

WETLANDS IN A COMPLEX WORLD

JUNE 3-8, 2012 ORLANDO FLORIDA, USA

Field Trip Opportunities - Sunday, June 3, 2012

Emeralda Marsh Restoration (Tour is Limited to 20 people)

Itinerary:

9:00am Vans depart Caribe Royale Hotel

9:00am-10:00am Travel to Emeralda Marsh Conservation Area

(36652 Emeralda Island Road, Lisbon, FL

34788)

10:00am-12:45pm Tour of wetland restoration area

12:45pm-1:15pm Travel to Sunnyhill Recreation Area Blue

House (19561 SE Hwy 42, Umatilla, FL

32784)

1:15pm-2:00pm Lunch at Sunnyhill Blue House

2:00pm-3:30pm Vans return to hotel

Description:

This tour will traverse portions of the Emeralda Marsh Conservation Area, a former agricultural area now in restoration to a variety of wetland and upland habitats and a former source of excessive nutrient loading to Lake Griffin. Lake Griffin, a 3600 ha water body, suffered substantial water quality degradation in the 1970s and 1980s. Initial diagnostic studies by the St. Johns River Water Management District (District) documented the primary controllable



nutrient source to the lake to be discharges from agricultural areas on the east shore. Conversion of historical floodplain wetlands to row-crop farms and cattle pastures began as early as the 1950s and peaked in the 1970s. Beginning in the early 1990s, the District acquired about 2600 ha of these farms. Initial restoration efforts began in 1995 with the establishment of a 430 ha wetland treatment system to remove nutrients and suspended solids from circulated Lake Griffin water. Other farm fields were flooded and water levels controlled to encourage development of wetland and aquatic habitat. Through these restoration activities, nutrient discharges from the former farmed areas were substantially reduced. The wetland treatment system ceased operation in 2001 following a substantial reduction of phosphorus concentrations in Lake Griffin.

Since 2001, most of the former farm fields have been managed to maintain native emergent, submerged and floating- leaved vegetation as well as provide for public use of the site for hiking, wildlife viewing, and hunting and fishing. Several of the former farms have been reconnected to Lake Griffin to help restore historical floodplain wetlands to the larger ecosystem.



Participants will see the results of long-term restoration following farming on historical floodplain wetlands. Challenges encountered

during this project followed from the earlier conversion of floodplain wetlands to organic soil f arm fields that were diked and alternately flooded and drained for agricultural production and from former wet meadows and uplands that were invaded by agricultural weeds and



invasive shrubs. Problems included restoration of desirable wetland and aquatic habitat on highly disturbed soils having elevated levels of nutrients and pesticides, excessive soil oxidation, and significant physical soil disaggregation. Sites visited will show varying stages of restoration through long-term hydrological management, vegetation plantings, and fire management. One site will show results of a restoration from transitional shrub to wetland habitat by creation of a serpentine flow-path and hydrologic reconnection to Lake Griffin. In addition, participants will observe nutrient treatment facilities that utilize aluminum sulfate injections to reduce phosphorus concentrations of storm water discharges from the restored wetlands.

We will have good opportunities to view the abundant wildlife.

What to wear and bring: Dress for air temperature about 30-32 C. We encourage you to bring binoculars and cameras and wear close-toed, comfortable walking shoes. We will walk only short distances (~100 m) on the tour. Bring rain jackets and sun protection as needed. The tour will proceed in mild rain weather but will be cancelled in extreme weather conditions.

Food Offered:

Water and box lunches will be provided. We will eat lunch at the Sunnyhill Recreation Area, another District site where former agricultural lands have been restored to wetlands.

<u>Driving Distance:</u> Approximately 60 miles (96 km) to the site. Map: g.co/maps/q72yd

Cost of Tour: \$75.00 per person

(Fees include lunch and transportation)

For Questions about the Tour Site, Contact:

John Stenberg, TOUR LEADER, St. Johns River Water Management District,

Phone: (386)937-1291 | Email: jstenberg@sjrwmd.com

For Questions about Tour Logistics, Contact:

Sharon Borneman, UF/IFAS Office of Conferences &

Institutes

Phone: (352) 392-5930 | Email: spb@ufl.edu