Water is a very important part of the golf course. Water hazards add interest and challenge to the game, but ponds and streams on the course also provide food, cover and nesting habitat for birds.

When creating water gardens for wildlife, be sure to keep water quality in mind, and work to prevent erosion. Depending on the aquatic wildlife you want to maintain, think about the nature of the pond’s bottom, and water depth, temperature and pH. Think about plant selection during the pond design process. Design the garden to provide appropriate water depths for various aquatic plants, and think about the amount of moisture in the soil around the pond at all times of the year.

Plants for Ponds

Water gardens are not complete without plants. When selecting plants, keep in mind that some plants perform best in wet areas adjacent to bodies of water, while other plants do best in various depths of water. Stick with a reputable nursery to select the best water plants. Here are just a few plants you might consider to plant in your pond; these are selected for their value to birds.

**Wapato** (*Sagittaria Latifolia*) grows in water as deep as 18 inches. Its starchy tubers are important food for black ducks, mallards and wood ducks. **Deep-Water Duck Potato** (*Sagittaria Rigida*) is a related plant that produces small yellow tubers which are eaten by waterfowl.

**Hard-Stem Bulrush** (*Scirpus Acutus*) also does well in water up to 18 inches deep. It produces seed that is eaten by waterfowl. It also provides excellent shelter for water birds.

**Cord Grass** (*Spartina Alterniflora*) does best in shallow water. It is a large plant, reaching a height of 4-6 feet. It is especially ornamental at the edge of a pond, and it provides cover and food for waterfowl.

**Cattails** (*Typha Latifolia and Typa Augustifolia*) provide cover for waterfowl, game birds and songbirds. They should be planted with care, as they can be very aggressive. To control their spread, manage water depth, since cattails do not compete well in dry soil or in water deeper than 18 inches.

**Wild Rice** (*Zizania Aquatica*) should be planted in water 6-18 inches deep. It produces excellent seed not only for people but also birds such as black ducks, teals, wood ducks, redwing blackbirds, bobolinks and song sparrows.

Plants for the Water's Edge

Many plants, both native and alien, do well in wet and moist areas adjacent to ponds. These plants provide beauty in the landscape, cover and nesting sites for birds, and food for birds at various times of the year. This list of some of the best plants for the water's edge starts with low-growing groundcovers and progresses to tall trees. This vertical effect must be considered because a combination of heights is important to many birds. Orioles, for example, nest high in trees but feed mostly on the fruits of shrubs and understory trees.

Groundcovers for the water garden include bunchberry (*Cornus Canadensis*), which provides excellent food for sparrows, thrushes and vireos. If you are fortunate enough to have resident swans, they feed heavily on mosses. **Wintergreen** (*Gaultheria Procumbens*), **Partridgeberry** (*Mitchella Repens*) and **Bearberry** (*Arctostaphylos Uva-Ursi*) all are superb native groundcovers that provide berries for grous and related birds.

Waterside perennials provide great color for the landscape and also seed to feed birds. Some good perennials for these habitats are **Yellow Flag** (*Iris Pseudacorus*), **Blue Flag** (*Iris Versicolor*), **Turtlehead** (*Chelone Glabra*) and **Queen-of-the-Meadow** (*Filipendula Ulmaria*). A simple large planting of **Joe-Pye Weed** (*Eupatorium Purpureum*) provides stunning white flowers in early summer, followed by attractive purple-red fruits in late summer.

Shrubs like **Red Osier** (*Cornus Sericea*) and **Winterberry** (*Ilex Verticillata*) are superb landscape plants, providing excellent winter color and fruit for birds such as bluebirds, catbirds, robins, thrushes and waxwings. They thrive in wet locations. In more well-drained areas near bodies of water, good bird food can be provided by several shrubs. **Bayberry** (*Myrica Pensylvanica*) feeds bluebirds, catbirds, chickadees, meadowlarks and tree swallows. **Elderberries** (*Sambucus Canadensis*) are eaten by pheasants, bluebirds, cardinals, catbirds, grosbeaks, kingbirds, phoebes, robins, sparrows, thrushes and waxwings. **Snowberry** (*Symphoricarpos Albus*) yields fruit in fall and winter, providing food for pheasants, finches, grosbeaks and robins. **Manbiburnum** species produce fruit for cardinals, robins, thrushes and waxwings.

