Duckweed and Watermeal





Duckweed and watermeal are both free-floating pond plants whose fast growing reproductive capacity can quickly reach nuisance levels. The dense green plant cover is unsightly to the pond owner and a possible cause of a dissolved oxygen problem. The shading of the pond surface can severely limit the normal photosynthesis by submerged plants and algae, causing fish stress and possibly a summer fishkill.

Duckweed and watermeal are typically found in quiet, nutrient-rich wetlands and ponds. They tend not to tolerate moving waters so unprotected windswept ponds or those with lots of flow do not usually experience overpopulation of either species. Nutrients from leaf litter, farmfield drainage, fertilizer, and bird/fish waste can contribute to the rich mucky pond bottom.

Both plants are both hard to control and generally include multiple actions such as:

Physical

- Manual removal with netting or raking
- o Aeration, which disrupts the water surface and limits the growth to the pond sides

<u>Biological</u>

- Grass carp do eat duckweed and watermeal but they cannot consume it as quickly as these plants multiply. Grass carp also prefer more substantial weeds if available and their waste adds nutrients to the pond bottom
- o the application of Macro-Zyme, a beneficial bacteria, which helps to degrade the "muck" on the bottom
- o deter waterfowl from the pond area

Chemical

 Herbicides are often recommended as part of a collective plan but not allowed in many states including NY without a special permit and a licensed applicator. Also, the dead decaying plants will increase the nutrient load of the pond bottom.

Sources: Ohio State Extension, Purdue Extension, Penn State Extension, Missouri DE