

Fall 2013 Meeting of the Natural Area Advisory Committee

19 September 2013, NATL Academic Pavilion, 12:00-1:00 pm

Recorded by Morgan Conn and Amanda Abel

In attendance:

Amanda Abel (NATL Graduate TA)

Mike Bentley (Entomology & Nematology Student Organization)

Ethan Carter (NATL Undergraduate TA)

Morgan Conn (NATL Graduate TA)

Mark Clark (Soil and Water Science)

Jaret Daniels (FLMNH)

Jennifer Gillett-Kaufman (NAAC Chair, Department of Entomology and Nematology)

Stephen Holland (Tourism, Recreation and Sport Management)

Erik Lewis (Facilities Planning and Construction)

Lary Reeves (NAAC vice-chair, Department of Entomology and Nematology)

Beverly Sensbach (FLMNH)

Katie Sieving (Wildlife Ecology and Conservation)

Stephen Holland (Tourism, Recreation and Sport Management)

Tom Walker (Friend of NATL, Department of Entomology and Nematology)

12:10 PM

Introduction (Jennifer)

Jennifer talked about the current state of NATL. She mentioned a desire for more volunteer days, focusing on targeted volunteerism – removing invasive plants, fixing the boardwalk, etc. The idea is to get clubs like the Entomology & Nematology Student Organization and the Wetlands Club to commit to projects that directly help NATL. Jennifer passed out new NATL Top 50 Checklist books of species found in the Natural Area. One of NATL's Summer interns worked on this project. Jaret Daniels suggested furthering the idea and making a variety of checklists, like one exclusively for birds or insects. Our other two interns, working in conjunction with the FLMNH, developed lesson plans with accompanying videos for local middle and high school teachers. One lesson plan focuses on invasive plants and the other on phytoremediation in the SEEP. We hope to have these lessons available to teachers in conjunction with the launch of Wi-Fi access in NATL.

1. FY 2012-13 Budget Update (Lary)

The fiscal plan has been on track besides the unforeseen cost of repairing the John Deere Gator. The miscellaneous expenses were slightly less than planned for because trail fliers were cheaper than anticipated. The 2012-13 NATL Fiscal Report is attached as Appendix 1.

2. Draft of 2013-2014 Fiscal Plan (Lary)

The amount of money allocated to invasive control has been reduced and shifted to miscellaneous expenses. The upland pine restoration allocation was increased due to the cost of a burn master to run prescribed fires. The 2013-14 Fiscal Plan is attached as Appendix 2. A vote was taken to approve the 2013-2014 spending plan and it was unanimously approved by the committee members that were present.

3. Updates on possible capital improvements and funding sources (Jennifer)

Last year the items listed in Appendix 3 were discussed and ranked by the NATL Operations Committee and modified based on a discussion by NAAC members. Since then five items have been crossed off the list. When the group was asked if they had any comments about the remaining items and their ranking of importance Katie Sieving asked about the utility of buying a sand wheelchair. Jennifer commented that Lake Wauburg had bought one and it was never used. The group then decided to take the sand wheelchair

off the list. Jennifer went on to update the group on the status of the WiFi stations and wildlife cameras being installed throughout the public area. She explained that the WiFi units will be off of the trails and camouflaged so they won't be an eyesore.

4. People Counter Update (Amanda)

Three TrailMaster units are installed at NATL's Academic, Cultural Plaza and Natural Area Park Entrances. These units measure NATL usage by counting the number of people passing through each of the three entrances. The Cultural Plaza Entrance has had a TrailMaster installed since July 2010, however initial technical difficulties yielded unreliable data in the first few months. Subsequently, two additional units were installed at the Academic Entrance (June 2011) and Natural Area Park Entrance (April 2012). The unit located at the cultural plaza entrance had difficulties during the summer of 2013 due to an ant infestation. This problem was resolved with the help of Mike Bentley. Appendix 4 includes a graph of the number of visitors counted by the TrailMaster units in 2012 and 2013 along with a table of all reliable information gathered by the units since December 2010. Because most NATL visitors are counted twice (as they enter and exit), all counts are divided by two in order to estimate the number of visitors NATL receives.