Small trees for waterside gardens include **Mountainash** (*Sorbus Aucuparia*), whose fruits are favored by (Continued on Page 7)
grosbeaks, thrushes, waxwings and finches. Shadblow (Amelanchier Canadensis) produces fruits that are delicious to people, but they are usually eaten first by bluebirds, cardinals, catbirds, crows, bluejays, orioles, robins, thrashers and woodpeckers. Fruits of the Sumacs (Rhus Species) feed turkeys, bluebirds, cardinals, catbirds, purple finches, phoebes, robins and vireos.

Trees for water gardens include Balsam Fir (Abies Balsamea). This tree is not refined enough for highly visible parts of the landscape, but in wilder areas it provides cover and food for nuthatches and chickadees. A better evergreen for the landscape is White Pine (Pinus Strobus), which attracts mourning doves, chickadees, grosbeaks, nuthatches and pine siskins. Birches (Betula Species) feed redpolls, chickadees and siskins; River Birch (Betula Nigra) is particularly good for moist soils. Eastern Hemlock (Tsuga Canadensis), which tolerates considerable soil moisture, attracts pine siskins and chickadees. Maples (Acer Species) yield seed that feeds bobwhites, evening grosbeaks and nuthatches.

**Birds Attracted to Ponds**

Your efforts at creating water habitat for birds will be rewarded by the presence of both resident and migratory birds. The serenity of the water provides an excellent early-morning place to watch birds and other animals.

The green-backed heron spends summers in most of the eastern U.S. It is attracted to all water sites, including ponds, lakes and swamps. It is also adaptable to populated areas, and is sometimes found in backyard ponds in cities. The green-backed heron requires some cover, which can easily be provided by cattails, shrubs and grasses. Floating plants provide cover for the young fish, frogs and invertebrates which form the basis of the heron's diet.

Mallards are found throughout the continental U.S. They build their nests in dense vegetation. Mallards feed on a wide variety of vegetation, and also on nymphs and larvae of aquatic flies and beetles.

Wood ducks summer in Minnesota, along with golfers. They are shy, and are most likely to be seen in woodland ponds or river backwaters. In nature they tend to nest in cavities high in trees, but they do nest in boxes placed on posts 2-5 feet above water level. Wood ducks eat acorns, beech nuts, water plants, bulrushes, pondweed and water lily seeds.

American kestrels are generally found in open grasslands where they hunt for small mammals and birds, but during their migrations they feed on high numbers of dragonflies. Since dragonflies spend a large amount of time near ponds, you may see kestrels near your ponds for a few weeks in the fall during their migrations.

Killdeer are usually found in large open areas, often nesting in areas quite close to people. Golf courses are common nesting sites. Killdeer feed on insects and crustaceans. Because many insects require water to complete part of their life cycle, water gardens in open areas often attract killdeer.

The eastern kingbird, which goes by the redundant zoological name Tyrannus tyrannus, is a bird of open areas. It nests in trees near water. Since it feeds on insects, open water and flowering plants are important elements of a landscape created to attract these wonderful birds.

Purple Martins are our largest swallows and favorites of bird watchers. They feed primarily on mosquitoes, which are prevalent in areas with ponds that provide habitat for their immature stages.

Tree swallows are found throughout the northern U.S. and Canada. They are attracted to places with open water and snags for nesting. If your landscape is populated by woodpeckers, you may one day see tree swallows, since they often nest in old woodpecker nest holes. Or, you can supply nesting boxes. Tree swallows eat insects while in flight, but they also feed on bayberry fruits in the fall.

Barn swallows are found throughout most of the U.S., and they nest almost anywhere. Like other swallows, they eat primarily insects, which makes them likely candidates for the water garden.

The common yellowthroat is found throughout the U.S. With its yellow underside, brown back and black-masked face, the male is unmistakable. Common yellowthroats prefer open wetlands where insect populations are high. They frequent clumps of cattails and other thick, low plants.

If your water garden doesn’t attract any other birds, it is sure to attract red-winged blackbirds. They are typically found in cattail marshes, but they frequent many drier habitats as well. Red-winged blackbirds can be attracted to a site with a seed feeder, but they eat more insects than seeds.

**ATTENTION:**

The September 15th Stodola Research Scramble on “The Classic” course at Madden’s on Gull Lake will be a SPIKELESS TOURNAMENT. Change your shoes now and enjoy the game of golf!