

## Partnering with Schools & Universities



US Army Corps of Engineers  
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## 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.



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## Job/Intern Fairs

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



- Recruit volunteers
- Educate
- Establish an agency presence



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## 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



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## 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

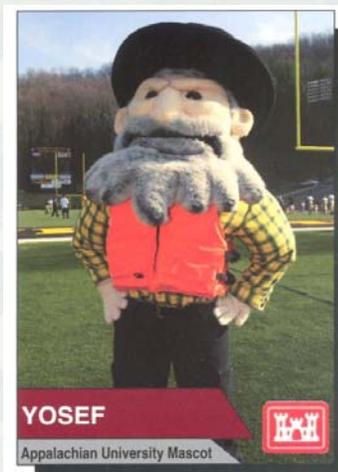


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## Case Study: W. Kerr Scott Lake & ASU

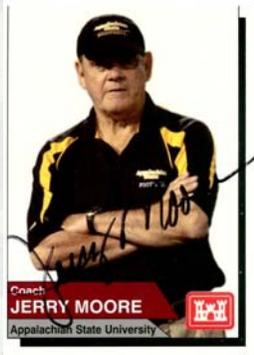


- Make initial school commitment easy, i.e. “Could we have 10 minutes of your time to take a picture of the mascot in a life jacket? Anytime would work for us.”
- At W. Kerr Scott Reservoir SAW, Appalachian State University allowed a ranger to come to a practice to get photos and video of players, coach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



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## Water Safety Trading Cards



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



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## Take Advantage of the Image

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



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## Keep the Ball Rolling!

Seek ways to remain involved. If you have promoted water safety with the athletic department, a coloring contest is an easy next step.



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Coloring contests allow you to integrate other partners such as elementary schools.



Through the local cooperating association, this group paid for the football prizes signed by the coach.



FRIENDS OF  
W. KERR SCOTT LAKE

499 Reservoir Road • Wilkesboro, NC 28697 (336) 921-3390



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## Contest was Judged by ASU Recreation Students



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## The Grand Tour

Once you have visited with the Recreation Department arrange for them to visit you.

- Give the faculty a tour of your park
- Brainstorm ways to work together
- Maintain the attitude "Our park is your oyster"



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## Work with the event planning class

Students in these classes are tasked to plan, market and execute events.



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At W. Kerr Scott Reservoir, the event planning class has organized:

- Take a Kid Fishing Day
- Mountain Bike Clinic
- Fly Fishing Clinic
- Activities for understaffed BSA group



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ASU student Melissa Autin was a certified canoe instructor whose event planning class assisted a Boy Scout event



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Get creative and research the schools existing programs.

How can you work together?



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## Read With a Ranger

(How W. Kerr Scott piggy backed with ASU's summer reading program)

- Present interpretive programs at your local library
- Literacy is a great tool to teach environmental education
- Host a book swap event



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## 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.



# Jonathan and Jacob



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Jonathan and Jacob performed 400 hours of service at W. Kerr Scott Reservoir and received 12 credit hours from ASU. The MOU was drafted by a park ranger and a recreation department professor.



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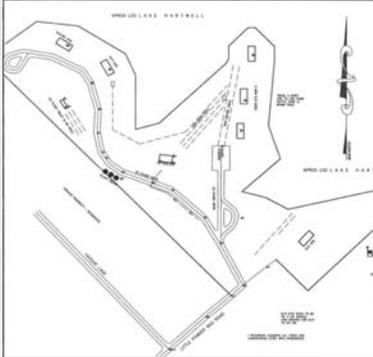
Jacob arranged for one of his professors, a Lewis and Clark re-enactor, to assist with a Cub Scout day camp.



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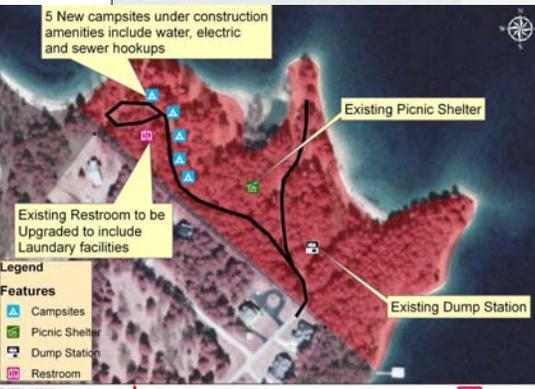


## Clemson University Department of Parks, Recreation, Tourism



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

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



**Hartwell Lake Volunteer Village**  
Feb 5 2010



## Get Students in your Park

Bird watching = partnership?

NC State biology and computer science department  
+ interested citizens

+ Jordan Lake  
= EAGLE CAM



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## 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.

## 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.



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## 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.



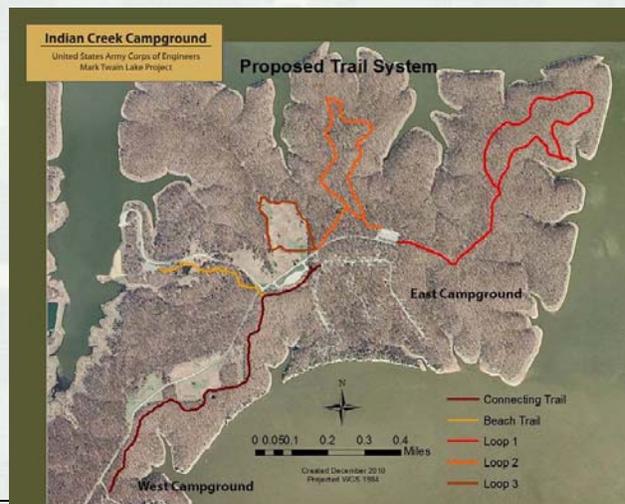
- The Professor on the Longleaf Pine project also happened to be the state coordinator for the American Chestnut Foundation with whom the Corps has a National MOU.