5. Volunteer Update (Amanda)

Since the last NAAC meeting in September 2012, NATL has hosted a number of volunteer events. Volunteers at these events worked on coral ardisia control, trash removal, planting wiregrass, and trail trimming. These events brought 58 volunteers who worked a total of 112 hours. In addition, Tom Walker, Ken Prestwich and Chris Johns collectively donated 243 hours of their time to NATL. A summary of volunteer hours is attached as Appendix 5.

6. Minigrant Update (Morgan)

In 2012, the NAAC received and ranked eight Minigrant proposals, and two (at \$500 each) were approved for funding. Typically, the two Minigrants funded by the NAAC are the only projects pursued. This year, we sought ways to allow the remaining projects to go on, resulting in five of the eight projects receiving funding through the Minigrant Program, the Florida Museum of Natural History, Doug Jones and Beverly Sensbach, generous faculty sponsors or the NATL Chair.

The Minigrant projects currently being pursued or completed include: (1) a survey of macrofungi in NATL; (2) Nitrate analysis of the SEEP; (3) Spring species composition and sampling techniques for NATL's mosquitoes; (4) A survey of non-native reptile and amphibian predators on caterpillars; (5) A description of pollination networks in NATL. These projects are in various stages of completion. Proposals and, eventually, final reports will be available on the NATL website (<http://natl.ifas.ufl.edu/minigrants.php>).

It is time for a new Minigrant cycle to begin. The NAAC agreed to begin receiving proposals as soon as possible, with a deadline of October 31, 2013. The NAAC will vote on the proposals and rank them on November 1st, 2013. This is a month earlier than last year; we hope to get the process in motion before the holidays.

7. Facebook and Twitter Updates (Morgan)

NATL's Facebook page has 475 Likes and our Twitter page has 333 Followers. Since the last NAAC meeting in April, we have gained 56 and 52 followers on Facebook and Twitter, respectively. NATL also has a hashtag (#UFNATL) which can be used in all social media platforms. This will be incorporated into Sustainable UF's social media campaign, so that visitors to NATL can more easily share their photos and videos of NATL on Facebook, Twitter, Instagram, and Vine. Two new signs were made and displayed to encourage this: one on the kiosk at the Academic Entrance and one freestanding at the Cultural Plaza Entrance.

8. Invasive Plant Update (Ethan)

NATL has approximately 142 plants that are not native to Florida, but only about 25 of these are currently under strict surveillance because of their perceived potential to significantly alter NATL ecosystems. An invasive plant will naturalize on its own, and take over native ecosystems by choking out and outcompeting natives. FLEPPC (Florida Exotic Pest Plant Council) maintains a list of all invasive plants in Florida, ranking them as either category 1 or 2. Category 1 plants are the most lethal and displace native plants disrupting ecosystems, while category 2 plants can spread but have not yet necessarily altered ecosystems severely enough to be categorized as 1. At NATL, we use both mechanical and chemical techniques to control invasive plants. A few common invasives that you may recognize are mimosa, Chinese tallow and camphor tree. The only invasive eradicated from NATL has been elephant grass, however all of our documented invasives have been severely diminished and are controlled. We define “eradicated” as being absent with no sightings in NATL for a minimum of 3 years. There are currently 8 plants that have not been sighted in several months and no known existing infestations awaiting treatment. The common names of these species are air potato, pindo palm, silverthorn, negundo chastetree, chinaberry, wandering Jew, Japanese loquat, and lantana. It is expected that they are no longer found in NATL, but have not yet reached the 3 year mark to be classified as eradicated. Four of the remaining invasive species that cause the most concern are cogon grass, skunk vine, coral ardisia, and Japanese climbing fern, which are all category 1.

9. Nature Trail Update (Ethan)

The Old Field, Hammock, and Upland Pine trails are mowed weekly until the rain stops and it cools down. Then they will be mowed biweekly. PPD mows all other trails in the public area. Sequences of interpretive signs are updated once a month and the trails are checked weekly to check for inconsistencies with the signs.

