

University of Florida

Natural Area Teaching Laboratory (NATL)

2003-2004 Annual Report

During the 2003-2004 school year the Natural Area Advisory Committee consisted of Mark Brown (Environmental Engineering Sciences), Mark W. Clark (Soil and Water Science), Donald W. Dickson (Entomology & Nematology), Deb DiPietro (Florida Museum of Natural History), Donald A. Graetz (Soil and Water Science), Daniel Herrera (Ethnoecology Society), Shane Hill (Entomology & Nematology Student Organization), Susan Jacobson (Wildlife Ecology & Conservation), Linda Jones (Teaching & Learning), Kaoru Kitajima (Botany), Doug Levey (Zoology), Chris Lewis (Wetlands Club), Alan J. Long (Forest Resources & Conservation), Francis E. Putz (Botany), Marilyn Roberts (Florida Museum of Natural History), Erick Smith (UF Urban Forester), Carol Stiles (Plant Pathology), Peter van Blokland (Lakes, Vegetation & Landscaping Committee), Thomas J. Walker, chair (Entomology & Nematology).

The Committee met twice: 12 Nov. 2003 and 25 Mar. 2004. Between meetings, business was conducted by e-mail. All annual reports and minutes of meetings are archived at <http://natl.ifas.ufl.edu/ann-mins.htm>.

Preservation Area 2 to be accessible to academic users

Preservation Area 2 [P2], also known as the Surge Area Wetlands, is about 12 acres of mostly wetlands east of Natural Area/Surge Area Drive. Its southern and northern extremes are directly across that drive from NATL. Otherwise, the Surge Area, with buildings devoted to academic and service functions, is interposed. Because the biota and physical features of P2 are importantly different from those found in NATL, the Natural Area Advisory Committee voted that P2 should be made easily and invitingly accessible to academic users of NATL. As a first step in this direction, it recommended that a NATL-type corral fence with a pedestrian gap be erected along the north-most 76 ft of the east edge of P2. This was endorsed by the Lakes, Vegetation and Landscaping Committee and approved by VP Poppell. This fence, and a matching segment of NATL fence across the street has been funded by IFAS and the Provost and will be put in place this fall.

In a related development, the Conservation Area Land Management Committee recommended that P2 become "NATL East" in the 2005 update of UF's Master Plan.

Natural Area Park enhanced

Natural Area Park, just north of NATL's Stormwater Ecological Enhancement Project (SEEP), is currently the only developed interface between NATL and UF's Cultural Complex. A poster that explains SEEP and a map that shows how NATL's network of trails can be accessed from the Park were added to the Park's kiosk, along with holders for free pamphlets describing NATL and SEEP. At the base of seven trees, representing the seven species of mature trees in the Park, signs were installed with information about the ecological and economic roles of the species. To provide more shade in the future and to increase tree diversity, 15 young trees, representing 12 additional common native species, were planted in the east half of the Park. To accommodate large K-12 groups during the summer programs of the Florida Museum of Natural History, three picnic tables were added to the five already in the Park. To improve the soil, mulch was spread among the tables and on other bare ground in the Park. To prevent vehicles from entering the Park, NAAC proposed, and the Lakes, Vegetation, and Landscaping Committee endorsed, a 24-inch-high board fence on the north and east boundaries of the Park. This fence will be erected this fall at the same time as the P2 fence described above.

At present, pedestrians going between Natural Area Park and the Cultural Complex use a paved road, with parking on either side, immediately south of the Park-and-Ride parking garage. The 2001 Cultural Complex master plan recommended that a new pedestrian

walk connect the Complex and the Park. The outer north fence of the Southwest Chiller Plant was removed to provide needed right-of-way, and Operations Engineering of Physical Plant designed an ADA-compliant walk. Ken Osfield, UF's ADA coordinator, pledged to fund the walk, but construction was postponed to allow completion of an addition to the Chiller Plant.

Restoration of upland pine advanced

A prescribed burn of nearly all of NATL upland pine was accomplished in February under the leadership of Alan Long and with help and equipment from the Austin Cary burn crew, UF's Physical Plant, and Alachua County Fire and Rescue. An estimated 90% of the 248 one-foot-high longleaf pines planted the previous summer survived the burn, but only about 75% made it through the spring drought. When the summer rains began, the survivors began to grow vigorously. Volunteers then further accelerated the restoration of upland pine in NATL's public area by planting 295 pots of wiregrass, 50 small turkey oaks, and 52 six-foot longleaf pines. Physical Plant supplied the plants and Division of Plant Industry provided water, via its hose bibs. Lastly, 500 wiregrass plugs were planted in upland pine in NATL's restricted area.

