

Partnering with Schools & Universities



US Army Corps of Engineers
BUILDING STRONG®



Why Partner with Educational Institutes?

- Involvement with local universities and schools is a natural fit with the Corps' increasing emphasis on environmental stewardship and STEM.
- A good program can foster ownership of the project which is beneficial when seeking community support.
- The easiest way to reach an adult is through the experiences of their children. Don't forget these programs have the ability to drive visitation from these contacts.
- Think outside the box: graphic design, environmental studies, event planning, recreation, biological sciences, engineering, architecture
- Give them the opportunity to say yes.



Court Your Local School Teachers

- Parks as Classrooms
 - You have the resource they have the students
 - Reaching students now can result in changed behaviors later
- Meet with your school superintendents and let them know what your projects have to offer its teachers and students.
- Host curriculum-based CE courses
 - Project Wet
 - Project WILD
 - Aquatic WILD
 - Aldo Leopold Education Project
 - Food, Land & People



Job/Intern Fairs

These are an easy way to begin interaction with your local university.



- Recruit volunteers
- Educate
- Establish an agency presence
- Establish relationships



BUILDING STRONG®

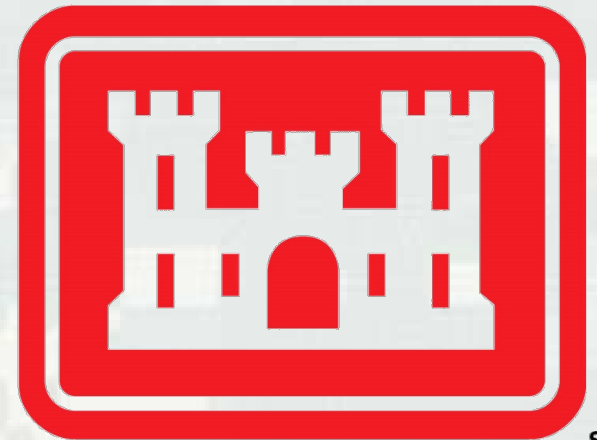
Where Preparation Meets Opportunity!



Guest Speaker for Intro to Rec Classes

The Athletic Department is a great way to promote water safety but the Recreation Department is your best way to get direct student interaction at your lake project.

