



# Lake Association News

A newsletter for the Association for the Preservation of Clear Lake

SUMMER/FALL 2010

## BMP FOCUS: FILTER STRIPS

You have probably heard the term BMP (best management practice) used before to explain conservation practices that are used in urban and agricultural areas to reduce soil loss, improve water quality, and provide wildlife habitat. Today, there is a large menu of BMPs available to landowners. One of the least complicated, yet most beneficial practices available, is called a filter strip. A filter strip is an area planted to grass on either side of a water body such as a river, stream, drainage ditch, pond, etc. The width of the filter strip can range from 30 to 120 ft. The practice is open for enrollment at anytime, as long as the area where it will be installed has previously been in row crop production. The filter strip is seeded to native grasses that require very little maintenance once established. Filter strips provide a buffer between the crop field and the water course that runs through it. This buffer not only helps keep sediment, nutrients, and chemicals from running off the field and entering the water, but it also provides important habitat for wildlife. The program payments are based on the type of soils where the practice is applied. In general, the payments fall in the range of \$175-\$200/acre. Contact the CLEAR Project at 641-923-2837 Ext. 3 for more details.



Native Grass Filter Strip

## Aquatic Plants: “Weeds”, or A Vital Part of the Lake Ecosystem?

To some, perhaps many, aquatic plants are simply nuisance “weeds” that interfere with boating or other recreational activities. A closer look at the role aquatic vegetation plays in a lake ecosystem reveals how vital it actually is. One of the most important functions of vegetation is habitat. For several species of fish, beds of aquatic vegetation are vital for every stage of development. Some species, like yellow perch and northern pike, lay their eggs on aquatic vegetation. Once hatched, numerous fish species in the larval stage seek out vegetation as a food source. A few species, like sunfish, eat the plants themselves, but most feast on the invertebrates that live on and near the plants. For both larval and young fish, aquatic plants provide cover, giving them an area of refuge from predators. The importance of water plants to young fish is confirmed each fall when the DNR performs a “young of the year” fish survey at Clear Lake. Seine nets are used to capture young fish near the shoreline at about a dozen locations around the lake. The amount of fish

caught near vegetation beds greatly exceeds areas where little or no vegetation is present.

In addition to fish, several other species rely on aquatic vegetation. Many plants produce seeds and tubers (roots) that are eaten by ducks, birds, muskrats, and others.

Another vital role water plants play is improving water quality. Certain water plants, like bulrushes, can absorb and break down polluting chemicals. Aquatic plants utilize nutrients in the sediment and water for growth, making them unavailable for algae. This reduces algae abundance and improves water clarity. Aquatic plants also maintain water clarity by preventing the re-suspension of bottom sediments. Aquatic plants, especially rushes and cattails, dampen the force of waves and help prevent shoreline erosion. Submerged aquatic plants also weaken wave action and help stabilize bottom sediment.

An often overlooked aspect of aquatic plants is the aesthetic benefits they provide. The visual appeal of a lakeshore often includes aquatic plants. Plants such as water lilies have flowers that

many people enjoy.

The density and diversity of aquatic plants at Clear Lake have been surveyed annually by Iowa State University for the past few years. The research shows that vegetation is increasing. Limnologists from the Wisconsin DNR were invited to review Clear Lake restoration efforts and noted that although vegetation is increasing, there is less of it than they would expect for the amount of water clarity Clear Lake has. The Iowa DNR and the APCL are considering conducting some research to determine what is restricting the growth of the plants. The research would consist of placing wave barriers and carp exclusions in a couple shoreline areas to see if vegetation increases as a result. This research will likely take place within the next two years.



Clear Lake aquatic vegetation

## Ventura Marsh Construction Update

Year one of construction activities for the Ventura Marsh project is now completed. Anderson Excavating Co. from Omaha, NE has spent most of this construction season focusing on installing a new outlet structure under county road S14. The structure will serve as the new primary outlet for Ventura Marsh and will be connected to the pump station when that is built next year. The site for the pump station was also prepared this year. The site has been preloaded with about 6 ft of fill to account for the significant amount of settling that is expected to take place where the pump station will be built.

The weather conditions have been favorable for construction this year and according to Corps of Engineers project managers, the project remains on schedule to be completed by next fall. Several activities are scheduled to be completed next year, including the replacement of the existing outlet structure and fish trap area with a new controlled spillway with rough fish control features. The controlled spillway will serve as the emergency overflow once the pump station is operational. The pump station is scheduled to be installed next spring and be operational by the fall of 2011. Other 2011 project features include dredging a flow channel from the pump station to the deepest part of the marsh to ensure complete water removal from the marsh when desired. The completion date for all the above mentioned projects is November 8th, 2011. Additional improvements such as installing a sediment control basin and performing about 10,000 lineal feet of vegetation cutting are planned to be completed in 2012 when the marsh is in low water level conditions. The sediment control basin will trap sediment from the streams that enter into Ventura Marsh. The vegetation cutting on the west end of the marsh will provide a flow path for the water.



