

## **Species Profile: Indian Swampweed**



Image: Indian Swampweed photo taken by Jan Sevcik

**Scientific Name:** *Hygrophila polysperma*

**Common name:** Indian Swampweed

**Synonyms and Other Names:** Dwarf Hygrophila, Dwarf Hygro, Miramar Weed, Indian Waterweed

**Taxonomy:** accepted (Plantae, Chromista, and Fungi) ( ITIS, 2011)

**Noxious:** this species is listed by the [U.S. Department of Agriculture as a noxious weed](#)

**Identification: Example Characteristics**

**Stem/Rhizoids:**

A spiny dicotyledon plant which is typically a submerged rooted plant, yet can be immersed in shallow areas with smaller, darker leaves. Stems creep upward and are

found to be brittle, and easily fragmented. This plant is 6 feet or longer. Has intertwined or erect stems. (USGS, 2019) (USDA,2015)

**Leaves:**

Elliptical leaves which are around 2- 8 centimeters long and 2 centimeters wide, coming to a point with a connection to the plant fixed in a singular place, the bases joined at the nodes by hair-like flanges of tissue. The leaf arrangement is opposite ( USGS, 2019 ) ( Langeland and Burks, 1999 ).

**Flowers:**

“Small flowers (0.375" across) of Indian swampweed can be bluish-white or white and found along the upper portion of emergent stems” (Pennsylvania Natural Heritage Program,2021).

**Look-a-likes:**

- **Alligatorweed** (*Alternanthera philoxeroides*)
- **Scarlet toothcup** (*Ammannia coccinea*)
- **Gulf swampweed** (*Hygrophila lacustris*)
- **Water purslane** (*Ludwigia palustris*)
- **Creeping primrose-willow** (*Ludwigia repens*)
- **Lowland toothcup** (*Rotala ramosior*) (Pennsylvania Natural Heritage Program,2021)

**Size:** Six feet or longer

**Native Range:** India, Malaysia, Bangladesh, Bhutan, Nepal, Cambodia, Laos, Myanmar, Thailand, and Vietnam (Angerstein and Lemke 1994, Nault and Mikulyuk 2009) ( USGS,2019 )

(USDA,2015)