- Educate
- Establish an agency presence
- Recruit
- Develop relationships

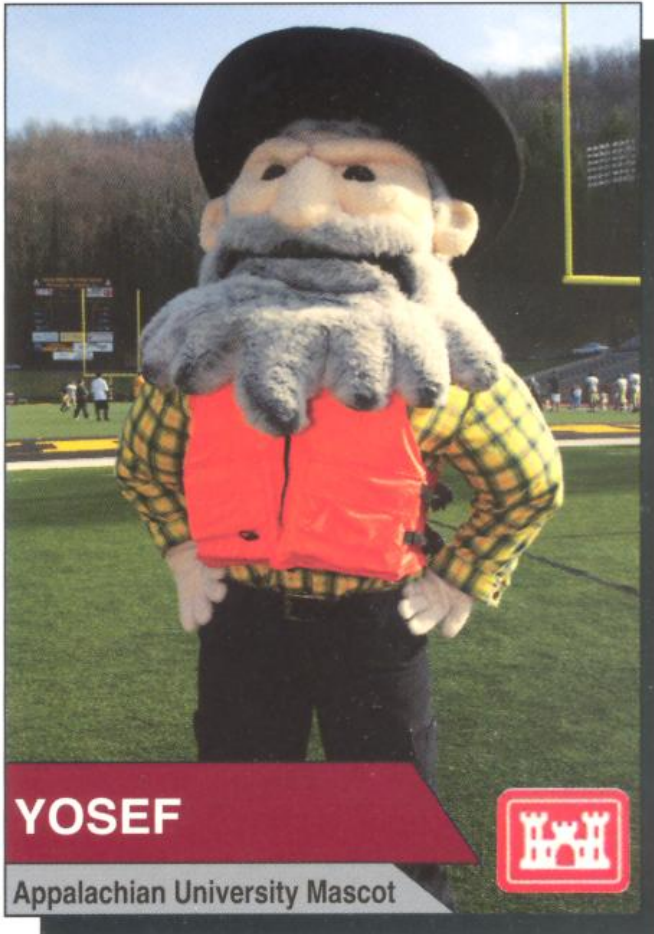


SM



BUILDING STRONG®

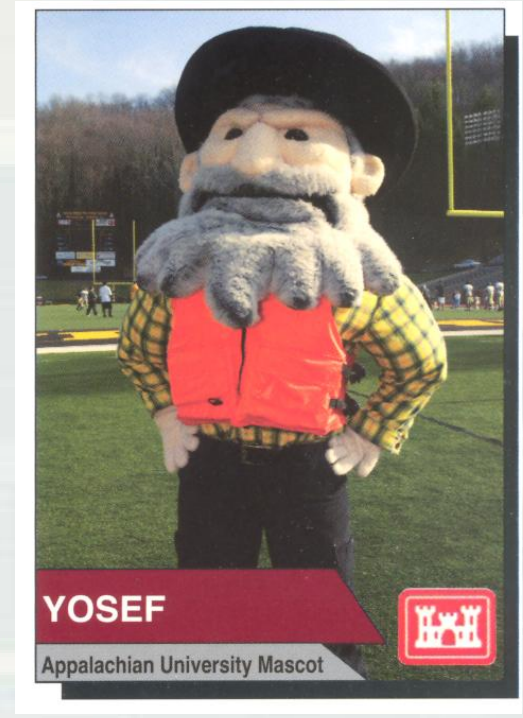
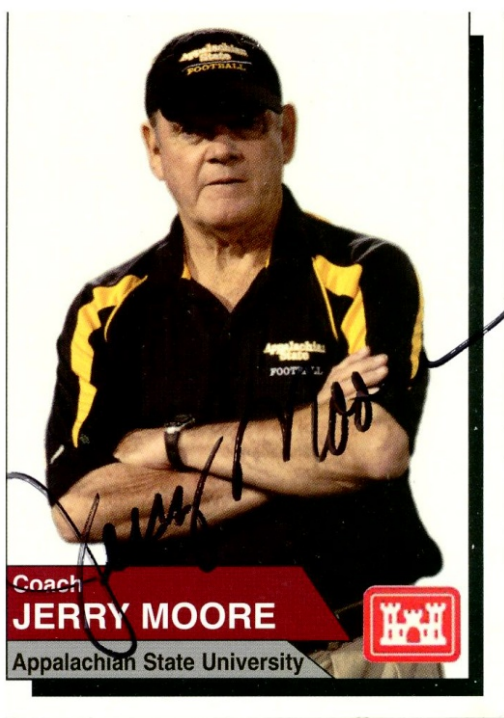
Case Study: W. Kerr Scott Lake & ASU



- Make initial school commitment easy, i.e. “Could we have 10 minutes of your time to take a picture of the mascot in a life jacket? Anytime would work for us.”
- At W. Kerr Scott Reservoir in SAW, Appalachian State University allowed a ranger to come to a practice to get photos and video of players, coach and mascot wearing life jackets and promoting water safety.



Water Safety Trading Cards



These are popular with kids and are cost effective way to promote water safety (4 cents per card)



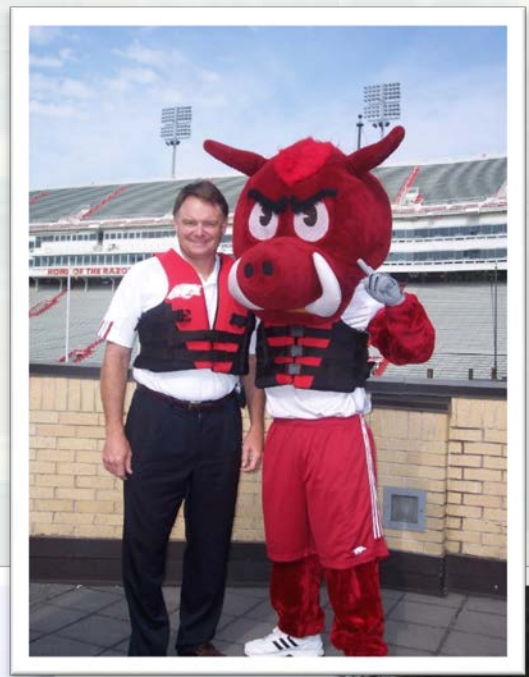
Take Advantage of the Image

Once you have established contact and made a successful interaction, get creative!

