

ACE RESOURCES

A Newsletter for the Association
of Conservation Engineers

FEBRUARY 2013

Enhancing Our
Natural Resources

BRECKENRIDGE is the quintessential Colorado mountain town, full of rich mining history and now a year-round destination resort. Prospectors seeking gold founded the town in 1859 and in 1887 the largest piece of gold ever found in Colorado was discovered in “Breck”. These days the gold comes in the form of snow as the 2,400 acre ski area hosts around 1.6 million skier-snowboarder visits annually up to elevations of 12,998 feet.

Summer and fall provide abundant outdoor opportunities as well as fine food and shopping. The weekend of September 13th brings the largest Oktoberfest in the Rocky Mountains so come to the conference early and don't forget your Lederhosen! Breckenridge, located at 9,600 feet elevation, averages a high of 65 degrees in September and 30 for a low. You may want shorts and a jacket at the same time. Summit County boasts 8,931 acres with 81 lifts at four ski resorts. 3,200 acre Dillon Reservoir hosts regattas, fishing, motorboating, camping and more.

Breckenridge is located 1½ hours west of Denver International Airport via Interstate 70 and State Highway 9. Mountain shuttle transportation is available.

The hotel venue for ACE-2013 is the DoubleTree by Hilton, located on Village Road, two blocks from downtown

ACE 2013

Breckenridge, CO—Sept. 15-19

*Co-hosted by Colorado Parks and Wildlife
and USDA Forest Service*

Breckenridge. Enjoy famous walnut chocolate chip cookies from the front desk, free room internet, gift shop, 24-hour business center, indoor swimming pool, outdoor hot tubs, and a fully equipped fitness center and sauna. Dine at 9600 Grill for breakfast, lunch or dinner daily. Free underground parking, elevator access, and complimentary in-town shuttle.

Organized activities for the conference will include the group social Sunday evening, spouse/ guest program, technical presentations, Wednesday evening banquet and Thursday field trip. We are currently looking at an exciting ski area tour for Thursday.

Norval Olson,
Colorado Parks and Wildlife



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President's Message

KEITH PARKER, PE

Greetings from the Bluegrass State. I want to start off by telling you that I appreciate your support and vote of confidence by choosing me to lead this great organization. Since 2007 when I attended my first Association of Conservation Engineers (ACE) conference in Missoula, Montana, I have benefited from the support and advice of my fellow members. I quickly found out that this was not just an engineer's organization but a diverse group of professionals dedicated to conservation. In the weeks leading up to my first conference in Missoula if you had asked me what it would take to remove a dam I likely would have replied a

little bit of paperwork and a well placed stick of dynamite. Luckily, during the conference we learned the possible impacts of my preferred method and were educated in the proper steps to complete such a project.

One of my goals, during my tenure as president, is to increase our membership. I will be working closely with our Membership Committee to come up with strategies to add members and increase attendance at our annual conference. I would also like to challenge all of our members receiving this newsletter to add one new member before the conference in

(Continued on page 4)

Join the Discussion of Dates and Locations for Future ACE Conferences

The Time and Place Committee is going to recommend Bend, Oregon, as the potential location for the 2014 ACE Conference (air flights are available into the area). Members are encouraged to suggest/volunteer locations for the 2015 and beyond conference locations. At the current time, the 2014 conference is tentatively scheduled for September of 2014 due to weather issues and Federal fiscal year timeframes. There was some discussion in Indiana about moving the conference from the fall to the spring. Members who have thoughts on this subject are encouraged to provide them for discussion. Send any information related to the above to Holly Bentz at hbentz@fs.fed.us.

Committee Members

2013

EXECUTIVE COMMITTEE

Keith Parker, KY
President

Breagan Eicher, IN
President Elect

David Bumann, WY
Past President

Randy Knott, GA
Past President

Howard Thomas, MO
Treasurer

Dale Gunter, AR
Secretary

Terra McParland, IL
At Large

Eric Brooker, KY
At Large

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John Hageman, WI—Chair
Gerald Dorscheid, WI

AWARDS

Eric Brooker, KY—Chair
Holly Bentz, OR
John Leszczynski, IN
Alice Anderson, TX

HISTORY

Terry Boyd, AL—Chair
Ed Donahue, WA
Gerald Dorscheid, WI

MEMBERSHIP

Breagan Eicher, IN—Chair
Tom Hohman, IN
Howard Thomas, MO
Randy Knott, GA
Kathy Dillmon, WY
Veronica Mitchell, CO