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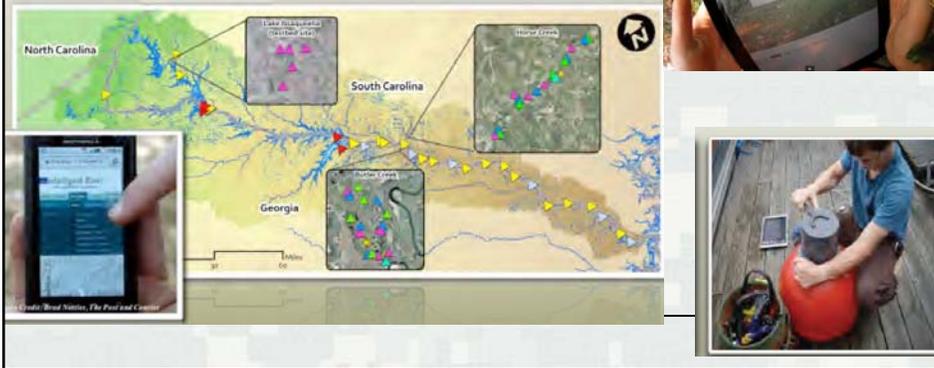
## Trail Design at Mark Twain Lake

- 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



## 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 4<sup>th</sup> grader to a local park.



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## Outdoor Nation Campus Challenge

- 6-week competition between 59 colleges in 30 states to see who can get the most people outdoors and active
- Participating schools near Corps lakes:
  - Clark Atlanta University (GA)
  - Clemson University (GA)
  - College of St. Scholastica (MN)
  - Chico State (CA)
  - Hampshire College (MA)
  - Lyon College (AR)
  - Morehead State (KY)
  - Ohio State (OH)
  - Ouachita Baptist (AR)
  - Stephen F Austin (TX)
  - Spelman College (GA)
  - Texas Women's University (TX)
  - University of Iowa (IA)
  - University of MN Duluth (MN)
  - University of Washington (WA)
- <http://www.oncampuschallenge.org/>





## Cooperative Ecosystem Studies Units

- Facilitates collaboration across agencies/non-fed partners
- Provides a pathway for federal agencies to fund projects at partner institutions with defined overhead (17.5%) and cost-sharing
- Examples of USACE work completed through CESU agreements
  - ▶ National Aquarium- Coastal restoration of seagrass, saltmarsh and dune grass in Chesapeake Bay; long-term monitoring
  - ▶ Lewis & Clark Community College National Great Rivers Research and Education Center - Japanese Hops monitoring, control and management
  - ▶ National Audubon Society and Cornell Lab of Ornithology- Protocol development for citizen science avian monitoring in floodplain forests in St Louis district (helps to meet Level 1 and 2 inventory requirements)
- <http://www.cesu.psu.edu/>
- Procedures to initiate a CESU project on Gateway



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## Process to Initiate a Project with a CESU

1. Identify a project and the appropriate CESU region – must be a public benefit and clear R&D element
2. Prepare a statement of interest (SOI) – (like a Scope of Work)
3. Transfer funds via MIPR to ERDC or your local grants officer.
4. Grants officer contacts CESU host university to post the SOI for a minimum of 10 days.
5. District technical POC prepares a Request for Full Proposal (RFP) to the selected recipient.
6. Technical evaluation
7. Award



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## CESU Study Summaries

### Great Lakes and Northern Forest

- [Potential Effects of Aquatic Nuisance Species on the Behavior of Recreational Anglers, Boaters, and Beachgoers](#)
- [Net Benefits of Recreational Fishing, Beachgoing, and Boating in the Great Lakes, Upper Mississippi River, and Ohio River Basins: A Review of the Literature](#)
- [Net Benefits of Recreational Fishing in the Great Lakes, Upper Mississippi River, and Ohio River Basins](#)
- [St. Marys River Coordinator and Working Group for the International Upper Great Lakes Study](#)
- [IUGLS Ecosystems Study Area Working Group: Investigating the Effects of Changes in Lake Level on Coastal Ecosystems](#)

### Great Rivers

- [Support for the UMRS Navigation and Ecosystem Sustainability Program Science Panel](#)
- [Side Channels of the Impounded and Middle Mississippi River: Opportunities and Challenges to Maximize Restoration Potential](#)
- [Upper Mississippi River System Ecosystem Restoration Objectives 2009](#)
- [Genetic Analysis of the Federally Endangered Winged Mapleleaf Mussel to Aid Proposed Reintroduction Efforts](#)
- [Research to Determine Cultural Affiliation of NAGPRA Remains from Truman, Pomme de Terre, Stockton and Smithville Reservoirs in Missouri](#)
- [Partial Restoration of Natural Hydrology on the Upper Mississippi River System: An Adaptive Management Approach for Water Level Reductions](#)

### Gulf Coast

- [Georeferencing Capabilities and Operational Missions of the Nova 2 Small Unmanned Aircraft System](#)
- [Webbased Hunting Permit Program for Lavon Lake Office, Texas](#)
- [A Water and Sediment Budget for the Lower Mississippi/Atchafalaya River in Flood Years 2008/2010: Implications for Sediment Discharge to the Oceans and Coastal Restoration in Louisiana](#)
- [Development of Riverware Model of the Rio Grande for Water Resources Management in the Paso](#)

## Questions?



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