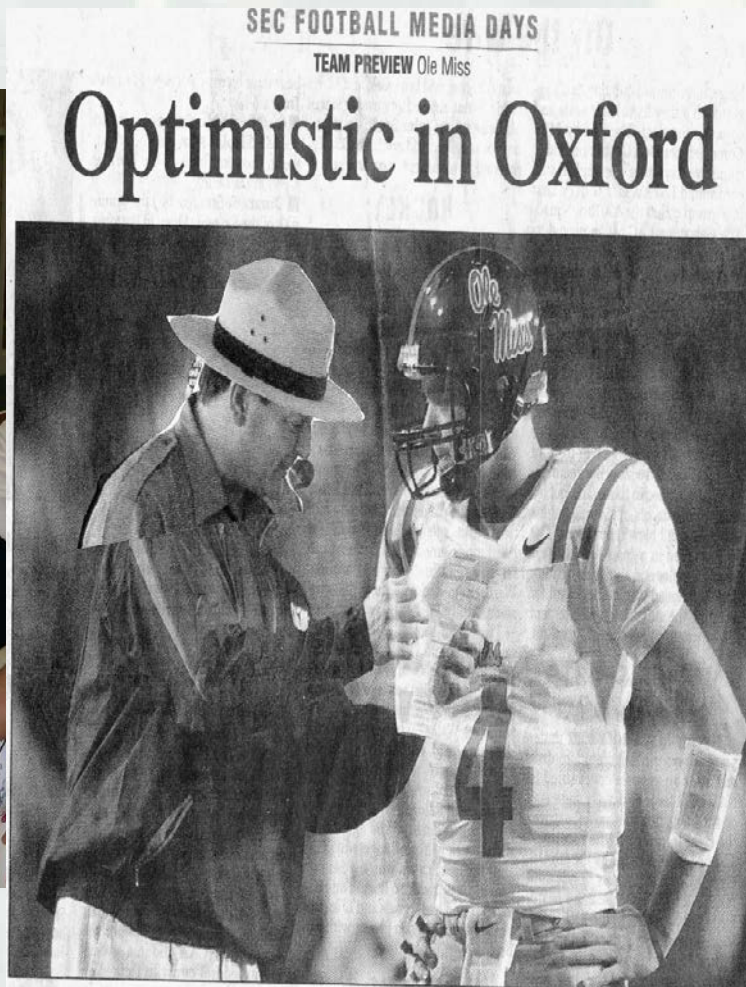
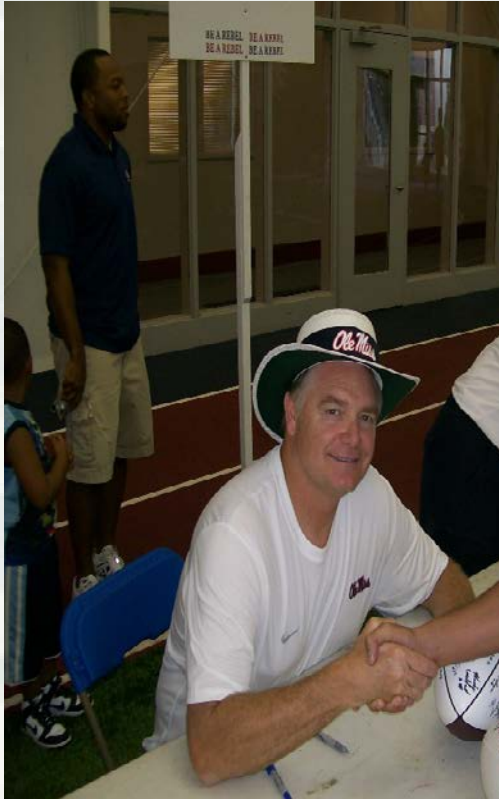


BUILDING STRONG®

Lessons Learned



Just Two Years Later!