PROGRAM COMMITTEE

Norval Olson, CO—Chair
Veronica Mitchell, CO

SCHOLARSHIP COMMITTEE

Steve Atkinson, MO—Chair
Champak Patel, IN
Deb Ohlinger, CO

SPECIAL ACTION

None

NEWSLETTER

Lynda Cliburn, IL—Editor/Chair
Gary Wilken, IL
Sue Peterson, IN
Dale Brockamp, IL

OPERATIONS MANUAL

David Bumann, WY—Chair
Kathy Dillmon, WY
Jeff Moody, IN

PAST PRESIDENTS

David Freedman, GA—Chair
John Hagman, WI
Tom Hohman, IN

SPECIAL SPOUSE (PROGRAM)

ADVISORY COMMITTEE
Jean Olson, CO—Chair
Anita O'Keefe, WI
Alice Anderson, TX

2013 SPECIAL COMMITTEES

TIME AND PLACE

Holly Bentz, OR—Co-Chair
Ed Donahue, WA—Co-Chair
Bob Roads, IL
David Bumann, WY

NOMINATING

Gary Wilken, IL—Chair
Ed Donahue, WA
John Hagman, WI

2012 Conference Roundup

The Association of Conservation Engineers held their annual meeting in Chesterton, Indiana, October 7-11, 2012. The event was co-hosted by Indiana Department of Natural Resources, U.S. Forest Service, Lawson Fisher Associates, and The Troyer Group. Chesterton is within a few miles of both the Indiana Dunes State Park and the Indiana Dunes National Lakeshore. We had excellent accommodations and meeting rooms at the Hilton Garden Inn Chesterton. Sixty two attendees (including exhibitors and spouses) were on hand to enjoy the good food, fellowship and share the vast and varied array of conservation engineering knowledge and experiences.

We were welcomed Monday morning by David Baumann, now the Past President from Wyoming Game and Fish Department. The opening presentation was given Brad Baumgartner, Interpreter at the Indiana Dunes State Park, and Jim Ton who is retired from Indiana Dunes State Park. They both shared lots of knowledge thru the years of the different activities and challenges that has taken place along the Lake Michigan shoreline.

The other presentations were given on Monday included: Native Seed Storage (Norval Olson), Moscow Covered Bridge (James Barker), SR 933 Bridge Deck Drainage System Retrofit (John Richardson), Coffee Creek -The Benefits & Challenges (Steve Barker), and the National Park Campground – Comparison of Indiana Dunes National Lakeshore with Yosemite and Yellowstone (Catherine Janiczak).

We also heard about an Innovative Solution to Wastewater Treatment Needs at Indiana Dunes State Park (Al Strong), an Overview of Streambed Simulation, Design and Construction (Holly Bentz), Trail Creek Sea Lamprey Barrier and Trap (Carl Platz), Asian Carp Know No Boundaries

(Continued on page 4)



The Thursday field trip featured a field trip to the Port of Indiana, Burns Harbor and Trail Creek Sea Lamprey barrier site. Pictured above is the Lamphrey Barrier Sign

2012 Carl V. Anderson Conservation Project Engineering Awards

Award of Excellence: "Shields/Smith Drainages Aquatic Improvements"

OWNER: USDA Gallatin National Forest
 SUBMITTED BY: USDA Gallatin National Forest, Jonathan Kempff, Bozeman, MT
 CONSULTANT: Vaughn Anderson, DJ&A, P.C., Missoula, MT

Award of Merit: "St. Paul Trail Bridge"

OWNER: USDA Kootenai National Forest
 SUBMITTED BY: Northern Region Forest Service, John Kattell, Missoula, MT
 CONSULTANT: Michael Brennan, Morrison-Maierle, Inc., Helena, MT

Award of Honor: "Alton Riparian Zone Restoration"

OWNER: City of Alton, IL and Heartlands Conservancy
 SUBMITTED BY: Williams Creek Consulting, Indianapolis, IN
 CONSULTANT: Jeff Moody, Williams Creek Consulting, Inc., St. Louis, MO

Eugene Baker Award: NA

Presidents Award: NA



Roundup

(Continued from page 3)

(David Nance), Portage Lakefront and River walk-Indiana Dunes National Lakeshore (Eric Ehn), Indiana Dunes State Park Creek Restoration – Phase II (Michael Reese) on Tuesday. We headed out to the Indiana Dunes State Park in the afternoon to tour the beach, creek, and adjacent areas. Then the dinner was held in the old historic Indiana State Park pavilion. We had seen pictures in earlier presentations of the way the structure had been utilized in the past. Roast pig and lots of accompanying good food and drink was shared by all the attendees.

