

Wildlife Management Plan for Research Triangle Park

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Site Description

Research Triangle Park (RTP), North Carolina, the nation's largest research park, provides a 7,000-acre landscape for studying the coexistence of wildlife and industry. RTP was created in 1959 with an initial land holding of approximately 4000 acres. The idea for the Research Triangle Park grew out of a collaborative effort of leaders from government, business and the universities during the 1950s. It was created with a goal of bringing jobs to North Carolina and providing a location where the nation's leading corporations, government agencies, and not for profits would work cooperatively within the scientific community.

RTP is located in central North Carolina between three major research universities – Duke University in Durham, N.C. State University in Raleigh, and the University of North Carolina at Chapel Hill. Development of the Park is handled by a private, non-profit organization, the Research Triangle Foundation. The Research Triangle Foundation (RTF) owns the undeveloped portion of RTP and is responsible for recruiting research companies to RTP.

Research Triangle Park now consists of various “campuses” which range in size from 8 to 600 acres and hold single buildings or clusters of buildings. Each campus is owned by the company housed there, but must follow zoning restrictions according to its location in either Durham or Wake County. Durham County allows a maximum of 15% of each lot to be used for building coverage with no limitation on how much may be used for parking and drives, while Wake County permits a maximum of 30% lot coverage which includes buildings, parking, loading areas and driveways. Both of the zoning ordinances require open space setbacks or buffers which are a minimum of 150 feet in width around the perimeter of the lots. In the Wake County portion of RTP, areas of steep slopes and drainage swales are identified and designated as Surface Cover Maintenance Areas and are restricted from disturbance. These development restrictions provide large areas of remaining untouched land, as well as habitat connecting strips, which all offer superb habitat opportunities for a variety of wildlife. In addition, RTF plans to set aside approximately 450 acres of land in natural area preserves. The natural area preserve land is located primarily in Wake County. Several types of landscape exist throughout the RTF properties. These include wetland, hardwood forest, lakes, and open areas of grass cover.

RTP provides a research site for studying the relationships between thousands of employees and the natural area surrounding their workspace. The variations in landscape

allow for ease in studying the impact of humans on nearby habitat areas and the level of human habitat interaction preferred by various species. Currently no wildlife enhancement projects exist on RTF property although there are some projects on individual company campuses.

The Research Triangle Foundation is seeking certification from Wildlife and Industries Together for RTP. The intended certification will include the RTF owned properties and a commitment to reach out to companies in RTP.

The following is an adaptive management plan, which is subject to change according to measures determined to be most beneficial to the biological diversity, RTF and other RTP companies and employees, and the general protection of land. Furthermore, the management plan is subject to change according to levels of support from the community, RTF, and RTP companies and employees, both financially and through active participation. Our goals for increasing wildlife in RTP are described below and will be based upon the following criteria for success:

Criteria For Success

- *Increased species* - measured by population density and diversity
- *Increased employee awareness and education* - measured by website use and support of projects, as well as number of other companies partaking in enhancement projects and frequency of trail use
- *Increased community support* - measured by expressed interest in projects from outside of RTP and frequency of volunteer activity and website use by non-RTP employees

Map: Appendix I

Goals

1. Increase habitat availability and improve current native species habitat, specifically within the natural area preserves.

Projects:

- a. Install bluebird, purple martin, owl, bat, great crested flycatcher, and duck boxes
- b. Install bird feeders

- c. Establish butterfly, songbird, hummingbird, rock, and amphibian water gardens
- d. Reduce mowing, specifically near bodies of water
- e. Remove invasive and non-native species

2. Encourage company support of habitat enhancement programs and the maintenance of higher levels of wildlife management strategies for individual campuses.

