



Fall Burning on Refuges

The first north wind of the season often reaches the Texas coast in September. For those that have endured the scorching summer sun and humidity, that first north wind is refreshing. On the Mid-coast refuges, it is a time to burn.

Fall is the busiest prescribed fire season we have. In part, it is because the north wind pushes the smoke generated from the fires off-shore, but it is also the time that burning results in the desired habitat objectives. Baccharis, a native but aggressive plant can quickly take over our prairie habitats unless it is top-killed or completely killed by prescribed fire

operations. Top-killing the plant will set-back the plant, but it may be over a meter high within one growing season. If conditions are right, fire can kill the plant completely reducing its density in the prairie over the next several growing season. Research has shown that burning in late September or early October has the best chance of successfully controlling baccharis.

During this period the plants are moving all of their energy into the bud, preparing

to flower in mid-October. If fire is hot enough to top-kill the plant and stays around the base long enough to scorch it, the fire may kill it.

On September 28, the prairie between Austin Bayou and the entrance road to the new office south of FM2004, was burned. Now we wait and watch to see if we achieved our objectives. The prescribed fire was the final phase in



the rehabilitation of this 2000 acre prairie habitat.

Fire is the primary prairie management tool.

Species Profile

Smooth Cordgrass, *Spartina alterniflora*

By: Jennifer Wilson

It is very easy to take this simple-looking plant for granted, but smooth cordgrass plays a very important role in our coastal environment. Some of its importance is obvious

when wading the shallow water around this plant: aquatic invertebrates and fish find shelter here; as the plant breaks down its nutrients are consumed by smaller animals that are prey for other species.

This plant is an early-succession pioneer. It is found chiefly along low-lying shorelines where tidal connections exist: bay shores and tidal guts are the best places to find it. No other emergent plant occu-

Inside this issue:

Dow Woods Update	2
Recent Herbicide Treatments at Brazoria	2
Celebrate Wilderness	2
DEEP—Connecting Students and Nature	3
MBCC approve acquisition of Eagle Nest Lake	3
Friends Happenings	4

Dates of Interest

- Celebrate National Wildlife Refuge Week October 12—16.
- Friends Meeting, November 7, 2:30PM at the Discovery Center with a field trip to the Brazoria wetland/farm fields with Ron Bisbee to follow.
- San Bernard Christmas Bird Count: Dec. 17

Dow Woods: To Be Opened Soon

By Shane Kasson

The San Bernard NWR will be opening the Dow Woods Unit for public access hopefully in November. Nearly 11 inches of rain in September slowed progress dramatically at the unit northeast of Lake Jackson, Texas on Old Angleton Road. Contractors were progressing rapidly in the hot and dry weather of August on both the rest-room facility and the Tveten (north) trail. The rest-rooms are nearing completion with only minor work remaining.

Our contractor on the concrete trail, in addition to being rained out for several weeks, became ill with pneumonia. Fortunately, he is recovering just as the ground dries out enough to resume work.

With favorable weather, they could complete the .9-mile trail by the end of the month. The stain for this trail was received last week and preparations are being made to start staining and sealing the concrete when scheduling allows. This will blend the concrete in with the environment and create a unique public use area.



The boardwalk crew, which is made up of volunteers, are scheduling people and equipment for work days in October. Construction of two boardwalks is needed to complete the Tveten Trail.

Interpretive panels and trailhead signs were designed this past August and are currently being fabricated. Refuge staff are designing a live oak kiosk for the trailhead area which will hold two interpretive panels. This project is made possible through funds from TPWD, DOW, USFWS and our Friends Group. If you would like to participate in preparing Dow Woods for Opening, please contact Refuge Manager Shane Kasson.

Restoring Prairie habitats at Brazoria NWR

By: Cody Dingee

Prairie restoration on Brazoria NWR continues with the second round of herbicide treatment. In September, more than 6000 acres of coastal prairie were treated with the herbicide Grazon Next. This herbicide is highly selective and targets invasive species such as Chinese tallow

and macartney rose. The new generation herbicide is a non-restricted, environmentally friendly herbicide compared to alternatives. Preliminary results are very good. The main area of treatment was located north of CR 227 and south of FM 2004, which is the heart of the prairie restoration area. Herbicide treatments generally require an initial and follow-up treatment

to be effective. We estimate about half of this area was first year treatment and the other half was follow-up. The majority of funding to implement this mass treatment on the refuge was received from multiple grants administered by Texas R.I.C.E. to improve prairie habitats for migratory birds.

Celebrate Wilderness—National Wildlife Refuge Week

National Wildlife Refuge Week 2010 highlights our wildest refuges, the Arctic National Wildlife Refuge and refuge wilderness around the country.

Sixty-four of the 551 national wildlife refuges contain Wilderness Areas. Refuge wilderness holds some of our nation's most treasured landscapes and wildlife. These range from the smallest,

six-acre Pelican Island Wilderness to the largest, Arctic's eight million-acre wilderness.

In 2010, the U.S. Congress has designated National Wildlife Refuge Week for the first time. Refuge Week is celebrated the second week in October each year. Come see what is happening on your National Wildlife Refuges.



Arctic National Wildlife Refuge celebrates its 50th Anniversary this year.

DEEP: Connecting Students and Nature

By: Bryan Adams

A sign of Fall is the gathering of eager faces of students participating in the Refuge's Discovery Environmental Education Program (DEEP). Bryan Adams, coordinates the program and with the help of eager volunteers introduces children and adults to the natural world.

