

School-to-Nature



Duckweed seen from above



Duckweed Roots, below the surface



Pond with floating Duckweed

Duckweed

Local ponds on Conservancy lands or elsewhere may be the home for Duckweed. This tiny plant is often mistaken for algae or “pond scum” but it is a useful plant in pond / swamp ecosystems. There are quite a few Duckweed varieties; this article focuses on one called Lemna, which has two tiny leaves, a single root, and features a miniscule air sac that keeps it afloat.

Lemna Duckweed reproduces in two ways: 1) “budding” in which the plant grows and splits off a tiny new plant on its own and 2) sexual reproduction with two stamens and a pistil; this second type is actually rare in the Lemna plant.

Duckweed improves pond water quality by filtering out phosphorus and nitrogen, creating a healthier environment for fish and other plants. It will also out-compete with algae for growth over the pond surface. However, a pond completely covered and shaded by duckweed is not healthy, because fish and other pond creatures cannot access oxygen. So, sometimes, duckweed needs to be skimmed back and limited.

In the wild, Duckweed is eaten by ducks, turtles, tadpoles, beaver and birds, and some large fish, which helps control the duckweed growth. It is shelter for frogs and young fish hiding from predator birds. Duckweed is grown commercially and harvested as a fresh vegetable in some countries. It is fully edible and is said to taste like sweet cabbage. Duckweed is also harvested and dried to make a nutritious feed for cattle and other animals and to feed fish on fish farms. It is also sold as home pet fish food.

As winter approaches, some Duckweed plants form a “turion” which is a tiny tight bud that withstands the winter by sinking to the bottom of the pond, and then floating up and regenerating in spring. A turion is not a seed, but rather the means to survival. For such a tiny plant, Duckweed has a complex and fascinating life.

Fun Fact: the photo to the right shows a kind of Duckweed (not Lemna) that grows the **smallest flower in the known world**, seen as the tiny white specks.



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