Wednesday morning we heard from Jeff Moody about The City of Alton Riparian Zone Restoration. Greg Smith talked about Low Impact Development and Pervious Concrete. Then after the morning break we listened to a discussion of Renovation of Low Valley Hatchery Ambient Pond presented by Stephen Atkinson, as well as Dennis Zebell's talk about Overtopping Protection: How to Turn Your Dam Embankment into an Emergency Spillway. Then Dale Gunter gave a presentation about a Comprehensive Study to Renovate Dam #3-Spring River.

After lunch the 2012 Carl V. Anderson Conservation Project Engineering Awards were given. One of the award recipients, John Kattell and Michael Brennan talked about the award-winning project of St. Paul Trail Bridge. John Hagman presented Lapham Peak Nature Center, and Randy Knott gave a very informative talk about Alcatraz- Preserving this American Landmark-The Secrets Revealed.

The late afternoon annual business meeting was followed by the conference banquet during which the President's Gavel was passed on to the new President, Keith Parker. Thursday was the field trip to the Port of Indiana, Burns Harbor and Trail Creek Sea Lamprey barrier site.

Sue Peterson
US Forest Service

Conference Hotel Information:

September 15-19, 2013 — DoubleTree by Hilton

Standard Hotel Room \$102 +tax | Mountain View Hotel Room \$119 +tax

Rooms/rates available up to 3 days before and after the conference based on availability

Reservations: 888-355-6318, Indicate **Group CODE G34**

or use website, <http://breckenridge.doubletree.com/> On left, above "Check Availability", click on "Add special rate codes", enter Group Code "G34", enter the dates, etc. then "Check Availability" (you may need to call in your reservation if arriving early or staying after).

Room block commitment date is **Friday, August 16, 2013**

<http://www.breckenridge.com/>

<http://www.townofbreckenridge.com/>

<http://www.gobreck.com/>

<http://www.breckresorts.com/doubletree-by-hilton>

President's Message

KEITH PARKER, PE

(Continued from page 2)

September. Membership dues are only \$25 per year and I would encourage you to consider paying this fee to sign up a younger member. I am sure many of you know of a student in college that plans to enter the engineering field or plans to work for a conservation organization.

During these tough economic times federal and state budgets continue to be cut and even when things improve I fear conservation agencies will be reluctant to approve travel requests in the immediate future. If you would like to attend our conference please explain to your administration the benefits of the conference and membership in the organization. If you are an engineer you will receive at least 15 hours toward your continuing education, and all attendees will sit through presentations that you could likely go home and apply to your own

agency. Explain to your administration how other members of ACE have implemented "green" projects that end up being a net savings in operating costs. Show them past presentations relative to issues in your state like fish barriers for Asian Carp or Sea Lamprey. When the agenda for the upcoming conference is available, print it out, and highlight the projects that would be relevant in your area. Monitor the website for the future conference agenda and copies of past presentations.

At this point in my career if someone asked me what it would take to remove a dam my first response would be "I can retire in 7 years, do you think we can make it last that long?" After they explained how the project would be a great benefit to the local ecosystem I would then respond "I have some friends in Montana that had a similar project, let me give them a call and see how we can get started." Please take advantage of the greatest benefit this organization has to offer, our network of dedicated professionals in the field of conservation engineering.

Guidelines for Submitting Abstracts

- All abstracts must be postmarked by May 10, 2013.
- Abstracts are not required, but if submitted shall be a maximum of one-page, single-spaced and be submitted prior to the established deadline.
- Full papers will be required for publication of the conference proceedings: PowerPoint presentations are acceptable.
- Biological sketches of all authors shall be a maximum of one page.
- Papers shall be on portable drive or on CD, in Word format with hard copy. Papers and biological sketches are due at the conference.

Announcement of selected papers will be made on June 7, 2013. Further instructions for speaker presentation will be provided upon notification of a paper's acceptance.

