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## NAS - Nonindigenous Aquatic Species

# *Ottelia alismoides* (L.) Pers.

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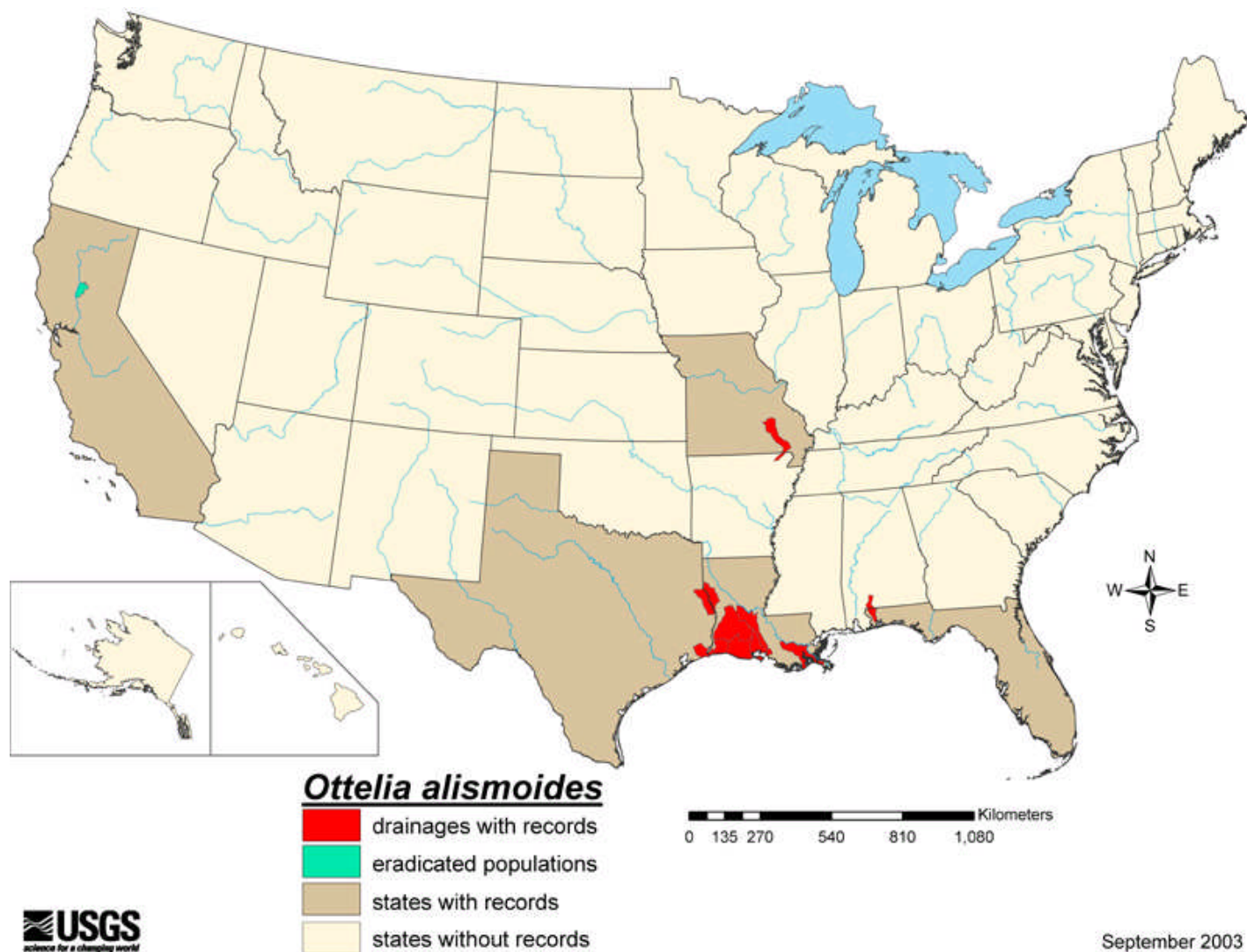
**Common name:** duck lettuce

**Taxonomy:** Division-Magnoliophyta (Angiosperms); Class-Liliopsida (Monocots); Subclass- Alismatidae ; Order- Hydrocharitales; Family- Hydrocharitaceae (Frog's Bit Family).

