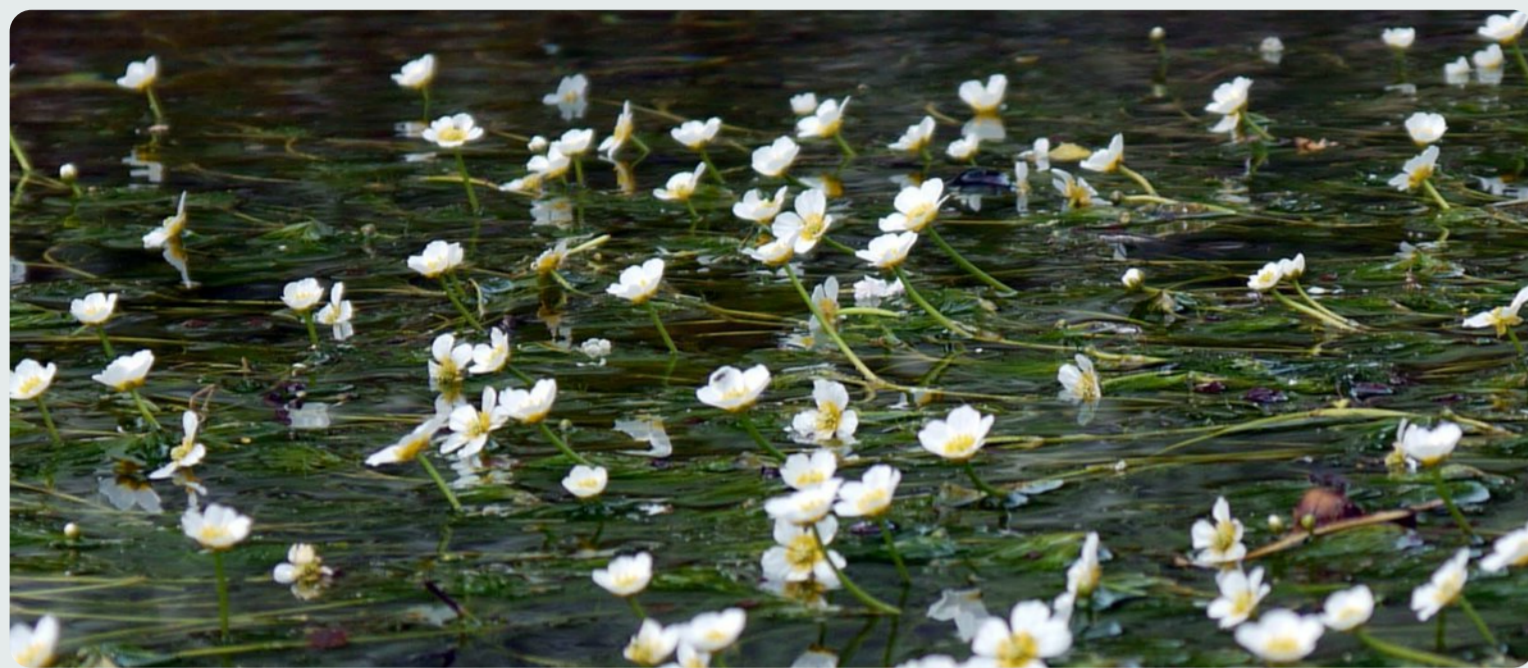


# Large-Flowered Waterweed

(*Egeria densa*)



**Family name:** Hydrocharitaceae (Frogbit family)  
**Common name/s:** Large-Flowered Waterweed, Brazilian Waterweed, Dense Waterweed, Anacharis



**Large-Flowered Waterweed** (*Egeria densa*) is a submerged aquatic plant known for its rapid growth and potential to form dense underwater mats in non-native regions. In Ireland, it is considered a high-risk invasive species that poses threats to aquatic ecosystems, recreational activities, and water quality in lakes, rivers, and canals.

The plant spreads through fragmentation, making management challenging. Control measures include mechanical removal, herbicide use, and preventative steps to limit spread. If left unmanaged, Large-Flowered Waterweed can significantly impact local biodiversity and aquatic habitat dynamics.

