

# KEEP IT HARDY

## A CARE GUIDE FOR OUR NEIGHBORHOOD POND

As neighbors in the immediate vicinity of Hardy Pond, we share special environmental responsibilities; our day-to-day actions have a considerable impact on the unique and sensitive ecosystem around the pond. Even if you live a few blocks away, the natural slope of the watershed combined with storm drains that empty into the pond can make presumably harmless activities a threat. Washing cars, making home repairs, and maintaining lawns and gardens may all contribute to the pollution of Hardy Pond.

Please take a few minutes to discover the simple actions that each of us can take to protect our environment, and insure a hardy future for the pond.

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## Hardy Pond Association Statement of Purpose

The Hardy Pond Association, Inc. was organized by area residents in 1991 to protect Hardy Pond, its natural environment, recreational resources, and water quality. Toward this end we have developed a number of immediate goals:

- assist in the continuation and completion of the Clean Lakes Project;
- clean up and protect the adjoining wetlands and shoreline;
- initiate a regular testing program for water quality;
- encourage proper conservation practices by abutters and users of the pond;
- pursue funding to further deepen the pond and to halt the eutrophication, weed growth and algae blooms;
- keep the neighborhood residents aware of pond related issues and events;
- develop Hardy Pond as an environmental education resource for Waltham.

## Donations and Membership

The Hardy Pond Association (HPA) needs your help. We distribute the *Hardy Ponder* newsletter free in the Hardy Pond neighborhoods and are pursuing a dozen important pond projects. Donations are put to use achieving the goals outlined in our Statement of Purpose. The most important contribution you can make is to become a paid up member of the Hardy Pond Association. We also need members to come to the monthly meetings and help with one or more of our projects.

Membership entitles you to receive our newsletter in the mail, and to a discount on HPA events or products. We keep members up-to-date on pond conditions and projects. For more information call 899-5344.

The Hardy Pond Association, a 501(c)(3) non-profit corporation, is a member of the Massachusetts Congress Of Lake And Pond Associations. (COLAP). HPA meets at 8 PM on the first Tuesday of every month at 104 Lake Street, Waltham, MA—new members are always welcome.

# Don't Feed the Weeds

Excessive phosphorus loading is a fundamental cause of Hardy Pond's explosive aquatic weed growth in recent years. Phosphorus is found in rocks and soil, as well as in plants and animals.

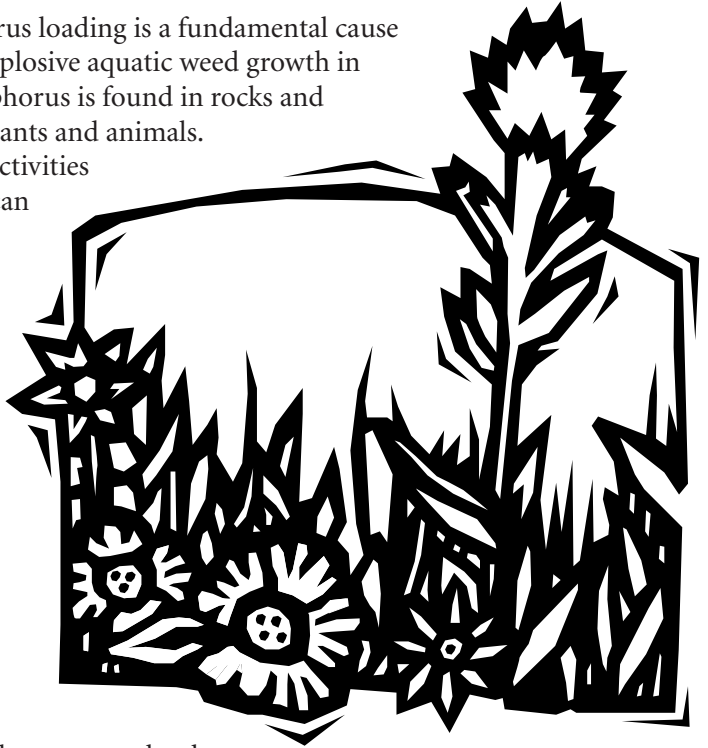
However, human activities and development can increase phosphorus in storm water run-off to ten times its natural concentrations.