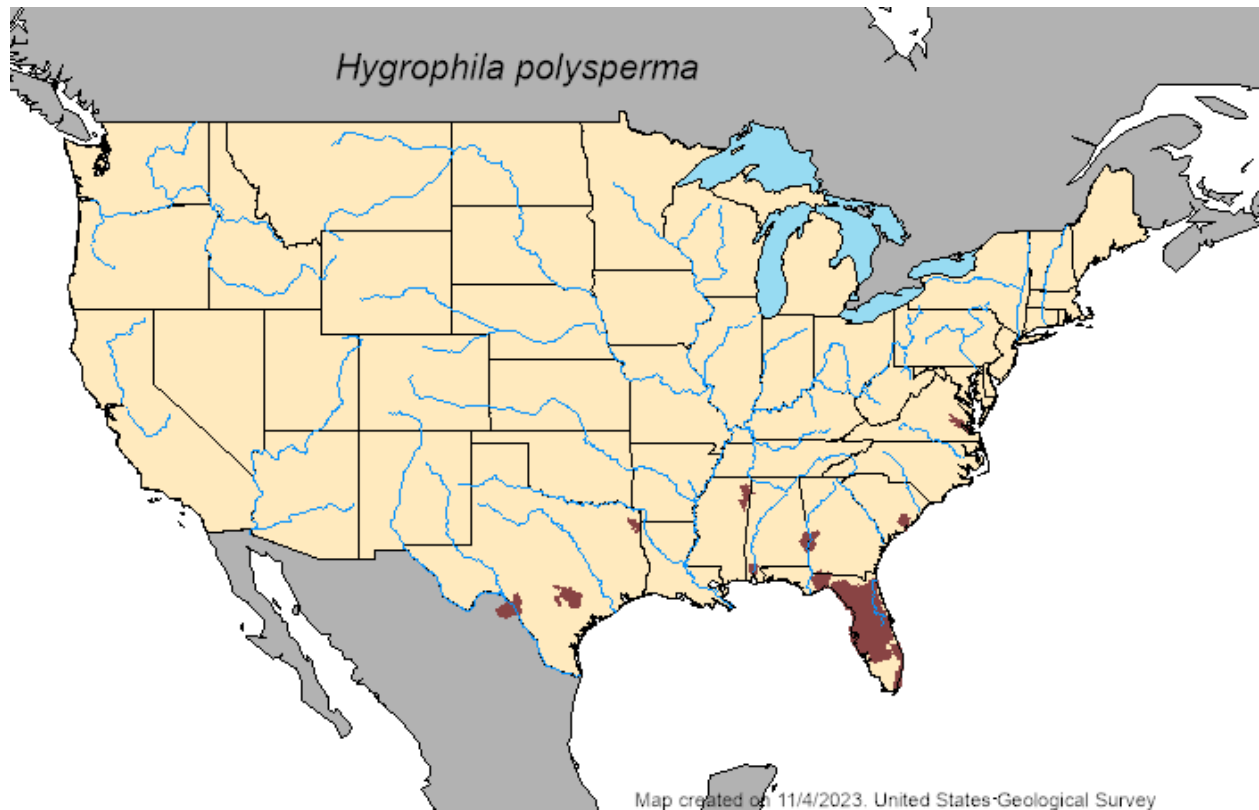


Figure 1: Map of Native Range of Indian Swampweed and Where it is Typically found, Red being the Non-Native HUC 8 Level Record

**Nonindigenous Occurrences:**

<a href="#">State</a>	<a href="#">First Observed</a>	<a href="#">Last Observed</a>	<a href="#">Total HUCs with observations†</a>	HUCs with observations†
<a href="#">AL</a>	<a href="#">1996</a>	<a href="#">2020</a>	2	Middle Chattahoochee-Walter F; Mobile-Tensaw
<a href="#">FL</a>	<a href="#">1965</a>	<a href="#">2022</a>	24	Alafia; Apalachee Bay-St. Marks; Caloosahatchee ; Crystal-Pithlach ascotee; Econfina-Steinhatchee; Florida

				Southeast Coast; Hillsborough; Kissimmee; Lake Okeechobee; Little Manatee; Lower Ochlockonee; Lower St. Johns; Lower Suwannee; Manatee; Myakka; Oklawaha; Peace; Santa Fe; Sarasota Bay; Tampa Bay; Upper St. Johns; Waccasassa; Western Okeechobee Inflow; Withlacoochee
<a href="#">MS</a>	<a href="#">2010</a>	<a href="#">2010</a>	1	<a href="#">Upper Tombigbee</a>
<a href="#">SC</a>	<a href="#">2007</a>	<a href="#">2009</a>	1	<a href="#">Cooper</a>
<a href="#">TX</a>	<a href="#">1969</a>	<a href="#">2021</a>	5	Caddo Lake; Elm-Sycamore; Middle Guadalupe; San Marcos; Upper San Antonio
<a href="#">VA</a>	<a href="#">1957</a>	<a href="#">1957</a>	1	<a href="#">Lower James</a>

Table 1: States with nonindigenous occurrences, the earliest and latest observations in each state, and the tally and names of [HUCs](#) with observations, provided by USGS in 2019

**Ecology:**

*“H. polysperma has a specific life cycle, starting with a rooted stage in hydro-soil in dense stands of shoots, some with large leaves reaching up to the canopy, and some emergent ones with smaller leaves. Shoots on moist banks are very small, and resemble the submerged form after banks are flooded. Shoots begin elongating in March as the water temperature rises, then they reach the surface in late spring. In summer, they break off into mats and float away, and*

*take root as soon as they come into contact with soil. The whole shoot of the plant breaks off near the root crown in August and forms very dense floating mats, which can sink piece by piece, or all at once to form a new colony; new shoots regrow from the roots, and they grow slowly in winter” (Hall et al. 2003).*

**Means of Introduction:** introduced into Florida via the aquarium industry in the 1950s (FWS,2018 ). Continued.. “aquarium trade and water garden industry are thought to be the main reasons for the dispersal of Indian swampweed in the United States” (Pennsylvania Natural Heritage Program,2021)

**Status:** Established in Alabama, Florida, Kentucky, Mississippi, South Carolina, and Texas

**Impact of Introduction:**

can occupy the entire water column in natural area water bodies which would outcompete and displace native vegetation, cause problems in canals and drainage ditches in south Florida by forming dense mats that impede water flow, clog irrigation pumps, and displace native vegetation (FWS,2018) and loss of recreational and aesthetic value associated with H. polysperma can also cause a decline in waterfront property values, as well as possible declines in tourism related revenue for the community (FWS,2018).

**Hardiness:**

USDA Hardiness Zone: 7b - 11 ( USDA )

**References:**

- Noxious weeds program risk assessments.* USDA APHIS | Noxious Weeds Program Risk Assessments. (2021).  
[https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/pests-and-diseases/SA\\_Weeds/SA\\_Noxious\\_Weeds\\_Program/CT\\_Riskassessments](https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/pests-and-diseases/SA_Weeds/SA_Noxious_Weeds_Program/CT_Riskassessments)
- Indian swampweed (hygrophila polysperma) - species profile.* USGS Nonindigenous Aquatic Species Database. (2023).  
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<https://www.fws.gov/sites/default/files/documents/Ecological-Risk-Screening-Summary-Indian-Swampweed.pdf>

*Integrated Taxonomic Information System - Report*. ITIS. (n.d.).

[https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=182342#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=182342#null)

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