

WILDLIFE HABITAT ZONES ADVISORY TEAM (WHZAT) MEETING 3 Notes
February 26, 2009 at Anderson Point Park, City of Raleigh 9am-12pm

Attendees:

WHZAT members:

Jacquelyn Wallace, NC Wildlife Resources Commission
John Connors, Wake Audubon Society
Dr. Jon Stucky, NCSU Professor of Wetland Plant Biology
Ivan Dickey, City of Raleigh Parks Assistant Superintendent
Tiffany Frost, City of Raleigh Nature Program Director
David Shouse, City of Raleigh Senior Parks Planner
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. James Gregory, NCSU Professor of Forest Hydrology and Soils

Also in attendance:

Jill Braly, City of Raleigh Parks Planner
Jamie Loyack, Hager Smith Design

Meeting began at 9:15 AM.

The agenda for WHZAT Meeting #3 was to discuss the different wildlife zones the Team proposes for Horseshoe Farm Park, agree on names for each zone, and hand draw the location, size and shape of each zone on a base map.

John Connors requested that Dr. Gregory receive the Horseshoe Farm soil and drainage maps and hopes that WHZAT can get his input. Melissa Salter stated that she had left Dr. Gregory a message, requesting that he attend today's meeting if possible.

The attendees reviewed the HSF soils map and noted the hydric soils. Connors noted each soil is listed as having a sand component. Connors noted that HSF was not just cropped, but also used as pasture for a long time. Ivan Dickey noted that there is red clay present down deep, as seen during the archaeological study. He also noted the lack of rock at HSF, and he and Connors wondered how the river bed formed as an oxbow without a lot of rock present.

Melissa Salter highlighted a document: "NC A&T Farm Wildlife Recommendations, Phase I" (written by NC Wildlife Resources Commission) as an example for WHZAT to utilize as a model for Horseshoe Farm wildlife zones. She noted the plan is site specific and concise, and as a Phase I document leaves room for future mid- and long-term modifications to the plan. Jacquelyn Wallace mentioned that the North Carolina Wildlife Resources Commission has technical assistant biologists that will help write habitat restoration plans. She will get contact information. Ivan Dickey likes the A&T plan and feels it is practical for managing the land.

Melissa Salter explained that today WHZAT will be discussing the three wildlife zones called for in the HSF Master Plan, and also potential new wildlife zones that the group will identify. Maps prepared by Kelsey Obernuefemann (City of Raleigh GIS) were handed out and reviewed. The first map was of ecological characteristics at HSF, and included the location of heritage trees, black walnut trees, areas of Giant Cane, and pine stands. The second map showed the location of human-made ditches, and archeological points.

At the previous WHZAT meeting, Jacquelyn Wallace had requested a 600 foot buffer around each wetland. The 600 foot wetland buffers were mapped and discussed. Jacquelyn noted that the 600 foot buffer is ideal but can be modified for site conditions. For example, the salamanders will not likely be using the meadow at HSF, even though the meadow is technically in the 600 foot buffer area. This particular buffer could be modified to fit the existing tree line.

Melissa Salter noted that much of the proposed 600 foot buffers for each wetland are likely to be protected based on the draft HSF Masterplan.

Ivan said that the buffers delineate the wooded areas as special, and will be useful for highlighting the sensitive nature of the Significant Natural Heritage Area.

Melissa Salter noted that City of Raleigh staff will survey the adjacent Greenway property to the east of Horseshoe Farm Park. Tiffany Frost said due to the steep grade one wouldn't expect wetlands in this area, but don't know for certain until you field verify. Ivan Dickey noted the problem of deer hunters and four wheelers on that property. WHZAT wants to avoid negative impacts to sensitive habitats on the east side of the Neuse River.

Connors noted that the area of Giant Cane in the eastern portion of HSF is quite extensive. Connors noted that a bigger concern, in his opinion, is the northern-most wetland on the west side of HSF. Ivan noted the elevation grade, which will have impacts on the Greenway trail. Connors and Ivan Dickey discussed potential Greenway trail routes, considering building on piers/boardwalks or running the Greenway trail further north of the steep grade and wetlands. Connors pointed out that there will still be construction impacts from a boardwalk, and Ivan Dickey noted the maintenance difficulties of boardwalks.