In a body of water such as Hardy Pond, phosphorus feeds microscopic algae and other aquatic plants. When they die, they fall to the bottom and decompose. This depletes oxygen levels

in the water which can free phosphorus that was trapped in the sediment.

This "cycle" accelerates excessive plant growth and the filling-in of the pond, a process known as eutrophication. A lack of dissolved oxygen can kill fish in the pond. It also results in the foul stench that residents have experienced during the late summer months around Hardy Pond.

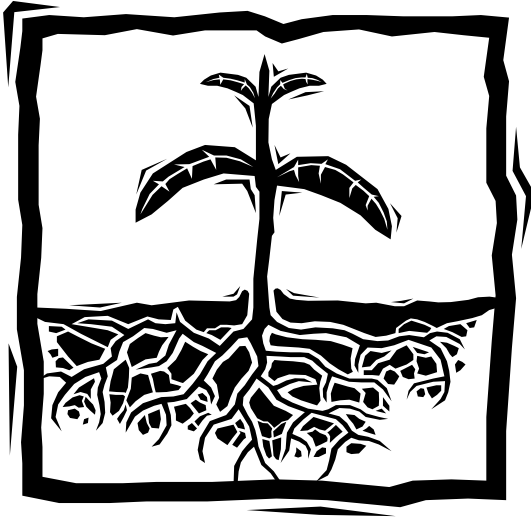
It is important for *everyone* to reduce phosphorus loading of the pond. A typical 50 lb. bag of lawn fertilizer contains 5 pounds of phosphorus; that's enough to result in 50,000 pounds of aquatic weed growth in Hardy Pond!



## **Steps that you can take to prevent excessive phosphorus from entering the pond include:**

- setting up a vegetated buffer zone (VBZ). See page 4.
- following recommended lawn and yard care practices.
- gardening with a "less is more" approach.
- avoiding harmful detergents and household chemicals.

# Vegetated Buffer Zones



One of the most effective means of preventing phosphorus overload is to maintain a vegetated buffer zone (VBZ). If you live near the shore or wetlands of Hardy Pond, you can significantly help the water quality and reduce dense aquatic weeds by planting a buffer zone between your lawn and the pond.

Vegetated buffer zones help filter nutrients and pollutants before they reach the pond, minimizing the impact of pesticides and fertilizers from

our lawns, and oil and grease from streets and driveways. Plants in the buffer zone use the nutrients and slow the surface run-off, providing cleaner water to the pond. Lawns are inadequate buffers, for they only hold soil in place. Grass is not thirsty enough and grass roots are not deep enough to absorb even a fraction of the run-off during a rainstorm. With a VBZ, lawn maintenance will be reduced, wildlife habitats will increase, and visual diversity will be added to the landscape.

## **An effective buffer zone can be created by following these suggestions:**

- Use a variety of native shrubs, ground cover, and trees—because in combination they take up the most water and nutrients. See the next page for plant suggestions.
- Make the buffer zone as wide as possible.
- Leave the VBZ undisturbed—do not rake the leaves and limit foot traffic to a bark-mulched winding path.
- Do not use fertilizers or pesticides in the VBZ.

While it is most important for shoreline and wetland abutters to plant a buffer zone, nearby residents can greatly aid in this effort by planting a similar area on the side of their yard which drains towards the street or Hardy Pond.

