

Fringed Water-Lily

(*Nymphoides peltata*)



Family name: Menyanthaceae (Buckbean family)

Common name/s: Fringed Water-Lily, Yellow Floating Heart, Floating Heart



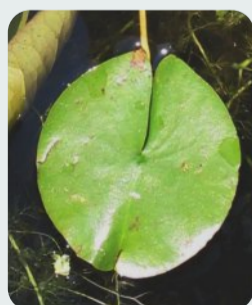
Fringed Water-Lily (*Nymphoides peltata*) is an aquatic plant known for its bright yellow, fringed flowers and floating leaves. In Ireland, it poses a risk of becoming invasive, particularly in still or slow-moving water bodies, where it can outcompete native species and disrupt aquatic ecosystems.

The plant spreads through both seeds and vegetative propagation, making management challenging. Control measures include mechanical removal, herbicide application, and preventative actions to limit the spread. If left unmanaged, Fringed Water-Lily can significantly impact water quality, biodiversity, and waterway management.

Description - Fringed Water-Lily (*Nymphoides peltata*) is a perennial aquatic plant known for its round, floating leaves and bright yellow, fringed flowers. It is commonly found in ornamental ponds and water gardens, but it can become invasive in natural water bodies, where it forms dense mats that impact water flow and native biodiversity. The plant spreads easily through vegetative means, making it difficult to control once established.

Key characteristics include:

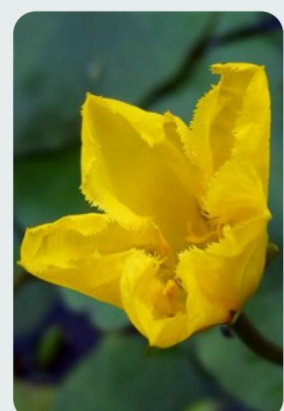
Size: The plant typically forms floating mats on the water surface, with submerged stems reaching lengths of up to 2 metres.



Leaves: The leaves are round to heart-shaped, 3-12 cm in diameter, and have wavy, slightly scalloped edges. They are green on top and may have a purplish tinge underneath. The leaves float on the water surface, resembling those of true water lilies.

Flowers: Produces bright yellow flowers with five fringed petals, measuring 2-4 cm across.

The flowers rise slightly above the water surface and bloom from mid-summer to early autumn.

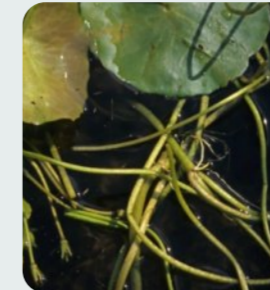


Fruit: Forms capsules containing numerous small seeds, which can be dispersed by water currents or wildlife.



Stem: The plant has long, creeping stolons (horizontal stems) that grow underwater, allowing it to spread and form dense mats.

Root: Fringed Water-Lily has a fibrous root system that anchors the plant to the substrate, but it can also grow as a free-floating mat.



Habitat - Fringed Water-Lily is native to Europe and Asia, where it grows in a variety of freshwater habitats.

It has been introduced to other regions, including North America, where it is considered invasive. It thrives in:



- **Lakes, Ponds, and Slow-Moving Rivers:** Commonly found in still or slow-flowing water, where it forms dense mats on the water surface.
- **Canals and Ditches:** Can establish in artificial water bodies, such as canals and drainage ditches, often spreading rapidly in nutrient-rich waters.

- **Wetlands and Marshes:** May grow in shallow wetlands or marshy areas, where it can outcompete other aquatic vegetation.

The plant prefers full sun to partial shade and nutrient-rich waters, growing best in water depths of 30 cm to 2 metres.

Status in Ireland - In Ireland, Fringed Water-Lily is considered a naturalised species that poses a high risk of becoming invasive, especially in lakes, ponds, and slow-moving rivers.

Fringed Water-Lily's ability to form dense mats can outcompete native aquatic plants, block sunlight, and reduce oxygen levels, negatively affecting aquatic ecosystems.

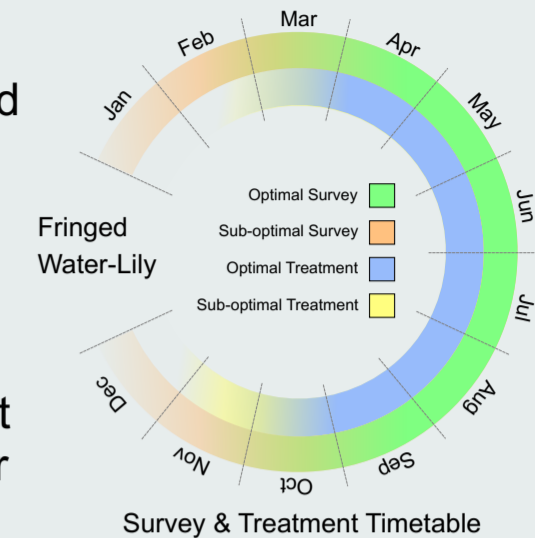
Reproduction and Spread - Fringed Water-Lily spreads through both seed production and vegetative propagation:

- **Seed Dispersal:** The seeds can be dispersed by water currents or carried by wildlife, allowing the plant to spread to new areas.
- **Vegetative Propagation:** The plant primarily spreads through creeping stolons, which can produce new plants at the nodes.

Even small fragments can establish and grow, making control challenging.

Management and Control - Managing Fringed Water-Lily requires a combination of approaches due to its rapid growth and ability to spread vegetatively:

- **Mechanical Control:** Manual removal, cutting, or raking can help reduce the plant's biomass, but care must be taken to remove all fragments to prevent regrowth. Repeated efforts may be needed for long-term control.
- **Chemical Control:** Herbicides approved for aquatic use can be applied to control infestations, although the impact on non-target species and water quality should be considered.
- **Biological Control:** There are currently no widely accepted biological control methods for Fringed Water-Lily.
- **Preventative Measures:** Monitoring water bodies for early signs of infestation and avoiding planting in natural water bodies can help prevent its spread. Careful disposal of plant material from water gardens is also recommended.



Ecological Impact - Fringed Water-Lily can have significant ecological impacts, especially in areas where it becomes invasive:

- **Competition with Native Species:** Forms dense mats that block light, outcompeting native aquatic plants and reducing biodiversity.
- **Impact on Water Quality:** Dense growth can reduce oxygen levels, leading to poor water quality and affecting fish and other aquatic organisms.
- **Alteration of Water Flow:** The mats can impede water flow, potentially increasing the risk of flooding in canals and drainage channels.



For further information and free advice, please contact:
Japanese Knotweed Control Ltd.



Email: mail@jkc.ie

Tel: +353 (0)86 250 8805

Web: www.jkc.ie