Melissa Salter suggested an official statement from WHZAT to the COR Greenway team that the wetlands be avoided during Greenway development. Dr. Stucky asked for clarification on the width of Greenways. Ivan Dickey said the paths are 10 feet with a 6 foot buffer on each side, so approximately 30 feet wide. Melissa Salter said the other thing WHZAT could do as a team was recommend that the Greenway through HSF be modified (such as use different materials, and/or use different trails widths) based on the sensitivity of the area. Ivan Dickey said the City of Raleigh doesn't usually mow along greenway trails if the trails are located in a forested area.

Connors notes that if drainage to the largest wetland at HSF is altered, it could cause permanent damage to the wetland. It might not take that much change in drainage to permanently ruin the wetland. The key is that the current drainage (both quantity and quality) to that wetland needs to remain intact. The Greenway Trail should not penetrate the drainage way. Jacquelyn Wallace

says that park development and Greenway trail should try to stay out of the wetland buffers as much as possible. Ivan Dickey suggested focusing on avoiding the center of the buffers. Jacquelyn Wallace said it is important to keep an entire chunk of the buffer intact. Melissa Salter suggested this be a WHZAT recommendation.

Connors worries about the Greenway construction and the long term use of Greenways – you're going to get lots of people using them, as you should, but you're going to get a lot of activity. His recommendation on it is to situate both bridges on the down river side of the wetlands to where pollutants won't get trapped in the wetland. He pointed out the most important wetland on the northwest part of HSF. His concern is avoiding petrochemicals and sediments in this wetland by building the greenway down river of this wetland.

Ivan Dickey noted that it sounds like WHZAT is identifying the largest wetland area as the most important wildlife zone. The group agrees and wants to recommend the Greenway be built down river of this wetland. Connors noted a trail through this more southern portion (down river of the large wetland) might provide edge habitat for that area. Connors recalled the concerns regarding disturbance and invasive *Microstegium* spreading as a result. He said we can try to stay on top of it and establish natives right away.

Jacquelyn Wallace drew two potential wildlife zones on the large aerial map of Horseshoe Farm Park, delineating the wetlands plus forested buffer as important reptile and amphibian habitat. One of the zones included both the wetlands on the western portion of HSF, which she called the Wetland Complex. The second zone was around the eastern wetland.

The two red "Natural Community" squares on the Horseshoe Farm Ecology map, located at the southern part of the oxbow bend, are from the NC Natural Heritage data layer and represent the Piedmont Levee Forest community and Bottomland Forest.

Tiffany Frost would like to consider the long term management associated with maintenance of the site, such as mowing. The group discussed the benefits of prairie and natural grasses in the southern meadow area and Connors said we should come up with numbers (acreage recommendations) associated with the areas for shrub thicket vs. meadow, etc. The group agrees there would be soft trails through this area. Dr. Stucky noted that realistically you will have to manage the area every two years to eliminate Sweetgums.

Connors noted there will be resistance to letting the whole meadow area grow – people will want to fly kites and do other open space activities. Tiffany Frost feels the areas associated with the volleyball courts and other amenities, as well as the more northern meadow area, will be sufficient for open space activities.

Jacquelyn Wallace drew an additional wildlife zone on the large aerial map: an early successional plant zone in the southern portion of the existing grass area. If the Greenway trail comes through HSF Park at the lower field ridge line, it was suggested the area south from the proposed Greenway trail be dedicated to the early successional wildlife zone that would include both grassland and shrub area. Connors wondered what percentage the City is willing to set

aside as habitat zone. He thinks it makes sense to use the Greenway trail to delineate this wildlife zone.

Dr. Stucky said we need to discuss what we mean by these zone titles.

Jill Braly asked if it was important to consider the Giant Cane area when establishing a butterfly meadow, whether the host butterflies of the Cane will leave the wooded area to find nectar from other sources. Connors said no, the two Pearly Eye species won't use the meadow and the Skipper can easily access it. Jacquelyn Wallace wondered if there was a good design for insect habitat – can it be more linear, does it need to be wider? Tiffany Frost said a blob shape is good, and drew a potential butterfly meadow zone on the map. She likes the idea of the Greenway Trail going through the insect habitat for nature programming purposes, but said we'll need to determine if the soils in this area are appropriate for a Butterfly Meadow. Connors noted the Butterfly Meadow wildlife habitat zone will be more management intensive so we may not want it to be too large. Jill Braly suggested that this could be part of the Master Plan contract and landscaping plan, so that it would not just be the responsibility of City gardeners.