Projects:

- a. Use the NC W.A.I.T. certification obtained on Foundation properties as a model for other company lands
- b. Provide companies with a plan outline and management options for their land
- c. Hold a meeting for companies to encourage them and demonstrate successful projects already underway
- d. Encourage employee participation in environmental initiatives
- e. Create a pamphlet describing the benefits and ease of employing habitat enhancement projects to be distributed to companies
- f. Post on the RTP website the list of companies holding individual certifications
- g. Post signs at RTP stating that the entire park is W.A.I.T. certified
- h. Reference W.A.I.T. certification in RTP publications and on park maps
- i. Reduce the disturbance of geese in parking lots by reducing mowing along waterways and placing feeders near the water

3. RTP employee education

Projects:

- a. Use signage along walking trails to indicate native species
- b. Create a link on the Environment@RTP website, where employees can add species seen on property
- c. Provide information for species identification on website
- d. Install nest box cameras to show live activity on the website
- e. Create a wildlife library on site with handouts of common species and reference books
- f. Recommended readings on the website
- g. Hold lunch and learn opportunities and nature hikes during the day with wildlife guides and speakers
- h. Provide entering companies with a packet of information describing the program, the certification, contacts, and possible enhancement projects for their campus, as well as management options and suggestions for their land
- i. Environment@RTP will hold meetings for companies in RTP pursuing environmental initiatives to share ideas
- j. Provide information on project status, new ideas, and employee education opportunities in the RTP-wide Foundation newsletter.

4. Educate the public and increase community involvement

Projects:

- a. Encourage employees to bring family members to nature events
- b. Use volunteer assistance of community groups
- c. Encourage local universities to utilize RTF property for research
- d. Allow public access to the website information, but restrict data entry to RTP employees

5. Create a wildlife inventory of RTP

Projects:

- a. Use the website to tally and list species on property
- b. Provide cards along trails to mark species noted

Schedule

Phase I (First Year)

1. Install blue bird houses
2. Install bat boxes
3. Install purple martin houses
4. Begin placing trail signage, including tree identification along walking trail
5. Open website to employees
6. Hold first informational meeting for RTP companies about environmental initiatives
7. Create informational packet and pamphlets for employees and new RTP companies.
8. Create a wildlife library at the Foundation Building
9. Create a regular Environmental Initiatives column within the Foundation newsletter

Phase II (Second and Third Year)

1. Install duck boxes
2. Hang bird feeders
3. Create butterfly gardens
4. Plant a native wildflower meadow
5. Evaluate potential for reduced mowing or the replacement of lawn with native plants and grasses, especially near water bodies
6. Signage near each habitat site improvement project
7. Lunch and Learn Nature Hikes
8. Wildlife speaker series
9. Foundation hosted annual RTP-wide environmental meeting
10. Formation of a Wake County Audubon RTP birding branch

Phase III (Fourth and Fifth Year)

1. Place basking logs, floating islands, and wetland plantings in water bodies
2. Create songbird gardens
3. Create an amphibian hibernaculum near a water body before first frost
4. Install owl boxes
5. Install great-crested flycatcher houses
6. Establish a rock garden
7. Establish an amphibian water garden

Continual Projects

1. Wildlife inventory
2. Compile photo gallery
3. Wildlife library
3. Hold employee education activities during the day with trained wildlife specialists
4. Update website
5. Reduce invasive non-native species

Monitoring

Monitoring programs will be set up on a project basis. Each project will be monitored by Environment@RTP members, Ducks Unlimited, local scouts, school groups, other employees of RTP, or community groups. At this point, monitoring will be done by willing RTP employees and volunteer groups. Eventually, monitoring would be most accurately performed by researchers, as well as volunteers for accurate data collection to be used for better understanding of the systems influenced by the habitat projects. A future connection with any of the three major universities in the area for research support would aid the monitoring program. Monitoring will consist of noting species abundance and diversity; levels at which ecosystems are functioning successfully; human interactions with the wildlife, both positive and negative; and frequency of species use of each enhancement project.

Species noted on site

Appendix II: This is not an exhaustive list, but merely serves as a starting point of observed species by RTP employees.

Potential Contacts and Partnerships

U.S. Fish and Wildlife Service
National Resources Conservation Service
Audubon Society
Ducks Unlimited
North Carolina Department of Environment and Natural Resources
North Carolina State University
Duke University
Local birding groups, garden clubs, scout troops, school groups

Funding

Environment@RTP is responsible for obtaining all funding through grant money,

donations, the RTP tax district, or RTP agency contributions. Most work and monitoring will be done on a voluntary basis by employee groups, school groups, local scout troops and clubs.