

## Managing Blanketweed and Duckweed

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Reviewed by Steve Head

Blanketweed and duckweed share a similar trait in that they do particularly well in still and nutrient-rich water. Both occur naturally in the United Kingdom, and neither need to be a problem and can be effectively managed. Within the few days and weeks that follow a new pond being built it is quite likely that blanket weed will develop. Over these initial periods this is not a problem and blanketweed will naturally come under control as populations of zooplankton (e.g. *Daphnia*) establish and graze upon it. In many ways, blanketweed can be seen as a helpful indicator and remover of nutrient from pond water for every time it is removed, so too are some of the nutrients.

More correctly blanketweed is filamentous algae, which will be more productive where there is a lack of shade and increased nutrient levels. As the pond gets older (several years on), blanketweed can be removed by hand or by using a rake. Enzymes released from barley or lavender straw can help moderate blanketweed growth, but is only temporarily effective. Similarly, various commercial additives can be shop bought to control its growth. Ultimately though, whilst there are excess nutrients, blanket weed will continue to grow. Therefore, the most effective management technique will be to lower nutrient levels by considering the advice given here elsewhere (e.g. don't use supplementary fish food or top up with tap water). Blanketweed growth may also be reduced by lowering light levels, so consider planting some floating leaved plants or improving marginal cover.

Duckweed is a group of species of tiny simple plants, *Lemna minuta*, *L. gibba*, *L. sulcate*, *L. minor* and the rare *Wolffia arrhiza*. They can cover a pond in days, and are often considered a nuisance. As with blanketweed, the presence of duckweed doesn't have to be a major issue. In fact, due to its size and relative complexity, duckweed can provide some additional valuable habitat. If you fish out some duckweed, carefully examine it and you will see a range of pond life that is making use of it. However, also similar to blanket weed, in nutrient rich waters duckweed can spread across the entire surface, which will not only be unsightly, but can choke other aquatic plants and cause the water to become deoxygenated.

Remarkably, tiny duckweed is the food plant for a moth, the Small China-mark *Cataclysta lemnata* and for the specialist beetle the Duckweed Weevil *Tanysphyrus lemnae*

On rivers, duckweed is only ever found in calm backwaters where there is little to no flow. If you are able, introducing some movement to your pond will deter duckweed growth. During spring and summer when duckweed growth is at its peak, this could be achieved by installing a solar powered fountain or pump which can be bought quite cheaply. Not only will this operate at no extra cost during the sunniest, and potentially most duckweed friendly days, but it will also serve to oxygenate the pond during key periods.

Finally, if you are forced to remove blanketweed or duckweed, do so carefully. Whilst it'll never be possible to save every single bit of pond life as you do so, some of the more conspicuous inhabitants such as amphibians, fish, water beetles or bugs can be carefully released. Contrary to popular advice, don't leave removed weed at the side of the pond for many of the nutrients will be released by the plants as they die. Instead, put the removed plants in a compost heap well away from any pond.