The group discussed how the Butterfly Meadow can enhance the environmental education center, and be a possible location for art, sensory herb garden, caterpillar habitat, etc. Melissa Salter advocates for all native plants. Connors said WHZAT can put a plant list together.

Connors and Jacquelyn Wallace discussed land designation ratios within the early successional habitat zone – recommending maybe $\frac{3}{4}$ early succession and $\frac{1}{4}$ shrub thicket. However Jacquelyn would like to get advice from experts in this field.

Stephen Bentley recorded the wildlife habitat zones identified by the group:

- 1) Wetlands – 2 zones, with largest wetland in western portion of HSF the greatest priority
- 2) Early successional community – south area of the lower field, with two subzones (grassland and shrub thicket)
- 3) Butterfly meadow
 - between $\frac{1}{2}$ to three acres
 - not a garden
 - not too close to woodline so it receives adequate sun
- 4) Early successional community – northern end of upper field, near Park entrance
 - needs to be more visually appealing
- 5) Giant Cane area

David Shouse encourages the group to think about the long term effects of the Greenway location in relation to the possibility that the homes north of the park will be provided sanitary sewer access in the near future. If a new sewer crossing is installed then it makes sense to tie the bridge and sewer crossings to one another in the northern portion of the property. He noted the construction considerations of building a Greenway – avoiding fill, working with natural flow patterns.

Connors said he'd "go to bat" to defend the environmental integrity of the site and especially the unique wetland pool, which is one of the most interesting/unique he's ever seen. He was willing to sacrifice the lower one to protect the upper wetland.

Connors had to leave at 10:45 AM.

David said the Greenway trail may start north of the environmental education center and then head south towards the canoe launch, giving a viewpoint of the early succession community.

Dr. Stucky asked if our recommendation was then to approve the Greenway through the northern portion IF we could protect the primary wetland on the west side, but if not, then the formal recommendation was to build below this wetland.

Jamie Loyack said the Master Plan calls for a 3 acre butterfly meadow, which is large for a garden but appropriate for more of a habitat area.

The group agrees the butterfly meadow should be close to the Env. Ed center and likes the idea of the Greenway passing through it. Ivan noted that then as you get closer to the center you could do more landscaping/gardening. Tiffany said we want to avoid invasive species by limiting edges, involving other experts in the design/construction phase.

The group will put together a plant list of recommended species for the butterfly meadow.

Ivan said he sees the northern field being much more intensively managed as more of a prairie meadow, lacking a shrub layer, requiring more visual effects management.

Jamie read from the Master Plan that the north upper field, approximately 5 acres, is to be planted in meadow grasses and wildflowers and to serve as a buffer to the open space play areas. Ivan's point is that that is not a wildlife habitat zone. Jacquelyn says you can still do some management, getting rid of the fescue, disking it, replanting it with a wildlife seed mix. David noted letting this area 'grow up' may change entrance view. Jon Stucky wanted to clarify that there was enough area planned for open play activities. David added that since the southern portion is now habitat, leaving this area more open makes sense. It may be provide the opportunity for some soft surface loop trails.

Dr. Stucky thinks construction might create a little border of *Microsteium*, but it won't out-compete the native cane.

The group restated the need to investigate the land on the eastern side of the river for potential bridge impacts.

Tiffany mentioned the bird houses and feeding stations. Although they are not a habitat zone, it is important that they continue to be managed.

The group wants to recommend flood plain protection and protection of microhabitats (pools, slopes, etc).

Melissa would like to move towards putting together a document outlining specific management recommendations. Stephen said we will have the zones identified with supporting notes before the next meeting. He then hopes team members will comment on those – making corrections, referring to experts, identify best practices.

Dr. Stucky offered to get some recommendations together for Zone 2 to help Melissa draft plans. Jacquelyn will contact a staff biologist to see if they can attend the next meeting/get in touch with Melissa. Tiffany will look into the butterfly meadow and plant lists.

The group will make recommendations for formal footpaths/trails through the Natural Significant areas, attempting to control the level of impact.

Jacquelyn will try to write up recommendations for the wetland zones by the next meeting. Stephen noted they can be broad and short.

Meeting concluded at 11:40 AM.