**Description:** [Aquatic herb](#), rooted and completely submersed.. Juvenile leaves somewhat linear, becoming [oblanceolate](#), [ovate](#) or broadly cordate with maturity. Largest [leaves](#) from 11 to 16 cm long, their bases tapering to meet the petioles. Petioles of varying lengths (potentially up to 50 cm). Conspicuous longitudinal ribbing and cross-ribbing on the upper surface of the leaves gives a quilted effect. Lower margins of leaves and edges of petioles often shallowly serrated to sharply toothed. Flowers wrapped within spathes, cylindrical structures 2 - 4 cm long, composed of green bracts that are ornamented with 3 or more [ruffled wings](#). Spathes born on long, angled stalks that become spiraled after flowering. Sepals and short-lived petals of male flowers exert from the tip of the spathe just above the water surface. Spathes containing female and/or bisexual flowers are self fertile and remain submersed. Petals white, [pink](#), [blue](#) or purple, often tinged with yellow at the base. The resulting fleshy, encapsulated fruits contain as many as 2000 [seeds](#) (Cook and Urmi-Kong 1984).

**Native Range:** Tropical and warmer areas of Asia and Australia (Cook and Urmi-Kong 1984).

**Habitat:** Lake shorelines, marsh ponds, irrigation ditches and stream margins in water ranging from .05 to 1 m deep.



Map indicates recorded presence in at least one site within the drainage ([USGS Hydrologic Unit 8](#)), but does not necessarily imply occurrence throughout that drainage.

**Distribution:** First discovered in the United States in 1969 in rice field ditches of Cameron Parish, **Louisiana**. Expanding east by 1986 to the Bayou Teche drainage and other coastal zones of Louisiana, such as the Barataria Basin. Recorded by 1993 from four additional parishes, within the Calcasieu-Mermentau and Vermilion drainages of southwestern Louisiana. A single population discovered 1977 in Butte County, **California**, (the Lower Butte drainage), was quickly eradicated and no plants have been observed since. Not recorded again until 2000 when found in **Missouri** at newly created marsh ponds in the Black River drainage (Yatskiyevych and Raveill 2001). Several flowering populations were found and due to the location, biologists suspected introduction by waterfowl. Most recently collected in **Florida**, 2003, in Thompson Bayou, a tributary of the Escambia River, where a shoreline colony of several plants adjacent to the University of West Florida Campus are targeted for eradication (R. Kipker & J. Van Dyke, pers. comm.).

**Comments:** *Ottelia alismoides* requires constant water levels; its vegetation does not tolerate drying out. Unlike most other aquatic plants, this species lacks specialized organs for vegetative reproduction and reproduces solely by seed. Seed production is infallible because plants are autogamous and have a high reproduction allocation (M. Jiang and Y. Kadono 2001; Cook and Urmi-Kong 1984). Dehiscent fruits release a floating, spongy mass containing seeds that eventually fall to the substrate (Cook and Urmi-Kong 1984). The floating mass released from the capsule has been observed to be consumed by fish, however it is not known if this affects seed germination or if fish are aiding in seed dispersal (Cook and Urmi-Kong 1984; Cook 1996)..

Populations in Louisiana are believed to remain localized; a long established colony at Lake Chicot is still only about 18 m<sup>2</sup> in size (C. Dugas, pers. comm.). Where introduced to ricefields and agricultural irrigation ditches outside of the United States, *Ottelia alismoides* is not considered a serious weed (Cook 1996).

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**Revision Date:** September 2003

\*Special thanks to Northeast Louisiana University (NLU) Herbarium for loan of their *Ottelia alismoides* specimens.

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Page Last Modified: June 06 2005