## SUGGESTED BUFFER ZONE PLANTINGS

### Trees

- Red Maple (*Acer rubrum*)
- Birch (*Betula* species)
- Black Gum or Tupelo (*Nyssa sylvatica*)
- White Ash (*Fraxinus americana*)
- Willow (*Salix* species)

### Shrubs

- Shadbush (*Amelanchier canadensis*)
- Sweet Pepperbush (*Clethra alnifolia*)
- Red Osier Dogwood (*Cornus stolonifera*)
- Witherod (*Viburnum cassinoides*)
- Highbush Blueberry (*Vaccinium corybosum*)
- Fetterbush (*Leucothoe racemosa*)
- Swamp Azalea (*Rhododendron viscosum*)
- Buttonbush (*Cephalanthus occidentalis*)

### Ground Cover

- Ferns (many species)
- Dewberry (*Rubus hispidus*)
- Pachysandra (many species)
- Daylily (*Hemerocallis*)



## Lawn Care and Hardy Pond

Without realizing it, residents near Hardy Pond that strive for the “perfect lawn” may pose several threats to the life of the pond. A closely-cropped lawn that slopes down to the water’s edge does little to trap petroleum or phosphates in the storm water run-off from driveways and roads. Many finely manicured lawns are regularly over-treated with fertilizer and pesticides. While fertilizers can give a healthy-looking, green lawn, they contain nutrients which can also promote a very green pond. Careless pesticide applications to a yard can result in toxic effects on aquatic life. Thousands of people live in Hardy Pond’s watershed. The effects of fertilizer and pesticide use is cumulative and damages this precious natural resource. If you must use these products, do so sparingly and follow the pond protection guidelines on the next page. Easy and inexpensive alternatives to chemical applications can be found in a good organic gardening book at your local nursery or library.



## Lawn care recommendations:

- If possible, avoid fertilizing your lawn. Try mulching to get the desired results; if you must use fertilizer, use one that contains no phosphorus. Liquid fertilizer, when properly applied, can minimize run-off of excessive nutrients and phosphorus.
- Avoid application of fertilizers or pesticides before a rainstorm. Be aware of the weather forecast.
- Avoid over-application of fertilizers. Have your soil tested to determine what additional nutrients are needed. Contact the Soil Testing Services at the University of Massachusetts at Amherst, (413) 545-2311, or try the U.S.D.A. Soil Conservation Service, (617) 423-1175.
- Avoid application of fertilizers during the summer. Turf grass demand for nutrients is low at this time and unused fertilizer is more likely to end up in the pond.
- Keep vegetable gardens small and avoid the use of herbicides and pesticides, which are harmful to fish, wildlife, pets, and children; many natural alternatives are available. Consider joining the Waltham Community Garden instead. Call 899-5344 for more information.
- Read labels to determine correct pesticide application amounts. More is not always better! Heed all warnings, especially those concerning use near waterways.
- If you hire a lawn care company, find one using Integrated Pest Management (IPM). Lawn care companies offering IPM use focused chemical treatments to target specific pests and their areas of infestation, rather than indiscriminate routine “preventive” spraying.
- Never dump yard waste into the wetlands, water, or along the shoreline of the pond—it is illegal and it contributes nutrients which promote undesirable aquatic weed growth. Over the years, dumping such as this has been a common practice among pond neighbors.
- A convenient way to dispose of yard waste is to participate in Waltham’s curbside recycling program. Leaves, branches, grass clippings, and other debris can be loaded into paper yard waste bags (available in supermarkets and hardware stores), or into clearly marked trash barrels to be collected on recycling days. For more information on recycling, call 893-0004.

# Storm Drains

Whatever's left on the street today will wash into Hardy Pond tomorrow. When it rains, storm drains collect run-off from the street and carry it into the pond. Petroleum from an oil change or a leaky transmission, coolant from a flushed radiator, or phosphate-loaded detergent from washing the car will eventually make its way into Hardy Pond.



You may have noticed that storm drains near the pond carry the cautionary message “Don’t Dump It Here, Keep Hardy Pond Alive.” In 1994 the HPA, in conjunction with the Waltham High School Environmental Club, stenciled the messages as a reminder to residents not to dump yard wastes, toxic chemicals or used motor oil into the drains. Surprising as it may seem, all of these harmful activities have been documented in the recent past.