Westfall
Last season, Mississippi Coach ~~Westfall~~ (left) and quarterback Jevan Snead rode an early-season victory over eventual national champion Florida to a 9-4 record that included a victory over Texas Tech in the Cotton Bowl. It was Nutt's first season with the Rebels. Arkansas Democrat-Gazette/RICK McFARLAND

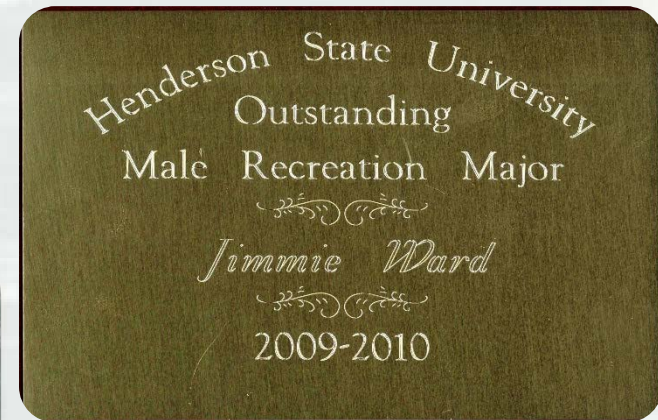


BUILDING STRONG®

Volunteer Interns

If you have a good working RELATIONSHIP with a university in proximity to your project, you can recruit volunteer interns.

Students are often required to do internships to fulfill their graduation requirements.



NC State Eagle Cam

- This project originated when Army Corps of Engineers biologist, Francis Ferrell, led a class of NCSU ornithology students on a visit to an active Jordan Lake Bald Eagle nest in March 2010.
- A team of volunteer engineers, NCSU graduate students, faculty, and staff formed over the next six months.
- Video cameras installed at an active nest in October and began monitoring the breeding pair just before female laid two eggs in early December.