10. Boardwalk Concerns (Ethan)

TAs maintain the SEEP boardwalk by trimming low hanging limbs, sweeping, applying sand to the slick areas after rain, and updating interpretive signs. The SEEP boardwalk has 9 boards that have become waterlogged and foot traffic has caused indentations in the soft wood. The Operations Committee has discussed this issue and believes this might be something that the Wetlands Club might want to take on as a project- either flipping the boards over or replacing the boards all together. Mark Clark agreed to this idea.

11. Wheelchair Access (Ethan)

The area of SEEP trail which borders Natural Area Drive has a few areas with steep slopes that people in wheelchairs are wary of navigating. Additionally there is a drainage ditch which wheelchairs cannot cross. On October 20th the Alpha Gamma Rho Fraternity will be doing a service day at NATL for 4 hours. They will create a minibridge to cross the ditch. They will also put down cross ties 60 inches from the fence and then level the trail in between. (Jennifer hopes to get some media coverage of this event, and has contacted WUFT.)

12. Restoration of Upland Pine (Tom)

Dr. Walker handed out updated versions of the NATL-west Grid Map (available here: http://natl.ifas.ufl.edu/i/NATL-west_G_Map.jpg) and spoke about what we accomplished this year and Upland Pine restoration efforts for the future. Most of this was centered on the prescribed burn this year, which was set in motion around February 1st when Mary Barnwell was hired as a burn master. By March 25th, everything was in order and the only thing standing in the way of a burn was finding a crew and waiting for the perfect conditions. Those conditions came and went on May 10th, when a burn was scheduled and then had to be cancelled. By early July, things were looking up – although we had a very wet summer this year – for the burn to go through. On July 12th, the prescribed burn in Restricted Area Upland Pine Blocks D&E was supervised by Mary Barnwell with some help courtesy of the Austin Cary Memorial Forest and the Ordway-Swisher Biological Station. Due to the weather conditions, only approximately 10% of the area was effectively burned.

Although the burn did not go as planned, lots of work was done to these Blocks that allowed restoration to continue forward. Block D is ready to be burned in February or March and Block E will be ready for a burn in another 2 or 3 years, giving ample time for the wiregrass plugs planted in late July of this year to become established.

13. Next NAAC meeting date and time. 12:00, Thursday April 17, 2014.

Attending members unanimously approved 12:00 PM on Thursday April 17, 2014 as the time and date of the Spring NAAC Meeting.

14. Group photo

The group photo of attending NAAC members is attached as Appendix 6.

12:55 PM Meeting Adjourns

Appendix 1
Fiscal Report for FY 2012-13

NATL Fiscal Plan for FY 2012-13		[reformatted here]	Final Fiscal Report for FY 2012-13	
Approved by NAAC and LVL, fall 2012				
Figures in red are deviations from original plan				
Funds available for 2012-13, excluding stipends for Graduate TAs*.				
Brought forward from 2011-12		\$ 916		\$ 916
Projected income for 2012-13				
Provost	\$ 6,000		\$ 6,000	
NATL endowment	\$ 4,625		\$ 4,626	
	Sum	\$ 10,625		\$ 10,626
	Grand Total	\$ 11,541		\$ 11,542
Spending plan for 2012-13				
Personnel				
Undergraduate TA	\$ 4,322		\$ 4,322	Experienced undergrads (Elizabeth Wells, Ethan Carter, Sam Hart)
Control of invasives	\$ 2,640		\$ 2,640	Invasive specialist (Ethan Carter)
	Sum	\$ 6,962		\$ 6,962
Other spending				
Miscellaneous expenses	\$ 2,200		\$ 2,399	Higher than expected because of equipment maintenance needs
Upland pine restoration	\$ 900		\$ 900	Increased to hire Sam Hart
2000 NT fliers	\$ 474		\$ 305	Printed by Ento Dept graphics for reduced price
2 minigrants @\$500 each	\$ 1,000		\$ 1,000	
	Sum	\$ 4,574		\$ 4,604
	Grand Total	\$ 11,536		\$ 11,566
To be carried forward		\$ 5		\$ (30)
Online donations to NATL (implemented March 2012)		\$ 921	Entire amount carried forward to FY2013-14	
* The Provost and the CALS Dean will each pay the stipend for				