## **To prevent toxins from entering the storm drains around Hardy Pond, follow these guidelines:**

- Storm drains are designed for collecting storm water run-off only; never use them for dumping automotive or household wastes.
- Never spill oil, or leave residue from solvents or chemicals on your street or driveway.
- Check for and repair any oil leaks under your car or truck.
- To eliminate the possibility of detergents or toxins in water run-off, wash the car at a carwash.
- Leaves, sand, litter, and other street debris should be thrown away or recycled, not swept into the storm drains.

# Recreation

Hardy Pond is host to an abundance of recreational activities. Season upon season, boating, fishing, wildlife watching, as well as ice skating and hockey games have been enjoyed by the community around the pond.

**To protect the future of Hardy Pond and its diverse inhabitants, we must observe the principles of conservation, and practice thoughtful and responsible use of its waters.**

- Leave no litter in the water or on the ice. Make a habit of removing all trash from the pond, even if it was dumped by someone else. Debris such as styrofoam, plastics, bottles, broken glass, cigarette butts, and fishing line are harmful to wildlife, and contribute to the pollution of Hardy Pond.
- Report any fires on the pond to the Waltham Police and Fire Departments. Fires on the winter ice are hazardous and illegal. In the past, residents have burned Christmas trees, wood pallets, tree limbs, picnic tables and construction debris on the ice. Frozen in the ice, they are a danger to skaters. When the ice melts, ashes and unburned debris sink into the pond, where they gradually decompose, adding nutrients and accelerating aquatic weed growth. Fires on the ice have been ignited with gasoline and other flammable solvents—these are highly toxic to aquatic life.
- Gasoline powered motorboats are prohibited on Hardy Pond. Because the pond drains and refills very slowly, it is particularly vulnerable to petroleum contamination. Any gas or oil leaked from a motorboat will remain in the water and the sediment, polluting the pond for years to come. While electric trolling motors are permitted, a canoe is the ideal craft for traversing the pond and enjoying the scenery around it.
- Avoid lowering boat trailers into the pond as they often carry invasive nuisance weeds from other bodies of water. Hand carry boats into the pond and always check their hulls to remove hitchhiking seeds and plants.



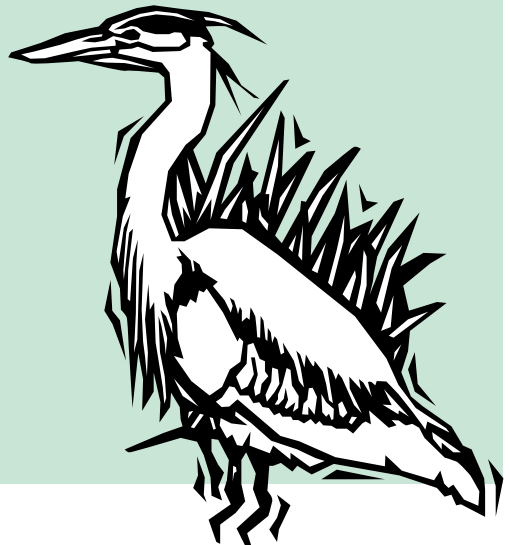
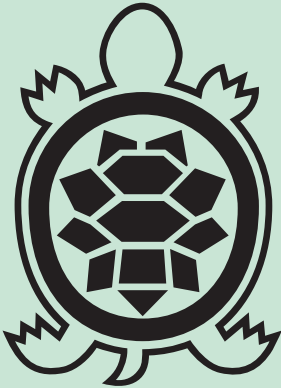
# Wildlife

Hardy Pond is home to an incredible variety of wildlife, including birds such as ducks, herons, and swans, mammals such as muskrats, groundhogs, and squirrels, as well as fish, frogs and turtles.



