# Habitat Enhancement For Water Birds

Audubon Society of New York State

Loss and destruction of water bird habitat represents the largest problem facing water bird populations today. Pollution and development in wetland areas has had severe consequences for the many species of shorebirds, ducks and geese who stop at wetlands across the country on their long spring and fall migrations. In addition, an abundance of predators (such as mongooses, cats, dogs, pigs, rats and bullfrogs) has helped to push many water bird species into extinction or threatened status.

The nesting success or number of water birds produced each year depends on the amount of quality habitat available on the breeding grounds. Areas for migration and wintering are also critical for ensuring the survival of sufficient numbers of water birds for breeding the following spring.

The value of wetlands or ponds as water bird habitat mainly depends on the number and kinds of plants present. Not all aquatic plants are alike in their usefulness. While certain plants provide both food and cover, many offer only one or the other. Cover plants are needed for protection from predators and weather, and as nesting sites. Most water birds prefer cover that grows in and along the water edge.

Water birds eat a variety of foods which include all parts of aquatic plants from the roots to the seeds. Insects, small animals and agriculture crops including turf, rice, corn, wheat, barley, milo, safflower and soybean represent part of the diet of many waterfowl and other water birds.

### What You Can Do

Habitat management or enhancement for water birds involves creating, maintaining or improving wetland or pond habitat to provide the essential elements of water, food, cover and protection for water birds. The following suggestions will help you to maintain or improve water bird habitat on your property:

• Keep the water level of a pond stable to encourage the growth of aquatic vegetation.

• Provide food, cover and nesting areas for water birds by planting aquatic vegetation and wet site tolerant plants at the pond edge and on the banks.

• Fence edges of ponds with sensitive nesting areas or sensitive plant materials to keep golfers from disturbing nesting species or trampling important habitat area.

• Do not let ponds or marshes be drained for repair or other purposes during important migration times (winter) or breeding season (spring).

• Provide resting sites for water birds, such as bare spots on the shore, floating logs, rafts or islands.

• Build a pond or marsh to create habitat for water birds.

Remember to provide a shelf no greater than 18" deep as most water birds can't feed in water or greater depth. Ponds with steep banks also inhibit vegetation growth, important for food, cover and nesting areas.

#### Mallards

Mallards prefer to breed near shallow ponds, lakes, marshes or flooded fields. Their nest is usually near water and consists of cattails, reeds and grass, and is concealed by vegetation. Mallards are seasonally monogamous, but switch mates each year. Their diet consists of sedge, grass and aquatic vegetation, as well as aquatic invertebrates and insects.

#### **American Black Ducks**

American Black Ducks range from southern Texas to northern Canada, but declining numbers have been reported due to aerial spraying for spruce budworm, habitat destruction, acid rain, over hunting, competition and hybridization with mallards. However, black ducks continue to be common in most water habitats including wetlands, ponds, lakes and rivers.

#### **Northern Pintails**

Northern Pintails eat about 90% vegetation, including seeds, aquatic plants and sedge. They usually raise one brood of six to nine young per year, and the male deserts the female early in incubation. Pintails rank third as a game bird species after Mallards and American Black Ducks, in both abundance and distribution.

# Wood Ducks

Wood Ducks verged on extinction in the early 1900s due to loss of habitat through forestry practices and development. Fortunately, they have made a comeback and readily use nest boxes. They prefer to breed in wooded swamps, flooded forests, ponds and marshes, and usually raise only one brood per year. Wood ducks eat seeds, acorns, berries, grain, aquatic and terrestrial insects and other invertebrates.

#### **Mute Swans**

Mute Swans are not native to North America, but were introduced from Europe for their "ornamental" value. However, they are now well-established in the wild in lakes, ponds, marshes and slow-moving rivers. Mute swans eat primarily aquatic vegetation, and nest on the ground near water. Their reproductive success improves with age (Continued on Page 25)

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through the first four nesting attempts. Pairs form in the fall and territories are fiercely defended.

# **Great Blue Herons**

Great Blue Herrons feed on fish, amphibians and aquatic invertebrates such as crayfish, snails and insects. Herons nest communally in a "rookery," building bulky nests of sticks and leaves high in trees or snags. After the breeding season, however, herons go their separate ways. They are generally solitary feeders and are most often seen during migration, and in late summer when breeding and nesting activities have ceased.

## **Great Egrets**

Great Egrets, large, stately white herons with yellow bills and black legs, inhabit marshes, lakes, ponds, coastal shores and mud flats. Here, they slowly wade in shallow water, feeding on aquatic invertebrates, fish and insects. Like most herons, egrets nest in colonies and raise approximately three young per year. Since the 1972 ban on DDT, egret breeding success has greatly increased.

# **Sandhill Cranes**

The Sandhill Crane, one of the largest water birds,



**RUNNER-UPS AT ALBION RIDGES** were, from left, Jon Almquist, MTI Distributing Co., Cary Femrite, Turf Partners, and Charles Schultz, Indian Hills Country Club.

has a wingspan of 6-7 feet. These birds form long-term relationships with their mates, and young birds remain with adults for up to 10 months after birth. In wet prairies, fields and wetlands, sandhill cranes eat a varied diet consisting of aquatic invertebrates, plants, insects and small mammals. Drainage of wetland areas has resulted in declining numbers of this species.

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