

Fall and winter care of water gardens

Many gardeners are enjoying a renewed interest in water gardening. Water adds a special effect to the landscape and fish are easy-to-care-for pets. A properly functioning water garden takes care of itself naturally throughout the growing season. Submerged plants and scavengers help keep algae populations from getting out of hand. However, water gardens do require late season attention for their survival.

Keep falling leaves and twigs out of the pond to prevent injury to the fish. Prevention is also easier than having to clean the entire pool in the fall. Netting stretched across the pool is an easy preventative to catch leaves or use a skimmer to remove leaves on a regular basis.

If your pond contains fish, be sure to feed them extra food beginning when temperatures cool and continue until the water temperature drops below 45 degrees F. This allows the fish to build up additional fat stores for winter survival. If the fish are to remain in the pond throughout the winter, it is necessary to keep an area free of ice throughout the winter. This allows the exchange of gases such as carbon dioxide, methane and hydrogen sulfide which are produced from decaying organic matter. The build up of these gases is toxic to fish. A one foot diameter opening per 100 square foot of pond surface area is adequate.

Stop fertilizing water garden plants when the daytime water temperature drops below 60 degrees F. This will give plants the opportunity to go dormant. As the leaves of hardy plants yellow or are frozen, cut the leaves off back to the crown.

The short, small leaves produced late in the season should remain attached. Lower hardy plants to the bottom of the pool where they will survive the winter. If there is danger of the pool freezing solid, remove the plants, in their containers, from the pond and place them in a non-freezing area. Put the containers inside a plastic bag and cover with moist material such as newspapers or peat moss to retain moisture.

Tropical water lilies and other non-hardy water plants can be overwintered in various ways. The goal is to keep the plant alive, but not growing vigorously. Plants can be kept in a washtub, tank or even in an aquarium in a greenhouse or under artificial lights. Plants need light for 12 to 18 hours. The water temperature should be maintained around 70 degrees F. Plants which form tubers, such as tropical water lilies, can also be stored as a dormant tuber. The plants should not be fertilized after August. This forces the lily to form a tuber. Allow the plant to remain in the pond until all leaves are killed by frost. A hard tuber must be present in order for the plant to survive. Once tuber formation is complete, remove it from the container and wash it off. If the tuber has roots or stem tissue attached, let it air dry for a few days and then break the roots and stems off. Place the tuber in a jar filled with distilled water



and store it in a cool (55 degrees F), dark location. Check the container regularly and replace the water if it is discolored. In the spring, place the container in a sunny warm location. When sprouts form, plant the tuber in sand. Place the planted tuber in a container of water so that developing leaves can float. When the leaves have grown to the water's surface and white feeder roots can be seen, remove the plant from the tuber and plant it into a standard container. Place the lily in the outdoor pond when the minimum water temperature is 70 degrees F or more.

If the pond has an inch or more accumulation of silt, leaves or debris, the pond requires cleaning. Place some of the original pond water into a holding tank for the fish. Cover it so fish don't jump out. Remove the remaining water from the pond. Remove and cover plants with wet newspaper or other moist material and place the plants in a shady location. After all the water is removed, scrub the pool floor with a stiff brush and water. Leave the algae growing on the side of pool. Rinse the pool and drain once

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Household invaders

It is once again the time when insects inadvertently enter homes and buildings from the surrounding landscape. Common accidental invaders include boxelder bugs, spiders, millipedes and elm leaf beetles.

Accidental invaders are generally harmless to people and property. They do not feed on people, pets, houseplants, stored products or furnishings. They cannot sting and they do not carry disease. Accidental invaders cannot reproduce indoors. They are nuisances just by their presence especially when they occur in large numbers.

The preferred management for accidental invaders is prevention; stop them before they enter the house. Typical exclusion or pest-proofing activities include use of tight-fitting doors and windows; sealing openings and cracks around pipes, wires, windows, doors, chimneys and foundations; repairing or replacing window, door and vent screens; and keeping siding, eaves and soffits in good repair.

Residual insecticide barriers can supplement pest-proofing and may be applied by a profes-

sional pest control firm or by the homeowner. Insecticide protection is short lived and may have to be repeated. Homeowners may spray permethrin, chlorpyrifos (Dursban) or diazinon around the home's exterior. Additional insecticides are available to commercial pest control operators.

Treat the southern and western sides of residences where insects are most common. Apply the insecticide according to label directions to siding, foundation, windowsills, door thresholds and to the lawn or landscape several feet from the building. Insecticides must be applied before insects begin to enter buildings to be effective (early to mid-October for boxelder bugs, millipedes and spiders).

Direct application of insecticide to clusters of insects outside on the siding and foundation may reduce the outdoor population and limit the number that will get into the house. Begin spraying as the insects congregate in late summer and repeat as necessary. The insecticides mentioned or a soapy water spray (5 tablespoons



of liquid detergent per gallon of water) can be used outside. The soap solution kills only the bugs sprayed. It has no residual effect and does not prevent others from coming to the site.

Remove insects that have already entered the home with a dustpan or vacuum. A household aerosol spray containing pyrethrin, resmethrin or other materials labeled for indoor use provides some relief, but is not a long-term solution to the problem. Aerosol sprays do not control concealed pests. Use insecticides indoors sparingly.

Insects that emerge from overwintering sites inside a home during winter and spring, all entered the building the previous fall. They did not reproduce indoors. Unfortunately, there is no practical method to control insects before they emerge. (DJ)

Acresage Insights



Tractor safety tips (part 10)



Tractors are one of the most important pieces of equipment on a farm, yet they are also among the most dangerous. More deaths are caused by tractors than by any other type of farm accident. It is, therefore, imperative that tractor owners routinely check their tractors and keep in mind the following safety guidelines:

If the tractor is equipped with a front-end loader, operate the tractor in a down position. When the loader bucket is up, the tractor's center of gravity moves to a higher position. This makes the tractor unstable and subject to side rollover. If the bucket must be up to complete a task, operate the tractor in a lower gear, do not turn sharply and return the bucket to the down position when possible.

Tractors are designed to tow loads from the rear hitch only. Never hitch a load to the axle or seat as this will cause the tractor to upset backwards. Always match your load to the tractor.

Tractors that are too small for the load will have problems stopping once the load begins to move. If the tractor needs extra weight for balance, add front weights as necessary. Balance the weight of the load on the trailing implement in order to minimize the stress at the hitch point.

Only hitch equipment to the tractor at the draw bar unless the equipment has been specifically designed to attach to the three-point hitch. Draw bars can be attached to the lower arms of the three-point hitch. Inadvertently, the three-point could be raised increasing the potential for a rear rollover. Attaching equipment higher than the draw bar can produce enough torque to cause it to roll over to the rear. (DJ)

Transplanting peonies

The peony has been a popular perennial in American gardens since the 1800's. The peony is hardy, dependable, long-lived and easy to grow. Gardeners value the peony for its large, colorful flowers in spring and attractive, season-long foliage.

Peonies can be left undisturbed in the garden for many years. Occasionally, however, it becomes necessary to move established plants. Peonies shaded by large trees or shrubs bloom poorly and should be moved to a sunny site. The redesign of a perennial bed or border may require moving the peonies. Large, old plants may become overcrowded and flower

poorly. Large, poorly blooming peonies should be dug, divided and transplanted to improve performance.

Moving established plants is a simple procedure. Cut the peony stems near ground level in September. Then carefully dig around and under each plant. Try to retain as much of the root system as possible. Promptly replant the peony in a sunny, well-drained site.

Division of large peony clumps requires a few additional steps. After digging up the plant, gently shake the clump to remove loose soil from the root

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