

Commercial Farm Pond Management Series

## Farm Pond Safety and Responsibility

Farm operators are responsible for activities that occur on their property. Even if the farm operator has no knowledge of a person using a pond for recreation, in the event of an accident, the farm operator can be held liable if safety measures were not taken in advance. Young children who live on and near a farm are especially at risk with regards to farm pond safety. Farm operators can take several steps to reduce the risk of injury and death associated with farm ponds. Adult supervision, fencing, signs, and safety equipment can make a big difference in providing pond safety and peace of mind.

## Swimming

Although swimming is one of the most popular recreational uses of a farm pond, it is the activity that holds the greatest risk for injury and death. Recent statistics show that 60 people are killed in New York in non-pool swimming accidents each year. Most of the victims are children, but adults and seniors are also at risk of drowning in farm ponds.

All children must be supervised constantly by adults when swimming in a pond. Hazards like deep holes, stringy weeds, docks, and rafts -- coupled with loss of balance, panic, and fear - can cause injury or death. It is difficult to monitor underwater conditions, so adults must be sure they can see children as they swim, dive, and play games. Near ponds, children are easily distracted, even when given firm commands from an adult. It is important for adults to recognize themselves as responsible for a child's safety around ponds. Adult drownings are also possible, so adults should be discouraged from swimming alone.

Ponds used for swimming should have a designated swimming area, roped off with bright, floating nylon rope. The swimming area should be maintained to correct bottom irregularities, minimize aquatic weeds, and identify the area for adults. A "safety spot" provides ready instructions and equipment for pond swimmers. Safety equipment may include a long, stout "reach" pole, a substantial length of nylon rope with a life ring or other floatation device on one end, emergency telephone numbers and phone locations. Rules about pond use should be reinforced regularly to

both young people and their families in the neighboring area.

Remote farm ponds are attractive to older youths and adults for swimming or fishing. To reduce liability, farm operators should place fencing and signs around all ponds to prevent trespassers from using the pond without permission or supervision. The fencing should be safe, unobstructed, and placed far enough back from the pond edge to allow access and maintenance. Normally, fences are located at the base of the dike and six to ten feet away from other pond edges.

Prominent signs should warn of hazards, with large, bold lettering on a bright background. Use signs to identify "No Swimming," "Swimming Area," "Danger," and other important warnings.

Some farm ponds should never be used for swimming. Ponds used for livestock should be off limits to all human activity. Additionally, ponds that are used for



pesticide applications, or consistently produce a foul odor, are excessively algae-laden, or are cloudy should not be used for swimming.

## Ice-skating

If you plan to use your pond for ice-skating, establish a strict standard for safe skating. It is difficult to determine ice thickness from the shore or even standing on the pond surface. Ice can melt from both

the top and from the bottom. Test holes are necessary to accurately measure ice thickness. Use a chisel, drill, or ice auger to check the ice. Pond ice should be clear and thick – at least 4" to support one adult with no equipment.



To form safe ice, the weather must be calm with an air temperature consistently below 25° F. Ice is normally near its melting point, so temperatures above 25° F do not create safe ice. Deep water freezes much more slowly than shallow water and spring-fed ponds are likely to freeze very slowly as warmer water is constantly flowing into the pond from the spring.

After ice has formed, new snow should be removed as soon as possible, otherwise, the surface may become coated with weaker "snow ice." This cloudy ice is formed when wet snow falls on top of cold ice. Snow ice tends to be weak and melts easily.

Removing snow from ice can pose a hazard if done improperly. Wherever snow is piled on the ice, it acts as an insulating blanket and will soften some of the ice underneath, making the pile very difficult to move. Always clear a larger area off the ice than you think you will need. Subsequent snow removals will not go as far as the first few. Spread snow piles out, so the weight does not buckle one part of the pond ice.

Cracks on frozen ponds are normal as temperatures change and the ice settles. However, cracks can become a hazard to skaters. Small cracks can be resurfaced with a bucket of water spread evenly when temperatures are near or below 20° F to ensure a smooth surface.

One of the most dangerous conditions around ponds in the winter is ice is separated from the shore. The separated ice is very likely to be too weak for human activity. Salt runoff, algae content, silt, and other impurities can weaken ice. Monitor water quality

during the summer to assure good ice during the winter.

Ice becomes weaker with more activity scouring the surface. Hockey, ice fishing, and paired skating place more weight on a particular portion of a pond ice surface. The ice sheet must be thick enough to accommodate these group activities.

Motorized vehicles, like ATV's, snowmobiles, snow blowers, and garden tractors place great stress on ice surfaces and can unexpectedly fatigue the surface. They must be supported by at least 6 inches of hard ice.

Avoid ever being on pond ice alone or at night. Mishaps happen quickly, especially for young children who may not be aware of ice dangers and are least able to rescue themselves. Signs and fences should be used to warn children and solo adults from standing on frozen ponds. Keep a lightweight ladder attached to a rope near frozen ponds as a rescue device. If you fall through the ice, call for help loudly and constantly. If possible, move to a stable ice area and roll onto the surface, wet clothes and all. Seek emergency medical assistance immediately.

Prepared by Jim Ochterski, Extension Resource Educator, South Central New York Agriculture Team, December 2002. Production of this fact sheet was funded by a Cornell Small Farms Program Grant.

If you are interested in additional information about commercial farm pond management, please refer to the other fact sheets in this series:

Farm Pond Maintenance Routines Calculating Water Volume in Ponds Farm Ponds and Fire Suppression Meeting Small Farm Needs with a Pond

You can access these and other pond management topics on-line at http://pond.dnr.cornell.edu