered Species
Program

Commonwealth of Massachusetts
Division of Fisheries & Wildlife
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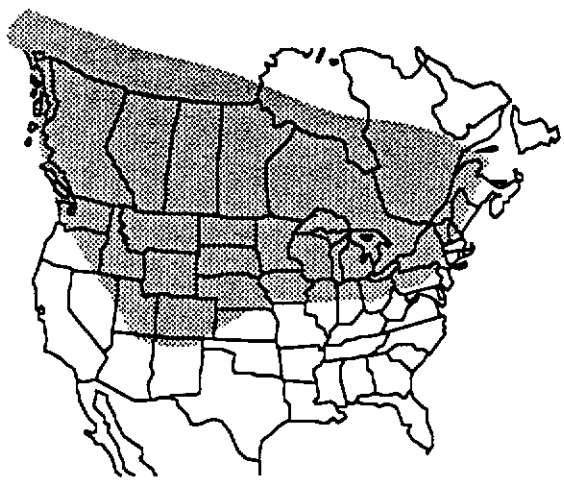
MASSACHUSETTS ENDANGERED PLANTS

NORTHERN PRICKLY ROSE
(*Rosa acicularis* L.)

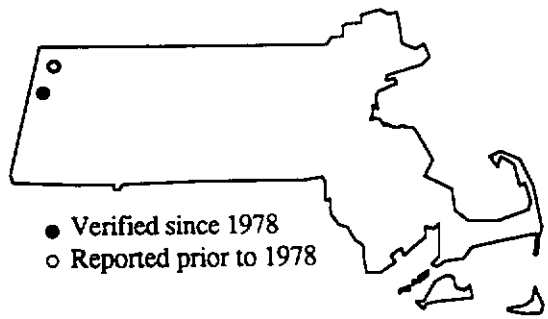
Britton and Brown. An Illustrated Flora of the Northern US and Canada. Dover Publications, Inc., New York. 1970.

Description

The northern prickly rose is a low, few-stemmed shrub in the Rose family (Rosaceae). It usually -- and, in our area, always--grows less than 1 m (3 1/3 ft.) tall. Its stems and branchlets are covered with numerous straight, very slender thorns that are 3-4 mm (0.12 - 0.16 in.) long. The compound leaves are alternate, with 3-7 (usually 5) leaflets. A pair of conspicuous stipules (vegetative appendages associated with leaves) occurs at the base of the leaf stalks; both the leaf stalks and the margins of the stipules are glandular. Northern prickly rose's 2-5 cm (0.8 - 2 in.) long leaflets are thin, serrate (with forward-facing teeth) and oblong-elliptic. Their surfaces are dull green above and paler green and minutely downy below. Flowers are generally solitary but may occur in groups of a few at the end of leafy branches. The pink petals are 2-3 cm (0.8 - 1.2 in.) long and nearly



Documented Range of Northern Prickly Rose



Massachusetts Distribution by Town

as wide. The sepals (members of the outermost floral whorl) are glandular on the outside and often white and hairy inside. Northern prickly rose begins flowering in late May. Its fruit ("hip") is ellipsoid--often narrowly so--2 cm (0.8 in.) long, bright red, and many-seeded; hips ripen from late summer to early fall.

Range

Northern prickly rose is a circumpolar species. In North America, the documented range extends from New Brunswick and Quebec to Alaska, south to Massachusetts., Pennsylvania, West Virginia, northern Illinois, Iowa and northern New Mexico.

Similar Species

R. acicularis could be confused with the pasture or Carolina rose (*Rosa carolina*). However, pasture rose's prickles are paired at the stem/leaf nodes and are only scattered in between. In addition, its hips are globular, not elliptical. Like the northern prickly rose, the bog or shining rose (*Rosa nitida*) has slender prickles; in contrast, however, its fruits are globular, and it inhabits peat bogs and cold swamps. (Northern prickly rose grows in thickets and on rocky slopes.) The northern prickly rose is unique in Massachusetts in having distinctly elliptical hips; all our other roses have globular or somewhat pear-shaped hips.

Habitat in Massachusetts

In general, northern prickly rose's habitats are thickets and rocky slopes. In Massachusetts, the sole current station of northern prickly rose is an open, dolomitic limestone ledge at high elevation. Associated species at this site include shrubby cinquefoil (*Potentilla fruticosa*), choke cherry (*Prunus virginiana*), roundleaf dogwood (*Cornus rugosa*), various species of goldenrod (*Solidago* spp.), and two rare Massachusetts plants--wall-rue spleenwort (*Asplenium ruta-muraria*) and purple clematis (*Clematis occidentalis*). An historical station in Massachusetts was near a mountain summit.

Population Status

In 1984, Northern Prickly Rose was rediscovered in Massachusetts--after a lapse of 65 years. It is presently listed as "Endangered" in the state, where there is only the one population that has been confirmed since 1978. An historical record (unverified since 1978) is known from the Mt. Greylock region, but field searches have not turned up this or any additional populations. Northern prickly rose is also considered rare in New Hampshire, Vermont, New York, West Virginia, Iowa and Illinois; it is considered demonstrably secure globally.