Appendix 2
Fiscal Plan for 2013-14

Initial NATL Fiscal Plan for FY 2013-14			Comments
Final version to be approved at Fall meeting			
Funds available for 2013-14, excluding stipends for Graduate TAs*.			
Brought forward from 2012-13		-30	
Projected income for 2013-14			
Provost	6,000		Assumes no change
NATL endowment	4,625		Assumes no change
Sum		10,625	
Grand Total		\$10,595	
Spending plan for 2013-14			
OPS			
Undergraduate TAs	4,322		Experienced help, 8 hrs/week (does most of routine maintenance of nature trails)
Control of invasives	1,320		<i>Invasive specialist, 2 hrs/week (1/2 of what was allocated in 2012-13)</i>
Sum		5,642	
OE			
Miscellaneous expenses	2,500		
Upland pine restoration	1,000		<i>Continues efforts to restore 13 acres of longleaf pine ecosystem Includes bummaster charges</i>
2000 NT fliers	400		<i>Based on quote</i>
2 minigrants @\$500 each	1,000		Program attracts student proposals to fulfill NATL needs
Sum		4,900	
Grand Total		\$10,542	
To be carried forward		\$53	
NATL improvement fund (from online donations)			
Online donations to NATL (implemented March 2012)	\$	921	
* The Provost and the CALS Dean will each pay the stipend for a NATL Graduate Teaching Assistant			

Appendix 3

Capital Improvements Update Fall 2013 Report

The following items were discussed and compiled by the NATL Operations Committee and modified based on a week's discussion by NAAC members. Some items have an associated web link that is an example of the item described.

Long Range NATL Wish List: 2011-2021 Vision Plan

We recognize that NATL already has tremendous value to the local UF community. This Vision Plan seeks to strengthen and enhance these indigenous values of NATL and, in addition, provide mechanisms for bringing the educational values of NATL to an unlimited online environmental community of users. We present the plan in the form of a two-part outline of infrastructure and other developments, focusing on both in-person and online users of NATL.

This list is not static; additional items may be added to the list. Items will be removed from the list if more than half of NAAC members feel that the item would not enhance the use of NATL. Funding for items could come from donations to the UFF on behalf of NATL or by writing specific items into future grant proposals.

A. Enhancing in-person access

- ~~1. Bike parking areas at each primary NATL entrance. Completed 2012.~~
- ~~2. Extend 110v AC to the pavilion and the NATL shed (two weather proof duplex outlets at the pavilion and hook up the wiring that came with the prefab storage shed). Acquire a portable projector screen available for use in the NATL Pavilion. Completed 2013.~~
3. Extend potable water service to the pavilion area to provide access to water for drinking, bottle filling, hand washing, and class-related low-volume uses. This could include a sink and associated drainboard if restraints on cost, design, and context are met.
4. Two or more locking cupboards for class use (to reduce the risk associated with students leaving valuables unattended in the pavilion during class time). (Design and placement not yet considered.)
5. Natural Area Park water fountain. (Design and placement not yet considered.)
6. Dog waste sanitation stations: Signs about dogs on leashes and picking up of animal waste at three main entrances with bags for waste disposal. (Dogipot 1003-L Pet Waste Station Kit) [LINK](#)
7. Sand wheel wheelchairs (1-5) and storage area. [LINK](#)
8. Additional seating areas at NATL Park and along NATL trails. (If the UF Foundation approves the plan, donors might pay enough for benches with commemorative inscriptions to fund other items on this wish list). [LINK](#).
9. Binoculars on a permanent stand that are attached to or near the boardwalk for wildlife viewing. (If the UF Foundation approves the idea, donors might pay enough for binoculars with commemorative inscriptions to fund other items on this wish list.) (Barska® 40x100 mm Blueline Jumbo Waterproof Binoculars and Stand). [LINK](#)
10. Add a classroom and/or lab building to facilitate NATL use. To avoid using land in the NATL-west Conservation Area, the building might best be situated on an out-parcel south of the pavilion. (A representative of the UF Foundation believes NATL might attract a donation of \$1 million or more. Having a plan for using such a donation might help the donor decide to make it. An alternative plan for using such a donation would be to set up an endowment for the benefit of NATL.)

