

WILDLIFE HABITAT ZONES ADVISORY TEAM (WHZAT) MEETING 4 Notes
March 19, 2009 9am-11am
Horseshoe Farm Park, City of Raleigh

Attendees:

WHZAT members:

Jacquelyn Wallace, NC Wildlife Resources Commission

John Connors, Wake Audubon Society

Dr. James Gregory, NCSU Professor of Forest Hydrology and Soils

Tiffany Frost, City of Raleigh Nature Program Director

Melissa Salter, City of Raleigh Land Stewardship Coordinator

Facilitator: Stephen Bentley, City of Raleigh Senior Park Planner

Absent: Harry LeGrand, NC Natural Heritage Program

Absent: Chris Moorman, NCSU Cooperative Extension Wildlife Biologist

Absent: Dowd Bruton, Wild Turkey Federation

Absent: Dr. Jon Stucky, NCSU Professor of Wetland Plant Biology

Absent: David Shouse, City of Raleigh Senior Parks Planner

Absent: Ivan Dickey, City of Raleigh Parks Assistant Superintendent

Substituting for Ivan Dickey: Gretchen Sedaris, City of Raleigh Parks

Also in attendance:

Jill Braly, City of Raleigh Parks Planner

Jamie Loyack, Hager Smith Design

Kelsey Obernuefemann, City of Raleigh GIS Technician

Meeting began at 9:10 AM.

To begin the meeting, the Horseshoe Farm **adopted** Master Plan document and drawing were distributed to the group.

Melissa Salter provided an update on the Greenway bridge crossing into Horseshoe Farm, having met with the City of Raleigh Greenway Team since the prior WHZAT Meeting. She explained that the bridge crossing will likely need to occur in the area to the north of the large wetland on the west side of Horseshoe Farm. Other potential bridge sites were carefully reviewed by the Greenway Team, but due to private property restrictions in the northernmost portion of the Park, and extensive streams and wetlands on the west side of the Neuse River “downstream” of the large Horseshoe Farm wetland, there do not appear to be viable alternatives to bridge location on the west side of Horseshoe Farm Park.

Stephen Bentley addressed the Greenway bridge location and associated site impact as a priority concern for WHZAT. He pointed out the taller bluffs in the Northern portion of the property and stated that the use of boardwalk is desired, if feasible, to avoid pavement and grading.

Gretchen Sedaris is concerned that the Greenway plan does not manage for invasives and Melissa Salter responded that once the City of Raleigh adopts an invasive species plan, both parks and greenways will be addressed.

Connors restated that his primary concern is to protect the large Horseshoe Farm wetland.

A map and draft document on the Horseshoe Farm wildlife habitat zone descriptions and goals was distributed to the group. Melissa Salter requested comments on the draft document be sent to her after team member review, and Stephen Bentley noted that the document is a work in progress. Stephen Bentley summarized the wildlife zones delineated by WHZAT at Meeting 3, referring to the draft zone map created by Kelsey Obernuefemann, and the draft narrative zone description created by Melissa Salter. Stephen Bentley opened the discussion up for team member comments on the six identified wildlife zones, and asked if the group wants to prioritize the wildlife zones.

Melissa Salter said she thinks protection of existing zones, and invasive species management in the Park are priorities over creating new habitats. Connors said that since the Lower Field plan can be drafted at a low cost and will take years to grow, he recommends that implementation of management in that zone proceed. He feels the City can continue to bolster inventories in the wetlands and then implement management and enhancement plans for those zones.

Jill Braly mentioned the opportunity for partnership with the US Fish and Wildlife Service and NC Wildlife Resources Commission, utilizing the FLLP (Forest Landbird Legacy Program). This program delivers cost share money to landowners, including municipalities, to establish forest habitat for landbirds. Stephen Bentley noted there may be other opportunities for grants to help facilitate the creation and management of the Horseshoe Farm wildlife zones (WHIP grants).

After WHZAT Meeting #3, Jacquelyn Wallace had arranged a consultation between City of Raleigh staff and Joe Folta, a Wildlife Biologist with NC Wildlife Resources Commission who has extensive experience with restoring the types of early successional habitats that WHZAT is recommending for Horseshoe Farm. It was reported to the group that Jill Braly, Kelsey Obernuefemann, and Melissa Salter had met with Joe Folta on March 18 at Horseshoe Farm to begin to develop a set of recommendations (specific to Horseshoe Farm) for early successional habitats, to include site preparation, establishment, and maintenance. The City of Raleigh has requested these recommendations be submitted by March 31, 2009. Joe Folta also visited the City of Raleigh Greenway parcel east of Horseshoe Farm, where there is a high quality forested wetland and an active fox den.

Dr. Gregory stated that the background for management plans should be an ecosystem map. Stephen Bentley suggested he submit this suggestion and Dr. Gregory added he will put it in his suggestions that he will provide to WHZAT. He also noted the good teaching opportunities available at Horseshoe Farm.

