

Lily of the Water: Fragrant Water -lily

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This is a great time of year to explore around the quiet shallow waters of ponds, lakes and streams. Look for one of Maine's most beautiful native flowers, the Fragrant Water-lily (*Nymphaea odorata*), floating amid lily pads and other aquatic plants. The best time to view the flowers is during the early morning hours when they first open. They will close by mid-afternoon and the heat of the day, opening again near dusk. The low-angle light of morning is also the best time to photograph the lily. You'll see more detail earlier than in the later harsh over-head sunlight of mid-day.

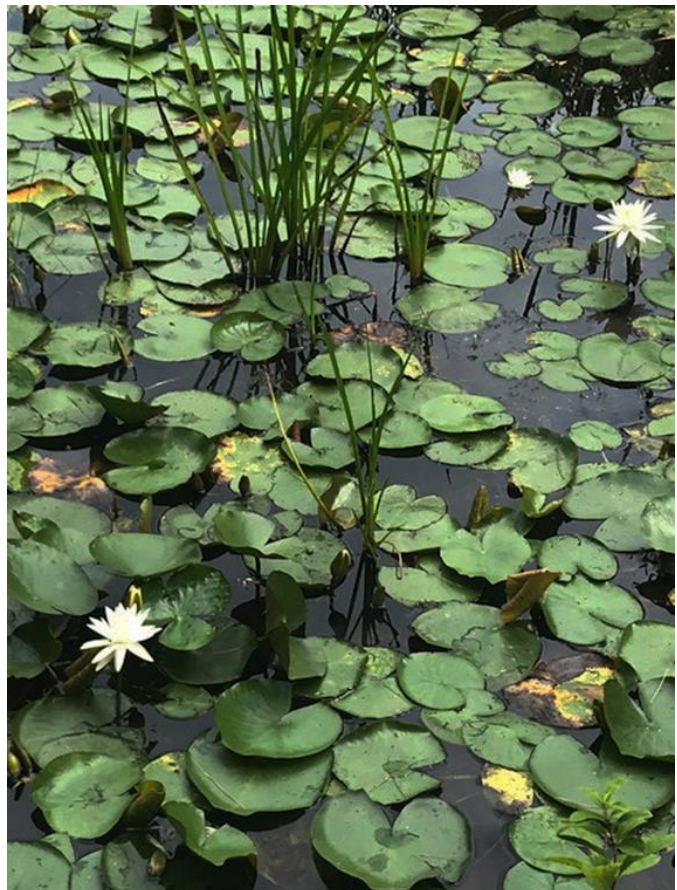
The lily flower is most often white, but on occasion may be light pink. It has several rounds or layers of petals. The longest petals, up to 4 inches long, make up the base. They are successively smaller in each higher round. The yellow central section of the flower is made up of a cluster of stamens (the pollen producers). The outer stamens are large and broad like petals; the inner stamens are slender and shorter. After pollination, flowers submerge, and seeds mature inside a fleshy fruit.

Lily pads are flat, round floating leaves (floating at the surface, or just below) reaching up to ten inches across. The leathery pads are shiny green on top and a deep reddish purple on the underside. A narrow V-shaped notch extends from the leaf edge to the center near the stem, making the pad look like a pie with one slice removed.

Water-lilies "breathe" from the top side of their pads through specialized pores called stomata. These tiny openings are for exchanging gases - carbon dioxide and water vapor between the leaf and the air. The stomata regulate the flow of gases in and out of leaves and thus for the whole plant.

Interesting Facts

- Frogs, dragonflies and other flying insects use lily pads as resting places. Fishes and other under water animals hide and rest beneath them in the shade they provide.
- Ducks and other waterfowl eat water-lily seeds.
- Muskrat, beaver, moose, porcupine and deer eat the rhizomes (fleshy underground stems with root-producing nodes).
- The Fragrant Water-lily is known by many other common names: American White Water-lily, Fragrant White Water-lily,



Fragrant Water-lily, White Water-lily, Sweet-scented White Water-lily, Sweet-scented Water-lily, and Beaver Root.

Activities for Children & the Young at Heart

1. Most plants have stomata on the underside of their leaves. Why do you think the stomata of water-lily are on the topside of their leaves? (Hint: think about what the stomata have to do for a plant.)
2. A dragonfly can rest on a lily pad. So can a frog. Could you? How large would a lily pad have to be for you to do so? (Hint: Look up the giant Amazon water lily. Here is one [article from the New York Botanical Garden](#) to get you started.)
3. Look at the [artwork of Claude Monet](#). Are you inspired to create water lily art of your own? Paint, draw, or try a three dimensional artwork in paper - cut and paste, or try origami - the art of paper folding. [Here is one link to get you started with origami](#). Find how-to videos by doing an online search.

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