

# What else lives at the pond?

## Guide to duckweeds

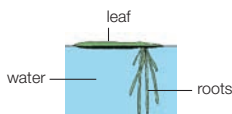
Duckweeds are plants on a miniature scale; they have leaves, roots and flowers – just very small ones! Duckweeds float on the surface of ponds. Where there is a lot of duckweed it can block out sunlight, which affects other pond life. This chart shows six duckweeds that you might see when you're spending time around the pond taking part in the [OPAL Water Survey](#).

**HINT** The pond may contain more than one species of duckweed. This guide groups duckweeds by how many roots they have, so look for that first. Then use the size, shape and colour of the leaves to decide which species you have. Using the OPAL magnifier will help you.

**Tell us what you see!** Duckweeds are useful indicators of water quality and a pond's condition. Invasive duckweeds (introduced from other countries) can negatively affect our native duckweeds. Help us track their spread by completing the [OPAL Water Survey](#). [www.OPALexplore.org](http://www.OPALexplore.org)

### Key

- Invasive species
- Native species



## Duckweeds with no roots

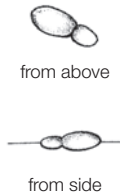
### Rootless Duckweed ●

*Wolffia arrhiza*

Never has roots.

Leaves are 0.5-2 mm long, oval-shaped and fat. They look like tiny bright green grapes.

Rare.



the small leaves are Rootless Duckweed

## Duckweeds with many roots

### Greater Duckweed ●

*Spirodela polyrrhiza*

Each leaf has more than one root.

Leaves are flat, 4-12 mm long, nearly round or tear-shaped. Top surface of the leaf darkish green and smooth or slightly ribbed.

Underneath is purplish red.

Uncommon.



purple underneath



Always exercise caution around water: please see health and safety guidance at [www.rospea.com/leisuresafety/adviceandinformation/watersafety](http://www.rospea.com/leisuresafety/adviceandinformation/watersafety)

0 1 2 3 4 5 cm



## Duckweeds with one root

### Fat Duckweed ●

*Lemna gibba*

Leaves are domed and 2-6 mm long. Top surface of the leaf is dull green or reddish-brown.

Look for big, bubble-like clear cells underneath the leaf.

Common.



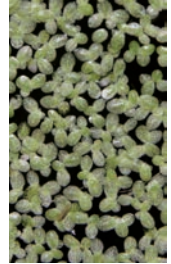
### Least Duckweed ●

*Lemna minuta*

Leaves flat and 1-2.5 mm long. Both leaf surfaces are pale grey-green in colour. The leaf is delicate and almost see-through.

Least Duckweed is an invasive species introduced from another country. It is now the most common species in some areas, and is probably still spreading. Help us to track where it is.

Common.

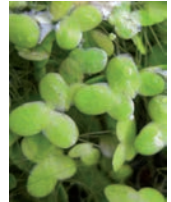


### Common Duckweed ●

*Lemna minor*

Leaves are flat, egg-shaped and 2-7 mm long. Top surface of the leaf is bright yellow-green. Unlike Least Duckweed the underneath is much paler.

Common.



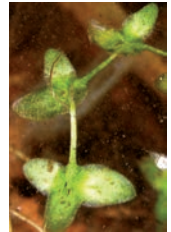
### Ivy-leaved Duckweed ●

*Lemna trisulca*

Leaves are flat and 5-10 mm long. Each leaf has a pointed tip and a stalk connecting it to other leaves. Leaves grow in groups of 3, are see-through and usually float just below the water surface.

Never has more than one root. Occasionally has no roots at all.

Common.



The **Botanical Society of the British Isles (BSBI)** has developed this survey in partnership with the Natural History Museum's Angela Marmont Centre for UK Biodiversity. The BSBI is the leading society in Britain and Ireland for the study of plants. They run plant surveys, field trips and training courses as well as publishing handbooks and journals. Find out about recording plants in your local area by visiting their website [www.bsbi.org.uk](http://www.bsbi.org.uk).

Text and images by Fred Rumsey (BSBI and NHM) and Lucy Carter (NHM).