Dr. Gregory referred to the NRCS Soils Map and noted the remnant coastal plain sandy soil area in the northern portion of the draft delineated "Lower Field" near the ridgetop, and said there was likely an interesting glacial history on site.

The group then walked to the wetlands area on the west side of the park.

Dr. Gregory said that the man-made ditch currently draining the large western wetland should be plugged to restore the site to a natural state and suggested it could be done with hand tools and tamping. Jacquelyn Wallace inquired about the hydrology perspective for plugging the drainage ditches from the wetlands, stating she was aware of a wildlife motivation for doing so. Dr. Gregory

said to avoid a flush of pollutants from the Neuse River, due to contamination upstream. Tiffany Frost added that the regional septic facilities are aging and could also lead to contamination of the Neuse River. Dr. Gregory talked of a few different techniques for plugging the ditch, one of which is to create a series of about 3 earthen berms spaced in the ditch. Connors mentioned the use of a gabion.

Recent beaver activity was noted near the large wetland. At the man-made ditch, Dr. Gregory and Connors suggested the construction of a gabion, or series of two gabions, for plugging the drainage path. It was suggested that beavers might aid this effort by packing mud around the structure. Recommended gabion sizes were 2x4 or 4x4. It was noted that such a structure may increase the extent of the wetland, and such manipulations should occur well before construction of the Greenway to determine what areas will be impacted.

Fish may also gain entry to the wetland through the ditches, and fish threaten the healthy salamander population currently residing in this wetland. Connors thought that because the wetland will dry out periodically, the fish population would not be sustainable.

Stephen Bentley said WHZAT can formally recommend plugging the ditch.

Connors requested Dr. Gregory take a look at the wetland hydrology on site, wondering if bedrock is limiting percolation. Dr. Gregory responded that the whole process is probably close to the surface. Dr. Gregory thinks the wetlands at Horseshoe Farm are ground water fed, and that surface flow is not a big impact to the hydrology of the wetlands. Dr. Gregory said "Floodplain wetlands are groundwater discharge systems." In the Piedmont, water is concentrated in the upper 50-100 feet of the regolith, or mantle rock. Connors raised concerns about any parking lot run-off impacting the large wetland, and the group considered step down treatment towards the large wetland vs. directing the flow away from the wetland and into the interior of the park so there is adequate space to treat the run-off sufficiently. Dr. Gregory recommended treating and directing flow away from the wetland. He added it would be interesting to do some connectivity studies and emphasized the need to minimize compaction of the soil to aid infiltration processes. Dr. Gregory stated that taking an acre of surface water run-off away from the wetland will not affect the amount of water in the wetland, but allowing polluted run-off to flow into the wetland would greatly affect it. Stephen Bentley said WHZAT can recommend that a better analysis of hydrology be done in phase one design to understand flows before construction.

The group walked to the Lower Field area of the Park.

Dr. Gregory asked about possible wetland restoration on the top slope of the lower field, where standing water collects. Jamie Loyack and Dr. Gregory discussed the on-site treatment of stormwater and Jamie noted that Hager Smith Design is looking at sheet-flowing, filtering and bioretention ponds. There was group discussion on the opportunity to use this area for multiple purposes and the group discussed the various educational opportunities associated with such an effort.

Dr. Gregory reiterates his advice for site development at Horseshoe Farm: Minimize run-off from developed areas, minimize soil compaction, and minimize contamination and pollution. Be sure to plug both (or all) ditches currently draining wetlands on site to prevent contaminants from the Neuse River from getting into the wetlands during floods.

Gretchen Sedaris asked about the current mow regime in the Lower Field and how it might be altered, and Melissa Salter said to wait for prescription recommendations from the NC Wildlife Resources

Commission biologist preparing a management plan for the Upland Meadow and Lower Field zones. Stephen Bentley suggested the City of Raleigh may increase the size of the current no-mow area.

Dr. Gregory stated that a once a year mowing regime is sufficient to limit woody vegetation.

Connors noted that the invasive species are not that bad in the Lower Field. Gretchen Sedaris is concerned about invasive seeds/material being brought in on equipment.

For establishment of the Upland Meadow and the Lower Field early successional zones recommended by WHZAT, Melissa Salter noted the current idea is to start from scratch on the Upland Meadow and use existing vegetation in the Lower Field.

Gretchen Sedaris noted she sees plants from an adjacent property owner's garden spreading into Horseshoe Farm, and that crepe myrtles from the Horseshoe Farm entrance drive have jumped across the road and have invasive characteristics. Jamie Loyack of Hager Smith Design mentioned that maintaining the history of the site entrance and drive are important to the surrounding community, and there has been support to maintain the crepe myrtles as part of the Park. The group talked of the possibility of replacing the crepe myrtles as they decline with native trees more appropriate to a Nature Park.

Meeting concluded at 11:00 AM.