## To make sure Hardy Pond's inhabitants continue to make their home here, follow these guidelines:

- Don't feed any wildlife, including geese and ducks. Feeding these birds disturbs migration patterns. Also, they learn to depend on humans for food rather than eating the diet nature intended.
  - Stay away from nesting areas. In particular, Hardy Pond's swans like their privacy, but be sure to stay clear of all the pond's nests, burrows and egg beds.
  - Don't disturb or approach wildlife. To view wildlife, use binoculars, or even the zoom lens of a camera (to capture the moment without disturbing the subject).
  - Turtles are not toys! Even the big snapping turtles (some of whom are 100 years old!) deserve our respect and should not be played with.
- When fishing Hardy Pond, practice catch-and-release. Also, be sure to take any remnants of monofilament line with you, as this is very hazardous to wildlife.
  - If a bird, reptile, or animal is a nuisance or is injured or sick, call the Waltham Animal Control at 893-4600. Let them handle the problem.



# Caution: Hazardous Materials

During a recent severe New England flood, many households around the pond hurried to remove possessions from the rising water in their basements. Unfortunately, in several instances toxic substances such as gas, oil, pesticides, fertilizers, as well as paints and other toxic chemicals leaked into the flood waters.



## To prevent contamination of the water in and around Hardy Pond:

- Store gas powered equipment and hazardous materials in a safe, secure area above the high-water mark.
- Dispose of paint and solvents in a responsible manner; never pour them down the drain, into storm sewers, or onto the ground.
- Latex paint can be dried out in a well-ventilated area, then put in the trash.
- Let used paint thinner settle. Once it separates, pour off the clear liquid for reuse. Let the solid residue dry out in a well-ventilated area, then put in the trash. Use caution, these materials are highly flammable.
- Used motor oil should be taken to a service station or auto parts store for recycling.
- Avoid using or purchasing detergents and household chemicals that contain phosphates.
- When possible, avoid purchasing paint strippers, solvents, or other highly toxic or flammable materials; they're dangerous to have around, and difficult to dispose of. Look for solutions that are more environmentally friendly, and purchase products that are less toxic.
- The City of Waltham Recycling Department has found three places that will take used motor oil, and four places that will take batteries. See next page for closest locations to Hardy Pond.



# Emergency and Resource Phone Numbers

**Congress of Lake and Pond Associations (COLAP), (800) 845-2769,** for general pond & lake information

**Department of Environmental Protection Emergency Response, (617) 292-5851**

**Department of Environmental Protection Hotline, (617) 292-5777,** for information on environmental regulations

**Environmental Law Enforcement Hotline, (800) 632-8075,** to report repeated dumping or pollution

**Fisheries & Wildlife, (508) 792-7270,** to report fish kills or other wildlife concerns

**Hardy Pond Association, 899-5344,** for more information about Hardy Pond

**Soil Testing Service, UMASS Amherst, (413) 545-2311,** for soil testing

**State Representative David Gately, (617) 722-2235, 891-4773**

**State Senator Susan Fargo, (617) 722-1572, 259-9623**

**Waltham Animal Control, 893-4600,** for Animal Control

**Waltham City Hall, 893-4040,** for Public Works, Health, Conservation Commission



**Waltham Community Garden (GROW) 899-6230,** Gene Burkhart

**Waltham Fire Department, 911,** for in-pond rescue, reporting ice fires. Non-emergency phone is 893-4105

**Waltham Police, 911,** to report dumping, gas-powered boats, emergencies. Non-emergency phone is 893-3700.

**Waltham Recycling Hotline, 893-0004,** for composting and recycling information

## Waltham Businesses

**Recycles motor oil, oil filters, and clean antifreeze**

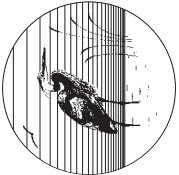
Tom Lyons Inc., 894-4900

**Recycles NiCad, button and lithium batteries**

Radio Shack,  
899-4620

call 893-0004  
for others





**HARDY POND ASSOCIATION  
104 LAKE STREET  
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