Photographic record of NATL vegetation digitized and posted

In January 1997, shortly after NATL's 50-meter grid was established, the Florida Museum of Natural History hired a professional photographer to make a record NATL's vegetation prior to major changes. At each grid intersection, photographs were made to the north, east, south, and west, and the resulting 297 color slides were archived by the museum. This winter, the slides were scanned at high and medium resolution and CDs of the digitized images returned with the slides to the museum. The medium-resolution images were also posted at <http://natl.ifas.ufl.edu/gridphotos.htm>, where they can be viewed by clicking in the four cardinal directions at each grid stake.

Road through NATL reconsidered

A proposal that University of Florida donate right-of-way through NATL for an extension of SW 24th Avenue, first made public on 31 Jan 2003, was set aside by President Machen on 3 May 2004. Events relevant to Machen's decision are documented at <http://natl.ifas.ufl.edu/24thAve.htm#history>.

Other events

Odum cypress dome to become part of NATL? Prior to his death, H. T. Odum gave approximately 15 acres near Hawthorne to the University of Florida. The property included a cypress dome of about 6 acres, which Odum wanted to be used for education and research. At the 12 Nov 2003 meeting of the Natural Area Advisory Committee (NAAC), Mark Brown proposed that the Odum property be made an off-campus part of NATL. The Committee suggested that Mark ask the Lakes, Vegetation and Landscaping Committee (LVLC) how off-campus natural areas should be managed and whether NAAC might be involved. NAAC agreed that information relative to the cypress dome could be posted on the NATL web site. At the 8 Dec 2003 meeting of LVLC, Mark proposed that the Odum property be made an off-campus part of NATL and that students and faculty be encouraged to use the dome for research and education. Planning Manager Linda Dixon suggested that if the property were to be used in this manner, the UF Foundation should be asked to transfer the property to the UF Board of Trustees.

Cogon grass to be eradicated. Through the efforts of Erick Smith and Alex Holecek, funding for the eradication of NATL's cogon grass and other invasive exotics was obtained as part of a grant for the control of upland invasive plants in the Hogtown Basin.

Signage for NATL trails augmented. Thirteen signs showing trail names and directions were erected, mostly in the public area.

Rain gage added. A National Weather Service rain gage was donated to NATL by the Department of Entomology and Nematology and installed on the west side of SEEP. Its data will help in planning controlled burns and in setting watering schedules for trees transplanted in Natural Area Park or in NATL's upland pine.

Poppy mallows survive. Poppy mallows that were planted in eight plots in NATL's upland pine during the summer of 2002 continued to survive and bloom during the 2004 flowering season. [Poppy mallows are a threatened species that occurred in the area impacted by McGuire Hall but not in NATL. Their possible establishment in NATL was funded by the McGuire Hall project.]

NATL grid map revised. In addition to updates of the trail system, the new map explains NATL's public and restricted areas and includes the schedule for re-starting successional plots.

Special projects approved. Projects in NATL's restricted area require NAAC approval only if they may have lasting effects on the area's academic usefulness or if they require markers and equipment to be left on site for more than a day. Two such projects were approved: "Effects of distance from edge on egg predation," proposed by Dan Thornton, Wildlife Ecology and Conservation, and "Comparing strip transects and point-quarter methods for estimating laurel oak abundance," proposed by Sonia Canavelli, Wildlife Ecology and Conservation.

Live oak saved. NATL's land-use plan was slightly modified to allow a live oak at the south edge of successional plot B to remain.

NAAC membership

Emilio Bruna represented Wildlife Ecology & Conservation while Susan Jacobson was on sabbatical during 2003-2004. Carol Stiles, long-time NAAC member from Plant Pathology, resigned and will be replaced by Jim Kimbrough. The Ethnoecology Society no longer plans a major project in NATL and hence will no longer have a representative on NAAC.

NAAC fiscal status

On 14 Aug 2003, the balance in NAAC's account was \$88.42. In October, Provost Colburn added \$1,000. On 14 Aug 2004, the balance was \$139.27. The only expenditure greater than \$100 was \$490.50, for additional picnic tables in Natural Area Park.