Oregon Sea Grant Extension
Sustainable Tourism &
Outdoor Recreation Program

Interpretative Fact Sheet

Yellow Pond-lily

(*Nuphar lutea*)

The following short article is from the *Oregon Coast 101 Species* collection used by the Guide and Outfitter Recognized Professional (GORP) training program. These articles are intended to provide interesting facts you can share with your clientele and add value to your services.

An Interpretive Fact Sheet has been written about each species. We are currently uploading these blogs and creating the links.

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Tourism and Business Development College of Business,
Oregon State University Extension - Oregon Sea Grant at
http://tourism.oregonstate.edu/

Guide and Outfitter Recognized Professional Program
https://www.GORPguide.org

For more information about the GORP training program see:
https://www.gorpguide.org/become-a-gorp-certified-guide

Yellow Pond-lily (Nuphar lutea)

tourism.oregonstate.edu/yellow-pond-lily-nuphar-lutea/

By colliek2 September 9, 2020

Varieties of Yellow Pond-lilies can be found across the US.

Why is it possible to drown a common house plant and yet there are plants that grow gleefully in water?

The common Yellow Pond-lily has a beautiful bloom and large, heart-shaped floating leaves (nearly 18-inches in length). The bloom is nearly 4-inches and held just above the water surface in spring through early fall.

Survival

The Yellow Pond-lily has developed a specialized type of underwater tissue that helps it survive. This tissue, called aerenchyma, facilitates the underwater movement of large amounts of oxygen and other gasses. This tissue holds eight times the amount of oxygen, compared to a house plant.

Respiration in water lily-type plants is anaerobic (meaning the process occurs without oxygen). Many ponds and slow-moving waters where it grows are often low oxygen. This respiration process creates ethanol (a type of alcohol) within the plant's cells.

This alcohol is poisonous to the plant. To get rid of the alcohol quickly, the plant evaporates it up through the aerenchyma cells and bloom. The pretty yellow blooms smell strongly of alcohol which attract pollinating flies, and create a small bottle-shaped tuber to store sugars in (explains the common European name of 'Bandy-bottle').

Medicine

Yellow Pond lilies have been used in traditional medicines remedies. There are warnings related to tannins and selecting materials from a clean water source (see the **Natural Medicinal Herbs** website at http://www.naturalmedicinalherbs.net/herbs/n/nuphar-lutea=yellow-water-lily.php). **Note**: Not all varieties or parts of the Yellow Pond-lily are edible or appropriate for use.

The **Edible Wild Food** website (http://www.ediblewildfood.com/yellow-water-lily.aspx) reports that the Yellow Pond-lily was a common food source for many Native people. Natives leached the rootstocks collected in the spring and winter of tannins and boiled or roasted for flour. Seeds were often cooked like popcorn. Flowers can make a refreshing drink.

The National Park Service reports Yellow-Pond lily species 'Nuphar polysepalum' growing in the Denali National Park/Preserve lowlands in Alaska. When cooked, this variety is also tasty (see Denali National Park, Alaska, https://www.nps.gov/dena/learn/nature/pondlily.htm).

Where to find it

Yellow Pond Lilies grow in a wide variety of aquatic habitats as far south as Baja California, and north into Alaska. Habitat ranges from hot desert ponds to ponds frozen more than half of the year!

Want it?

Propagate Yellow Pond Lilies through seed or division and will grows in containers!

For more information, see *Plants for a Future* at https://pfaf.org/user/Default.aspx. Image is Royalty free from free-images.com.