B. Instituting remote access (and security) and real-time online interaction with NATL

- ~~1. Update the look of the NATL website while improving its usefulness as a distance natural laboratory. This change will maintain the historical information on the website now; it will not be lost in the change—just repackaged. Completed 2012. Website additions could include a NATL~~

~~"virtual collection"/species inventory with photos and audio recordings of sounds such as resident bird, frog and insect calls for groups interested in taking virtual field trips. Completed 2013.~~

- ~~2. Complete and enhance Wi Fi coverage in NATL. With this, we could lead live tours of NATL using camera abilities built into iPads and other electronic devices. This would allow teachers and students the ability to direct the tour by asking their NATL tour guide to zoom in on subjects of interest. This would be a wonderful opportunity for our students in the ecotourism track to lead tours for students around the world. Completed 2013.~~
- ~~3. Install webcams in NATL at carefully selected venues. These cameras could be used by researchers studying animal behavior in NATL as well as giving access to NATL to teachers in their classrooms. Example of broadcasts: [LINK](#) Completed 2013.~~
4. Six additional people-counting devices for gathering data on trail usage.
5. In partnership with FLMNH, develop a program using an interactive whiteboard (e.g., SMART board) to use digital material from NATL to involve K-12 students in learning about ecological concepts and problems. Including grade-level specific, standards-based curriculum materials (field investigation activities) that can be implemented as part of school field trips or summer enrichment programs. Make available as downloadable files for use by home schooled children, scout groups and others.

C. Enhancing the research and teaching usage of NATL

\$10,000 a year instituting a seed money grant program (\$500-\$5,000 grants) to foster data collection, proposal submissions and distance curriculum development utilizing NATL. Distance curriculum developed using seed grant funding would be made freely available on the NATL website. \$1,000 per year earmarked for a grant that would support one or more citizen science projects in NATL. Citizen science projects could fund some NATL specific ideas as well as support the partnership of NATL with national initiatives.

Appendix 4

People Counter Summary:

Figure 1 summarizes information collected by the TrailMaster units in 2012 and 2013. Figure 2 summarizes all reliable information gathered by the TrailMaster units since December 2010. Because most NATL visitors are counted twice (as they enter and exit), all counts are divided by two in order to estimate the number of visitors NATL receives.

