Small Yellow Cowlily Nuphar microphylla

Description

Small Yellow Cowlily is an aquatic herb that represents a smaller version of Yellow Cowlily or Spatterdock (*Nuphar lutea*) that is widespread in Pennsylvania. The Small Yellow Cowlily has its basal part anchored in the substrate of the lake or pond. The leaves arise from this base, via long stalks, and usually are seen floating on the surface of the water. The leaf blades typically have a heart-shaped outline, sometimes with a deeply incised base, average about 3 inches (7.5 cm) in width, are untoothed on the edges, and often become purplish below. The yellow flowers, which appear in summer, are located at or slightly above the water surface, and are about ³/₄ inch (2 cm) in width, with a prominent central flat-topped disk where the pollen is deposited. They occur singly on each stalk, which arises from the plant base. The fruit is a spongy or leathery "berry" containing many seeds.



Photo source: Robert Bierman @ Wisflora

North American State/Province Conservation Status Map by NatureServe 2025



Distribution & Habitat

Small Yellow Cowlily ranges from Nova Scotia to Manitoba and south into New Jersey, Pennsylvania, and Illinois. In Pennsylvania, it represents a northerly species and has been documented historically in the eastern, particularly the northeastern, counties. The species grows in lakes, ponds and slow-moving sections of rivers and streams.

Current State Status

The PA Biological Survey (PABS) considers Small Yellow Cowlily to be a species of special concern, based on the few locations recently confirmed. It has a PA legal rarity status of Tentatively Undetermined and a PABS suggested rarity status of Endangered.

Yellow Cowlily (Nuphar microphylla) <25 years</p> >25 years

Conservation Considerations

The viability of populations of Small Yellow Cowlily and its habitat may be enhanced by creating buffers and protecting the natural hydrology around wetlands, controlling invasive species, and avoiding indiscriminate use of aquatic herbicides.

NatureServe conservation status ranks

G5 – Globally secure; S1 – Critically Imperiled in Pennsylvania

PNHP Pennsylvania Natural Heritage Program

References

- NatureServe. 2025. NatureServe Explorer [web application] NatureServe, Arlington, Virginia. Available at https://explorer.natureserve.org (Accessed: May 8, 2025)
- Pennsylvania Natural Heritage Program. 2025.
- Rhoads, A.F. and W.M. Klein, Jr. 1993. The Vascular Flora of Pennsylvania. American Philosophical Society, Philadelphia, Pennsylvania.
- Rhoads, A.F. and T.A. Block. 2007. The Plants of Pennsylvania: An Illustrated Manual. 2nd edition. University of Pennsylvania Press, Philadelphia, Pennsylvania.