Construction of new outlet structure for Ventura Marsh

## 2010 SWIM ADVISORIES INCREASE

The number of swim advisories issued at Iowa swim beaches increased throughout the state in 2010, and Clear Lake beaches were no exception. For the first time in two years, levels above the geometric mean standard for *E. coli* of 126 cfu/ml were found at both McIntosh Woods and Clear Lake State Park. Bacteria remained at low levels at both beaches until early August when high readings began to appear. Levels remained high throughout most of August, and then fell back to normally low amounts by the end of the month. Unfortunately, there is no easy way of identifying the exact source of the bacteria. On McIntosh Woods Beach, heavy geese use appears to be the likely source, but does not appear to be a major factor at Clear Lake State Park Beach. The Clear Lake City Beach was also monitored and had zero geometric mean violations. Work will continue to reduce potential sources of bacteria in the watershed.



## LAKE NEWS

# Sandhill Cranes Return to Ventura Marsh

Story and Photos by:  
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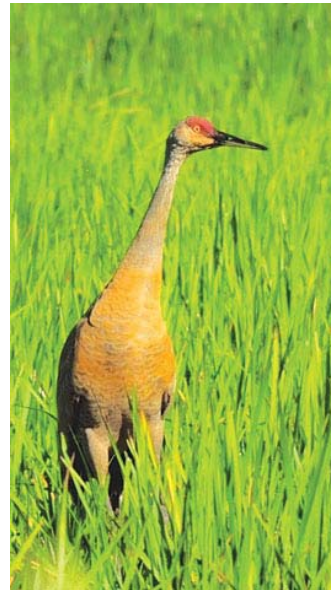
cranes successfully nested in Cerro Gordo County.

The event became official this spring when a single crane chick (more properly called crane colt) emerged from a nest located in a remote and boggy section of the 792-acre Ventura Marsh. Within hours of hatch, the ever vigilant parent cranes were already shepherding their gangly newborn across the area's thickly vegetated terrain in search of high protein menu items. Favorites included pond snails and a variety of aquatic insects.

With its penetrating stare, ear piercing call and four foot height, the sandhill crane is about as ultra-impressive as a wild bird can get. Credited with having the loudest voice of any bird species, the crane's elephant-like bugling can be clearly heard for a mile or more. Commonly referred to as "Marsh Dancers," cranes conduct elaborate courtship rituals in which the birds engage in flamboyant unison calling while simultaneously bowing and extending their huge, six foot wings before leaping straight into the air to perform a perfectly choreographed nuptial dance. Extremely wary, nesting adults stay as far from humans as possible and their young are rarely observed.

Sandhill cranes were once a com-

mon nesting species on Iowa wetlands, but the state's settlement marked the beginning of the end. Hunted by homesteaders for food and feathers, relentlessly pressured by wetland drainage and eventually plagued by the growing popularity of wild bird egg collections, crane numbers declined dramatically during the late 1800s. The state's last known



nesting of sandhill cranes occurred in May of 1894 on a marsh located to the north of Hancock County's Eagle Lake. The nesting attempt failed when collectors pirated the eggs. Nearby, the last breeding pair of Iowa whooping cranes was also setting on eggs. By now, all cranes had become exceedingly rare and their eggs were in high demand. Consequently, in a remarkable and

callused display of short sighted greed, the female whooper was shot at the nest and her hide and eggs collected. Although the male was pursued back and forth across the marsh, the bird eluded capture and was finally driven from the area. This shameful incident marked the very last time that whooping cranes attempted to nest anywhere in the United States.

Sandhill cranes fared somewhat better than their cousins, and although the birds remained extremely rare during most of the 1900s, a fragile mid-continent population managed to survive within the undeveloped reaches of Wisconsin, Minnesota, and Michigan. Their numbers have shown a sharp increase during recent years, and the birds are currently expanding their Midwestern range. In 1992, the species returned to Iowa when two successful crane nests were documented at Tama County's Otter Creek Wildlife Area. Sandhill cranes are now nesting in 20 Iowa counties.

Encouraged by the species' recent growth and expansion, DNR wildlife biologists predict that sandhill cranes will continue to become an increasingly common summer resident at Iowa marshlands. Although they aren't nesting this year, three more adult cranes are currently residing at Ventura Marsh. Cranes don't usually nest until their third or fourth year, and the presence of these young adults certainly lends hope to the prospects of gaining a second nesting pair at Ventura in the not too distant future.

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