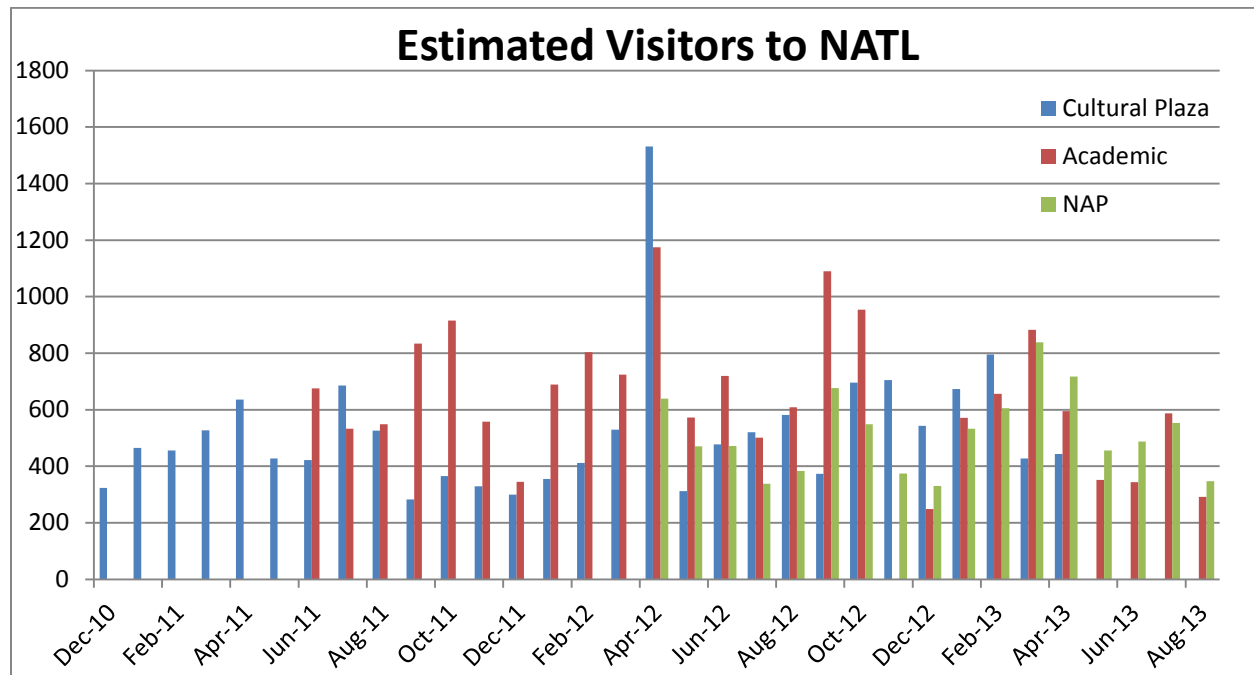


Figure 1. Summary of TrailMaster counts for 2010 through 2013 at the Cultural Plaza, Academic and NAP entrances (all numbers are TrailMaster counts/2 because most users are counted twice, as they enter and exit).

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CPE	2010												324	324
	2011	465	457	528	636	428	422	686	527	283	366	330	300	5428
	2012	356	412	529	1532	313	478	521	582	373	697	706	543	7042
	2013	673	796	428	443	*	*	*	*					2340
AE	2011						676	533	549	835	916	558	346	4413
	2012	689	804	725	1175	573	720	502	609	1090	955		249	8091
	2013	572	656	883	595	352	344	588	291.5					4281.5
NAP	2012				639	471	472	321	384	677	549	375	331	4219
	2013	534	605	838	717.5	455.5	488	553	347.5					4538.5
													Grand Total	40677

Figure 2. Summary of NATL usage estimates via TrailMaster counts (all numbers are TrailMaster counts/2 because most users are counted twice, as they enter and exit). *Technical difficulties, possibly due to ants and/or laser sensitivity setting, caused data to be unreliable from May-August.

Appendix 5

Volunteer Summary: Since the last NAAC meeting in April, NATL has hosted a number of volunteer events. Volunteers at these events worked on Coral Ardisia control, trash removal, planting wiregrass, and trail trimming. These events brought 58 volunteers who worked a total of 112 hours. In addition, Tom Walker, Ken Prestwich and Chris Johns collectively donated 355 hours of their time to NATL.

May	June	July	Aug
5/16 Trash Pick-up (2 people X 2 hrs) 4 hrs	6/11 Chris Johns and Sam photograph plants for Most Wanted Poster 2 hrs	7/3 Chris Johns photograph Ardisia 1 hr	8/17 Volunteers trimmed trails and picked up trash (11 people X 2 hrs) 22 hrs
5/21 Chris Johns NATL Most Wanted Poster 2 hrs	6/11 Chris Johns works on poster 5 hrs	7/4: Chris Johns finishes poster 3 hrs	
	6/12 Chris Johns works on poster 4 hrs	7/20: Summer Plunge volunteers plant wiregrass (5 people X 2hrs) 10 hrs	
		7/20: Warrington Welcome Class plant wiregrass (17 people X 2hrs) 34 hrs	
		7/29: Volunteers plant wiregrass (7 people X 2 hrs) 14 hrs	
		8/1: Volunteers plant wiregrass (2 people X 2 hrs) 4 hrs	

Volunteer Hours

Miscellaneous Volunteer Projects	112 hours
Chris Johns	17 hours
Tom Walker	142 hours
Ken Prestwich	84 hours
Total	355 hours

Appendix 6

Group Photograph

