

AQUATIC INVADERS

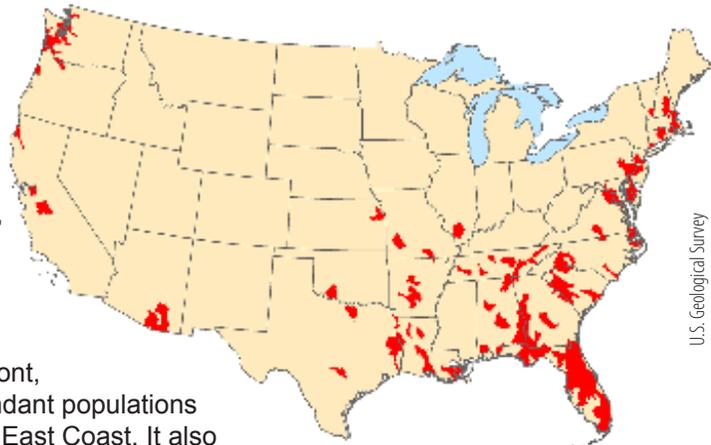


COMMON NAME: Brazilian elodea, also Brazilian waterweed; and sold in the aquarium industry under the name anacharis.

SCIENTIFIC NAME: *Egeria densa* (Planch)

NATIVE DISTRIBUTION: From regions of Brazil to coastal areas of Argentina and Uruguay.

U.S. distribution: Elodea was imported into the United States in the late 1800's and touted as "good plant to add oxygen to water." The plant is now present in Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, and Washington. The most abundant populations of Brazilian elodea in the U.S. are on the East Coast. It also has been introduced into New Zealand, Australia, Denmark, Germany, France, Japan and Chile.



Habitat: Brazilian elodea is a submerged perennial that can reach lengths of 2.4 m. It can live rooted or free floating at depths of up to 6 m. In its native range, Brazilian elodea is found growing in slow moving, shallow lakes, rivers and streams. It grows best in somewhat acidic and nutrient-enriched waters.

Cool facts:

- All of the Brazilian elodea plants introduced to the United States are males; therefore the plants only reproduce vegetatively.
- Under good light and nutrient conditions, the Brazilian elodea has been known to grow up to 30 cm in length per day.
- Brazilian elodea is more robust and faster growing than a native species of elodea found in the United States -- American elodea (*Egeria canadensis*).
- There are no herbicides that are selective for Brazilian elodea. This means that when an infested body of water is treated with chemicals, native plants may also be destroyed.

Life cycle: Brazilian elodea typically goes through two periods of rapid growth each year, which are followed by decay of the older leaves and stems. The first growth spurt occurs in spring. During the summer months, it branches profusely — creating a dense mat. The green leaves are whorled with usually four leaves per node. Each leaf is 25 to 31 mm long, with an oblong shape approximately 5 mm wide. A second rapid growth period occurs in the fall, followed by the production of flowers with three white petals and three green sepals. After flowering the older foliage decays and the plant overwinters on the bottom in an evergreen form.

Pathways of introduction: Known for its oxygenation ability and pretty flowers, Brazilian elodea has been widely sold in the aquarium and water garden industries under the name anacharis. Although illegal to sell in some states, Brazilian elodea is still being used in some schools for science classes. Because Brazilian elodea can reproduce via fragmentation, one plant introduced to a new body of water can quickly become established and spread. Recreational water users may also unknowingly transport fragments between water bodies when the plants are caught on boats, trailers and gear.

Impacts: Once Brazilian elodea has been introduced into waterways, it grows rapidly and creates dense mats on the waters surface. These mats will crowd out native plants, and impede boating, fishing, swimming and other aquatic recreation activities. The mats are unsightly, reduce water quality and provide poor habitat for fish. Some stands can become so dense that water movement is restricted and sediment is trapped. Also, fragmented pieces can clog water intake pipes.

Ways to prevent its spread:

- Never release any non-native organism into the environment. Freeze or dry unwanted plants, or seal in plastic bags before disposal.
- Good boat hygiene is critical – boats and trailers that have been washed with warm, soapy water or mild bleach are less likely to spread non-natives. Live wells and bilge water should be drained before you leave the boat access area.
- Make sure that in the event of a flood, the plants from your water garden will not be washed in to adjacent aquatic environments. Water runs down hill!
- Report invasive species to local officials and the USGS online at <http://nas.er.usgs.gov/> or by calling 877-7867-267 (877-STOP-ANS).

These tips apply to ALL non-native species.

Don't forget: Use native plants in your aquaria, and clean your boat and trailer after each use.