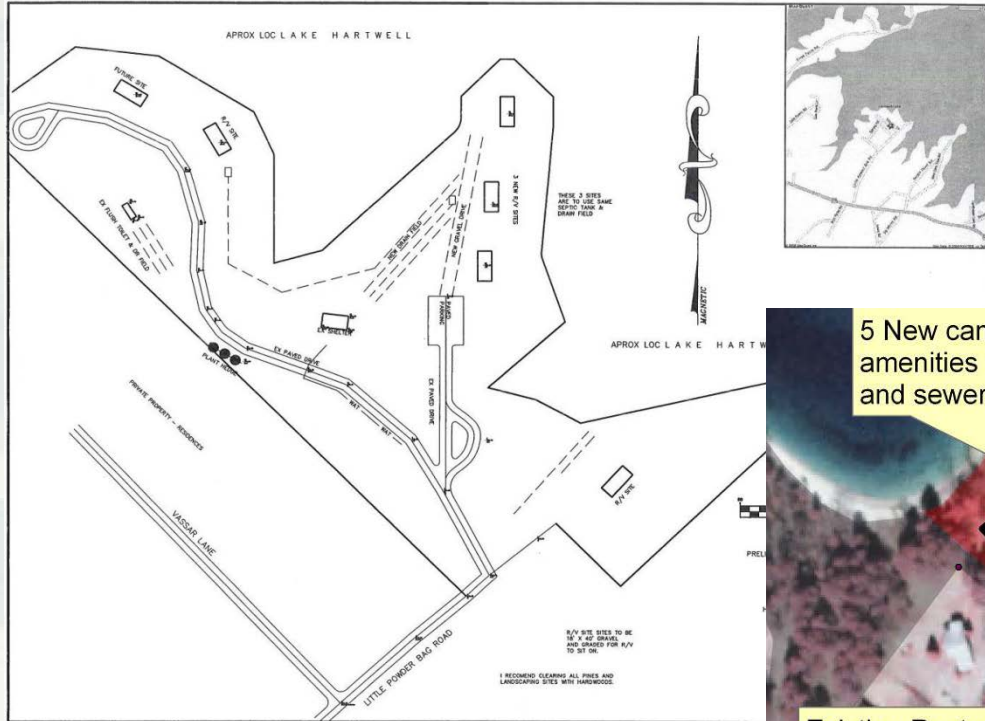
NC STATE UNIVERSITY

Live Video - Bald Eagle Nest at Jordan Lake, NC

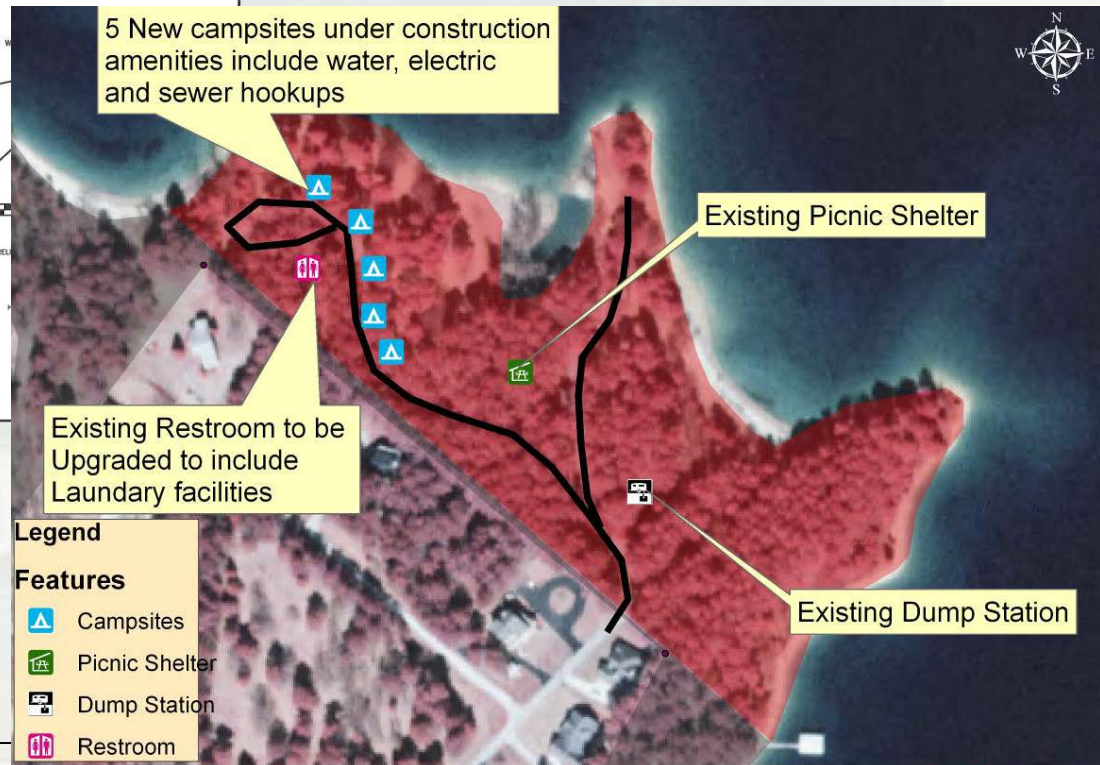


Nest is visible dawn to dusk Eastern Standard Time.

Clemson University Department of Parks, Recreation, Tourism



- 2009 MOU with Clemson for facility planning, outreach, data collection, program development



- Student assignment to design a volunteer village
- Winning design implemented at Hartwell

0.00001 0.02 Miles
1 inch = 0.03 miles



Hartwell Lake Volunteer Village
Feb 5 2010





Walla Walla District MOU with WSU



- Issue: Lower Granite- Illia Dunes Recreation area overuse. Popular party area for WSU students resulted in habitat degradation, littering, parking problems, safety concerns
- MOU signed with WSU in 2015 to involve students in addressing the problem and providing volunteer clean-up and restoration of the area



Juniata College Raystown Field Station



- Lease since 1974 to Juniata to provide opportunities for environmental research and education at Raystown.
- Developed Raystown Conservation Education Partnership
- Led to 2007 Handshake funded challenge partnership agreement for environmental education programming.



Simonson Biological Field Station

Henderson State University

- 7,200 square-foot log structure on 104 acres
- Classrooms and laboratory
- Student dormitory rooms
- Supports HSU faculty research, field based courses, educational outreach, biology club and biology department retreats and events
- Support use consistent with its mission



BUILDING STRONG®



BUILDING STRONG®

DeGray Lake Visitor Center Renovation

Estimate-\$350,000

Mary Beth Trubitt, PhD, Station
Archeologist for the Arkansas Archeological
Survey at HSU

- Serves as research and resource center
- Maintains archeological records, collections
- Teach anthropology courses and outreach



BUILDING STRONG®

- Artifacts on loan from the University (free)
- Caddo Village mural- cost of materials only
- Identification labels and labor for display (free)
- Provided historic trivia, loan historical photographs



Restoring Native Species at Allatoona

- Lake Allatoona has a 10-year plus relationship with Berry College.
- Ranger Terrell Stoves approached a professor at the college about a possible partnership to reintroduce the Mountain Longleaf Pine to Pine Mountain at the project.
- This success led to the expansion of the program 7 years later to include the project as a test site for the introduction of potentially blight resistant American Chestnuts.

