

Queen-of-the-prairie *Filipendula rubra*

Description

Queen-of-the-prairie is a member of the rose family (Rosaceae) that spreads clonally by the growth of underground stems called rhizomes as well as reproducing sexually. Individual ramets, or members of a clone, grow from one to two meters tall; a single clone may spread over scores of square meters. Leaves are pinnately compound, with the terminal leaflet the largest, up to 20 centimeters wide, divided into five to nine palmate lobes, and coarsely toothed. Flowers usually have five deeply pink petals, with a ring of long stamens surrounding a cluster of club-shaped pistils. They grow in large, showy inflorescences up to 20 centimeters wide.

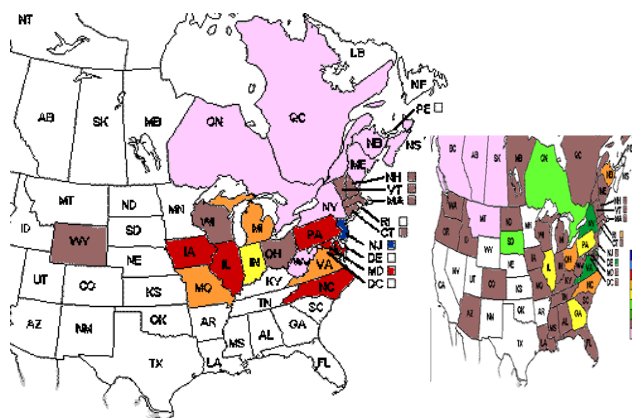


Distribution & Habitat

Queen-of-the-prairie grows mainly in fens, calcium-rich peat-producing wetlands, but clones may also be found in wet woodlands and grassland seeps. It grows from Newfoundland south in to Georgia, and has been found as far west as Wyoming; but its natural range is probably somewhat smaller.

North American State/Province Conservation Status

Map by NatureServe 2014

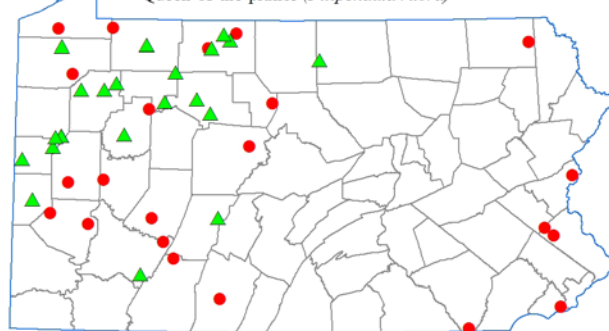


Current State Status

Queen-of-the-prairie is rare because its preferred habitat, fens, are generally rare. The species also suffers from potential reproductive limitations – some populations produce very little viable seed. This may be because queen-of-the-prairie populations are often composed of only a handful of clones, which reduces their genetic variability.

Pennsylvania Distribution

Queen-of-the-prairie (*Filipendula rubra*)



▲ records since 1980 ● records pre-1980

Pennsylvania Natural Heritage Program Data 3-2014

Conservation Considerations

Queen-of-the-prairie populations will benefit greatly from protection of their wetland habitats, which are often destroyed or fragmented by human development. Forest management practices can also be altered to allow more natural disturbances to create early successional habitat. Existing populations should be protected from collection, which may be a minor concern. Efforts to re-establish queen-of-the-prairie populations in unoccupied habitat should make use of seed or transplant material taken from a wide variety of parent clones to ensure that new populations will have sufficient genetic diversity to produce viable seed.

NatureServe conservation status ranks

G4G5 – Apparently globally secure; **S1S2** – Critically imperiled in Pennsylvania

References

- Aspinwall, Nevin, and Terry Christian. 1992a. "Clonal structure, genotypic diversity, and seed production in populations of *Filipendula rubra* (Rosaceae) from the northcentral United States." *American Journal of Botany*, 79(5): 488-94.
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Pennsylvania Natural Heritage Program