For those of us that grew up in the days before video games, Facebook, and texting, we spent much of our free time wandering the woods or splashing in ditches catching tadpoles or anything else too slow to escape. However, things have changed, and while it's important for today's young people to be technologically literate, they are often missing out on that vital connection with nature that

shows them where they fit in on the Earth. Almost daily I read new research about the importance of contact with nature for both mental and physical health, and yet most folks somehow don't manage to make time to get outdoors. Well, we have to start somewhere and

DEEP provides a great opportunity for kids, teachers, and parents to see what a great chunk of nature we have on the Gulf Coast. It's an exciting program, and has been really well received by students and teachers over the years.



DEEP is dependant on the generosity of numerous volunteers who have a passion for sharing our natural world. If you would like to help children get a taste of the world as you knew it, contact Bryan Adams.

*A teacher affects eternity; he can never tell where his influence stops."
...Henry Adams*

Migratory Bird Conservation Commission approves Eagle Nest Lake Acquisition

On September 15, The North American Migratory Bird Commission approved the acquisition of 4500 acres including Eagle Nest Lake using Migratory Bird Conservation Stamp (Duck Stamp) funds. The Lake is located north of Columbia Lakes on CR 25. The acquisition is a cooperative effort with the Natural Resource Conservation Service (NRCS) and the Conservation Fund.

Prior to the Service acquiring the property, NRCS will be acquiring a conservation easement under the Wetlands Reserve Program. The Program will outline management of the land including the restoration of the historic lake level. This will enable the lake to be returned to an emergent marsh, which will be more productive for waterfowl and wading birds.

In addition to the lake, the Service will acquire bottomland forest and former Damian prairie habitats which are currently in agricultural production. "The restoration of over 1000 acres of native prairie from agricultural lands will be a

huge challenge for the Service in the years to come. However the benefits to be realized for migratory birds and native wildlife as well as prairie plant species will be tremendous", said Project Leader Jennifer Sanchez.

Once restored to natural marsh will be dependant on rainfall. During droughts, it will be expected to go dry and mechanical manipulation or herbicide application may be required to control cattails or other plants. The Service anticipates not closing on the property for about a year as the NRCS and the Service conducts due diligence in establishing the conservation easement and the fee title ac-

Eagle Nest Lake is one of the few natural lakes near the Texas Coast

In the interim, The Conservation Fund is assisting with purchasing and holding the property. They have obtained grant funding to support the acquisition and assisted with negotiations.

You can support the acquisition of lands for Refuges by purchasing a Duck Stamp.



Eagle Nest Lake will provide management challenges and opportunities following acquisition.



Friends Happenings



Texas Mid-coast National Wildlife Refuge Complex

2547 CR 316
Brazoria, Texas 77422

Phone: 979-964-4011
Fax: 979-964-4012

Preserving and protecting the wildlife and habitat within the Texas Mid-coast region and providing opportunities for visitors to enjoy these unique lands.

On the Web

<http://www.fws.gov/southwest/refuges/texas/texasmidcoast>

<http://www.refugefriends.org>

The Friends of Brazoria Wildlife Refuges supports the Mid-coast Refuges through partnering on public use, outreach, and habitat projects.

- Utilizing a \$200K grant from Texas Parks and Wildlife as well as a \$20K grant from DOW and \$69K cost share grant from the Refuges and numerous volunteer hours, the Friends have contracted the construction of a restroom facility and the .9 mile concrete north trail and purchased material for the south trail. A 48' octagon pavilion and a culverted crossing will also be contracted within the year.
- Pooling together several donations and a cost share grant from the Refuge, the Friends have contracted with Rosene Creative Services to fabricate static and interactive displays for the Discovery Center. The three wall displays will be completed this year.
- The Friends have administered a North America Wetlands Conservation Association small grant to continue wetland enhancement on the Brazoria NWR. Working with the non-profit organization Texas R.I.C.E., levees have been rebuilt and water-control structures installed to create managed wetlands and recreate wet prairies across 350 acres.
- Planning for the 2011 Migration Celebration has begun. This annual outreach event is scheduled for April 16th and 17th at the San Bernard NWR. Over 100 volunteers assisted with this event in 2010 as over 1000 visitors enjoyed the events. Contact David Plunkett, Migration Celebration Chairman, or visit the website (www.migrationcelebration.org) for more information.

Species Profile (cont.)

pies areas lower in elevation than smooth cordgrass. As it becomes established and grows, it traps sediments suspended in the constantly-fluctuating tides. Over time, this sediment can build so high that this plant can no longer exist. Other marsh plants such as Olney bulrush then take its place. It is possible to find this plant establishing itself in some areas of our refuges where goose-grazing has bared *Distichylis* grass and the soil has eroded through tidal action.

The pioneer characteristics of smooth cordgrass make it a relatively inexpensive, highly effective tool to use in salt marsh restoration and erosion-reduction activities. Much of the olney bulrush around Cowtrap Trail at San Bernard is on ground bared by goose grazing in the mid-1980's. Planting smooth

cordgrass there set succession in motion and today the same areas are dominated by plants that survive on the higher elevation it created. Similar work was done on an expansive eat-out at San Bernard NWR in 2004 and 2005 and is showing

good results. Plugs took root, filled in between, and are expanding into the bared ground.

Planting individual plant plugs and spreading seed will be an essential tool in years to come as the Refuges target the restoration of saltmarsh which have been degraded due to eat-outs, subsidence, and erosion.

Smooth cordgrass in action can also be viewed from the auto tour loop at Brazoria NWR. A great place to admire this multi-faceted plant is the stop at Crosstrails Pond; the marsh on the south side of the road is dominated by the plant.



Smooth cordgrass spread from planting plugs in 2004 on goose eat-out at San Bernard NWR.