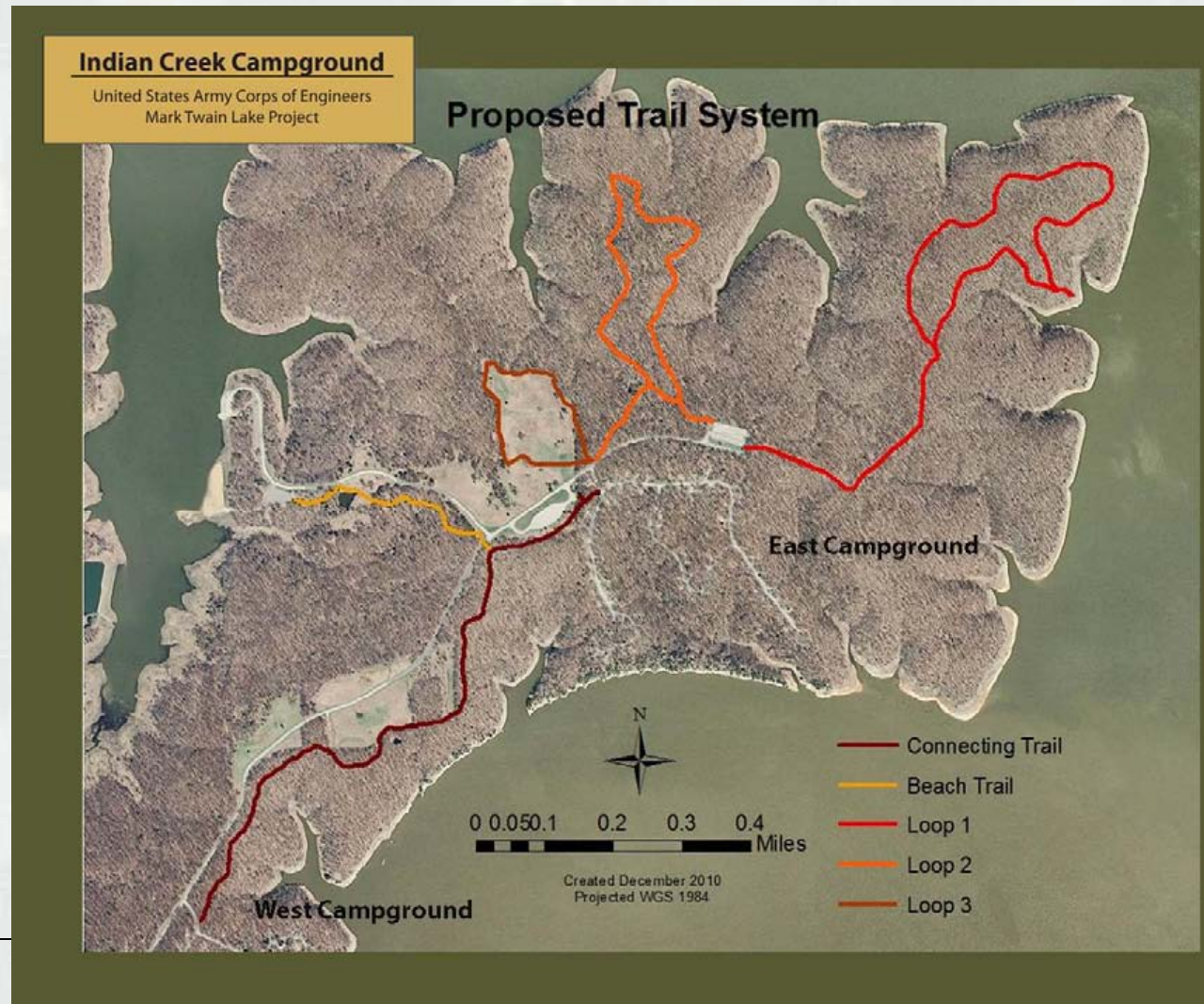


- The Professor on the Longleaf Pine project also happened to be the state coordinator for the American Chestnut Foundation with whom the Corps has a National MOU.