**Description** - Large-Flowered Waterweed is a submerged, perennial aquatic plant that is widely used in aquariums and as an ornamental plant in garden ponds. It has become invasive in many regions worldwide, where it forms dense underwater mats that can obstruct waterways, outcompete native aquatic plants, and affect water quality. It is often confused with other similar aquatic species, such as *Elodea canadensis* (Canadian Waterweed).

**Key characteristics include:**

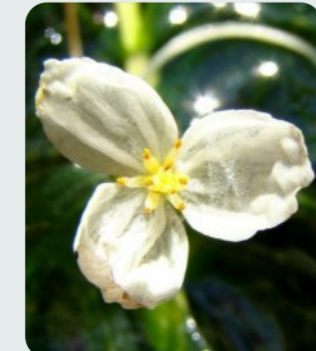


**Size:** Can grow up to 3 metres long, depending on water depth and growing conditions. The plant forms dense mats under the water surface.

**Leaves:** The leaves are elongated and strap-like, measuring 1-4 cm long and 2-5 mm wide. They are arranged in whorls of 4-8 leaves around the stem, giving the plant a bushy appearance.

The leaves are bright green, with finely serrated edges, and have a somewhat fleshy texture.

**Flowers:** Produces small white flowers with three petals, each about 2 cm in diameter, that float on the water's surface.



The flowers emerge from long, thread-like stalks that reach the water surface. Flowering typically occurs from spring to early autumn.

**Fruit:** Small, elongated capsule that contains numerous tiny seeds. It develops after flowering but rarely produces viable seeds outside its native range due to the absence of natural pollinators.



**Stems:** The stems are slender, branching, and can be up to several metres long, allowing the plant to form dense underwater growth.

The stems are brittle and can easily fragment, which contributes to its spread.

**Root:** Has a fibrous root system that anchors the plant to the substrate, although it can also survive as a free-floating fragment in some conditions.



**Habitat** - Large-Flowered Waterweed is native to South America, including Brazil, Uruguay, and Argentina. It has spread to many temperate and subtropical regions worldwide, where it can thrive in a variety of aquatic habitats:

- **Lakes, Ponds, and Canals:** Commonly found in still or slow-moving freshwater, where it forms dense underwater mats that cover large areas.
- **Rivers and Streams:** Can also establish in slow-flowing rivers and streams, where it may dominate sections of the watercourse.
- **Reservoirs and Drainage Ditches:** Thrives in artificial water bodies, such as reservoirs, ditches, and drainage channels, where nutrient levels may be higher.

The plant prefers nutrient-rich waters, with temperatures ranging from 15°C to 30°C. It grows best in clear, shallow waters with full sun or partial shade.

**Status in Ireland** - In Ireland, Large-Flowered Waterweed is considered a high-risk invasive species, particularly in lakes, rivers, and canals, where it can outcompete native aquatic vegetation and significantly alter aquatic ecosystems.

Its ability to form dense mats can hinder recreational activities, affect water flow, and reduce oxygen levels for other aquatic life.

**Reproduction and Spread** - Large-Flowered Waterweed spreads through vegetative propagation, as it does not typically produce viable seeds in most regions:

- **Fragmentation:** The main method of spread is through stem fragmentation, where even small pieces of the plant can root and form new colonies.

This allows the plant to spread rapidly, especially through human activities such as boating, fishing gear, or aquarium disposal, or by water currents.

- **Limited Seed Production:** While the plant can produce seeds, seed-based reproduction is rare, and most spread occurs through vegetative means.

