

Kettle Ponds: A Natural Legacy

A Guide for Residents and Visitors to Protect Kettle Ponds

Why care about kettle ponds?

Kettle ponds, acidic freshwater bodies that were formed by glaciers 12,000 years ago, speckle the landscape of Cape Cod. In the towns of Wellfleet, Eastham, Orleans, Brewster, and Dennis alone, there are more than 100 ponds. These ponds are used by year-round residents and park visitors, so some human impact on them is unavoidable. By following a set of guidelines, however, that impact can be minimized. Do your part to conserve our water resources.



1. Reduce your nutrient inputs. High nutrient levels, both nitrogen and phosphorus, in ponds can lead to overgrowth of algae. It is best not to add additional nutrients to your lawn and garden, but if you do consider natural fertilizer alternatives, such as grass clippings, leaf litter, and seaweed mulches!

Some best practices:

- ❖ Reduce the area that is kept as lawn, and let some of your yard grow naturally.
- ❖ Plant native Cape Cod grasses. They will thrive and typically require less watering.
- ❖ Apply less fertilizer to an established lawn, since its nutrient needs are less than a new lawn.
- ❖ Apply fertilizer only in mid-spring and/or autumn, when nutrient needs are highest.
- ❖ Refrain from applying fertilizer if heavy rains are forecasted.
- ❖ Deep, less frequent watering is better than light, frequent watering.
- ❖ Allow grass to grow, since longer grass reduces weed growth, requires less watering, and has a greater nutrient filtering capacity than close-cropped grass.

2. Reduce or eliminate the use of hazardous chemicals in your home and garden. Lawn pesticides and leachate from septic systems are two of the major concerns for kettle ponds.

- ❖ Keep your septic system properly maintained.
- ❖ Eliminate the use of pesticides in your yard. Try natural alternatives.
- ❖ Use natural cleaning and household products which are widely available
- ❖ Never dump hazardous chemicals down the drain. Since septic systems are not designed to deal with them, the chemicals will be discharged into groundwater or ponds.

3. Maintain a buffer zone between your yard and the pond. A buffer is a protective vegetated area that filters pollutants and sediments. Without buffer zones, water enriched with nutrients and

chemicals from septic tanks, lawns, gardens, and roads flows directly into the ponds.

Some Buffer Zone Basics:

- ❖ Plant a buffer at least 20' wide. The wider it is, the better it will serve as a filter.
- ❖ Choose plants that are native to Cape Cod. A list of suitable shrubs, trees, and groundcovers can be found at the UMASS Extension website at <http://extension.umass.edu/landscape/fact-sheets/selection-and-maintenance-plant-materials-coastal-landscapes>.
- ❖ Do not apply pesticides or fertilizers to the buffer zone and leave leaf litter where it falls.
- ❖ Keep vehicles out of the buffer zone.

4. Care for the pond by minimizing your impact along the shoreline and in the pond. Plants and wildlife are sensitive to your presence, especially trampling, handling, and removal.

- ❖ Follow marked trails. Foot traffic kills vegetation that keep pond shorelines stable.
- ❖ Do not trample or remove aquatic plants. They control erosion and filter nutrients.
- ❖ Dogs and horses also contribute to the destruction of shoreline plants and slopes. To minimize their impacts, dogs are not allowed in ponds from May 15 to October 15.
- ❖ Teach children to observe living things without touching. Frogs, turtles, and butterflies are only a few of the animals that can be harmed by handling.

5. And just a few more things you can do to protect our ponds.

- ❖ Clean up all trash. Plastics, glass, and metal can harm visitors and wildlife.
- ❖ Pick up after your pet.
- ❖ Use restrooms, not the pond.
- ❖ Rinse off boats when transporting between ponds.

Still need convincing?

Cape Cod is a sole source aquifer. This means that all of our water comes from thin lenses of freshwater held by sand and gravel beneath the land. When a kettle pond is polluted, the whole freshwater system suffers. That may mean that our pollution affects our neighbor's water, or that we pollute our own water. We can be assured that the effects of kettle pond pollution will be felt somewhere and somehow. That is why your understanding, caring, and most of all ACTION are needed to make sure that our water resources are protected!

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