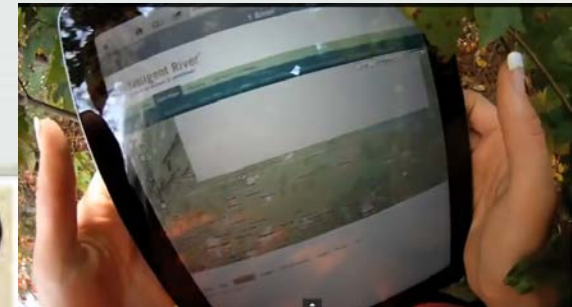
Trail Design at Mark Twain Lake

- MOU with Western Illinois University and the FOREST Council
- Worked with Open Space Park Planning/Landscape Construction class on needs assessment and design of multi-use trail project
- FOREST Council applied for grant \$



Clemson Water Quality Monitoring

- Clemson University awarded \$3M by the National Science Foundation to design, develop and deploy a basin-wide network of computerized sensors that provide real-time remote data acquisition to monitor water quality along the entire length of the Savannah River.
- Partnered with the Corps to place sensors and share data.



Boise State Kestrel Box Program

- Students at BSU build and install kestrel nest boxes, develop management plan, monitor populations, band birds



Western Kentucky University Water Quality Work at Nolin River Lake

- Set up Interagency Personnel Agreement (OF-69) to fund water quality research by two WKU employees. No competition required. (*not to be used for students/grad students... must be a technical expert*)
- Authority: 5 USC 3374 Intergovernmental Personnel Act of 1970
- Allows temporary assignments of state, local, or tribal government, and university employees at Federal agencies
- Assignments should have mutual benefits for both organizations with sound public purpose to further the goals of the organizations
- Developed sampling/work plan to investigate harmful algal blooms and non-point source pollution
- End product: document that can be used to contract for sampling
- Led to partnership with USGS to install real time WQ monitoring stations that use remote controlled submarine



Outdoor Nation Campus Challenge

- 6-week competition between 90 colleges in 35 states with 1.3 million students to see who can get the most people outdoors and active
- Participating schools near Corps lakes:
 - Ouachita Baptist (AR)
 - Southern Illinois (IL)
 - University of Iowa (IA)
 - Texas Women's (TX)
 - NC State (NC)
 - Miami University (OH)
 - Texas Christian (TX)
 - Green Mountain (VT)
 - Cabrini (PA)
 - University of Alabama (AL)
 - West Virginia (WV)
 - Austin Pey (TN)
 - Morehead State (KY)
 - California State Chico (CA)
 - Indiana University (IN)
 - Clark Atlanta (GA)
 - Spellman (GA)
 - Berry (GA)

- <http://www.oncampuschallenge.org/>



ESRI ConnectED Initiative

- ESRI offers an online ArcGIS organization account to every K-12 school in the U.S. for FREE. Also provide instructional tools and tech support.
- <http://www.esri.com/connected>
- Powerful tools to engage students with digital/electronic media and connect them with their nearby public lands and waters.
- Good way to meet the “Every Kid in a Park” initiative to get every 4th grader to a local park.



Beating the Odds: A Year in the Life of a Piping Plover

Piping Plovers flock to the same shores that attract people. These birds are on the brink, with only 8,000 adults left. From Canada to the Caribbean, Audubon is working to safeguard sandy reaches critical to the birds' survival, and encouraging people to share the beach.

Intro Summer Fall Winter Spring

A map of North America and the North Atlantic Ocean. A red line traces the migration path of Piping Plovers, starting from the Gulf of Mexico and moving north along the Atlantic coast. The map includes labels for the United States, Mexico, and the Gulf of Mexico. A play button icon is overlaid on the map.

A Diminutive Beachcomber's Life on the Edge

The Piping Plover, a federally threatened and endangered shorebird, inhabits wide, open beaches, shorelines, and dry lakebeds in North America. The global population of these sparrow-sized birds is only about 8,000 adults. It breeds primarily along the Atlantic coast from eastern Canada to North Carolina, on the shores of the Great Lakes, and along rivers, lakes, and wetlands of the northern Great Plains. In winter, the birds migrate to coastal beaches, sandbars, and mudflats from the

Help Audubon protect Piping Plovers



Dr. Joy James
Appalachian State University



BUILDING STRONG®

Questions?



BUILDING STRONG®