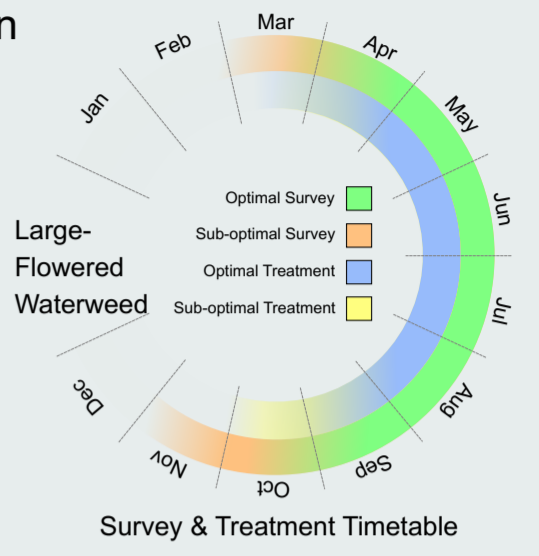
**Management and Control** - Controlling Large-Flowered Waterweed is challenging due to its ability to regenerate from fragments and rapid growth. Management typically involves a combination of methods:

- **Mechanical Control:** Manual removal, cutting, or raking can help reduce the plant's biomass, but care must be taken to remove all fragments from the water to prevent regrowth. Repeated efforts are often needed for effective management.

- **Chemical Control:** Herbicides that are approved for use in aquatic environments may be applied to manage infestations, though the impact on non-target species and water quality must be considered.

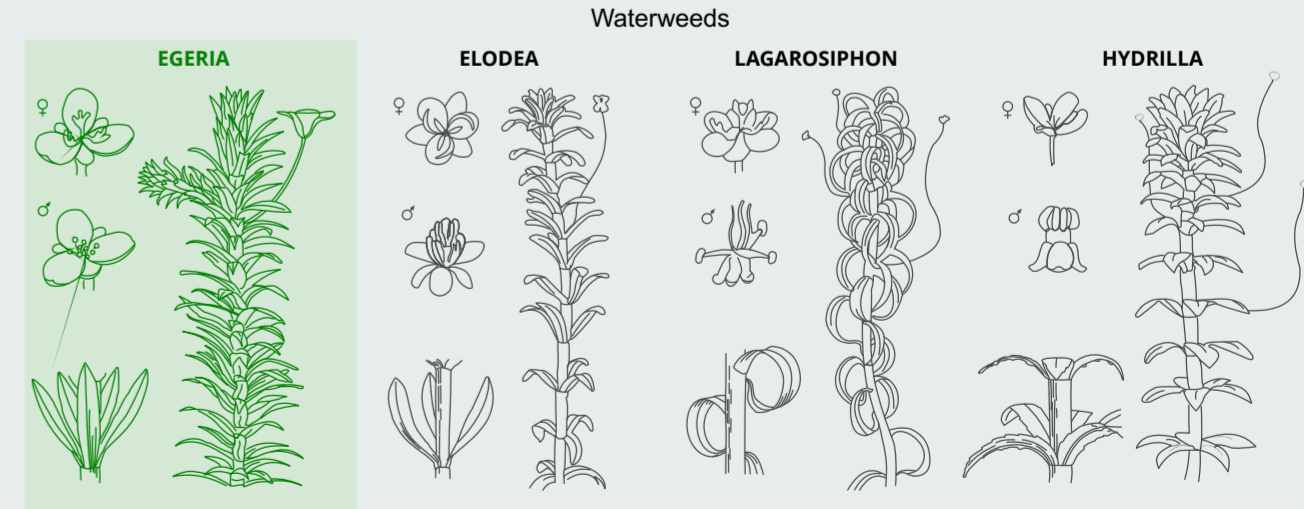
- **Biological Control:** Some biological control methods, such as introducing herbivorous fish (e.g., grass carp), have been used to help control the plant, but these approaches must be carefully regulated to prevent other ecological impacts.

- **Preventative Measures:** Cleaning boats, fishing gear, and equipment before moving between water bodies can help prevent the spread of plant fragments.



**Ecological Impact** - Large-Flowered Waterweed can have significant ecological impacts, particularly in areas where it becomes invasive:

- **Competition with Native Species:** Forms dense mats that outcompete native aquatic plants, leading to a reduction in biodiversity.
- **Alteration of Water Flow and Oxygen Levels:** The mats can impede water flow and reduce dissolved oxygen levels, affecting fish and invertebrate populations.
- **Impact on Recreational Activities:** Can hinder boating, fishing, and swimming by creating dense underwater growth that entangles equipment and restricts movement.



**For further information and free advice, please contact:**  
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