CALL FOR PAPERS



Competition Announcement and Rules

ENTRY FORM

Submit by May 10, 2013

1. Paper Title: _____

2. Author: _____

3. Name: _____ Title: _____

4. Company / Agency: _____

5. Address: _____

6. City, State, Zip: _____

7. Phone: _____ FAX: _____ Email: _____

8. List any Conferences where this paper has been presented: _____

9. List any equipment needs (laptop, projector, etc.): _____

10. List any specific products your paper endorses: _____

Fax, Mail, or Email Form to:

Veronica Bustamante Mitchell, P.E.
USDA Forest Service – Rocky Mountain Region
740 Simms Street
Golden, CO 80401
303-275-5206
303-275-5170 (fax)
vmitchell@fs.fed.us

Competition Announcement and Rules

Purpose

The purpose of this design awards competition is to give recognition to those members and/or their departments whose work, as judged by their peers and associates, best exhibits the goals and objectives of The Association of Conservation Engineers.

Categories

PROJECT CATEGORY A

STUDIES / RESEARCH PROGRAMS

Non-design services including, but not limited to: Pilot/experimental projects; bioengineering; electrical heating; new products and materials; basic research on new technology; fuels and water; properties and uses of fuels; research in natural resources; hazardous waste studies; resource recovery; environmental impact studies; soils and other subsurface geotechnical investigation and evaluation; damage correction; computer services; technical papers. All of the entries in Category A are involved with non-construction document design services.

PROJECT CATEGORY B

CONSERVATION / ENVIRONMENTAL

Energy generation, transmission, distribution, conversion, conservation and storage-mitigation
Dams (water supply, irrigation, flood control, recreational, fisheries management)
Drainage systems
Incineration
Mine Reclamation
Parks and Wildlife facilities
Resource recovery
Waste treatment facilities
Water resources and supply
Wetlands treatment

PROJECT CATEGORY C

SPECIAL PROJECTS

Any project that does not fit into other categories including, but not limited to:
Erosion protection and control
Recreational-theme parks, zoos, marinas, aquariums
Site development
Structure of buildings
Historical restoration
Construction projects resulting from unique studies or research of the type in Category A.

Eligibility

ENTRANT:

Any governmental agency or department, or its selected consultant, engaged in the fields of recreation, wildlife preservation, tourism, and/or conservation of the natural environment, which is a member of or has made application for membership in the ACE, is eligible for participation in this awards program.

PROJECT:

The project entered must be the completed work of the governmental agency or department making the submission.

Up to two project entries may be submitted by each participant.

The project must have been completed within the **24 months** preceding its submittal.



For use of award chairperson only
PROJECT REG. NO. _____

**DECLARATION OF INTENT TO SUBMIT
FOR
ACE CONSERVATION PROJECT ENGINEERING AWARDS**

(This page is due by fax or email postmarked on or before May 17, 2013)

Date submitted: _____

Note: Please furnish all information requested below for each entry. If additional forms are required, copy this format.

I intend to submit an entry to the Association of Conservation Engineers Design Awards Program in the following category and division designated.

Category (Check One)

- A. Studies/Research Program _____
B. Conservation/Environmental _____
C. Special Projects _____

Budget Cost of Project: _____ Scheduled Completion: _____

Actual Cost of Project: _____ Actual Completion: _____

Name of Submitting Entity: _____

Address: _____

Contact Name: _____ Phone No: () _____

Fax No: () _____

E-mail: _____

Name of Project: _____

Location: _____

Owner's Name: _____

Note: Remember to get Owner's approval for use of project award nomination

Name of Consultant(s): _____

(if applicable) May be the same as submitting entity

Address: _____

Note: The submitting entity or the owner of the project must be a member of the ACE organization or must have made application for membership at the time the Declaration of Intent is filed.

Competition Announcement and Rules

Entry

Making your submittal for the ACE Conservation Project Engineering Award is a simple two-step process as follows:

FIRST: Send your Declaration of Intent to submit by fax, email or mail postmarked no later than Friday, **May 17, 2013**.

SECOND: Prepare your Entry packet. Entries must be emailed no later than **Midnight (Easter Time Zone)** on Friday, **June 14, 2013**.

Winners will be notified on or before **August 16, 2013**, to prepare a Project Panel to bring for display and presentation at the ACE 52nd Annual Conference in Breckenridge, Colorado, September 15-20, 2013.

Submit to:

ACE Committee Chairman—Eric Brooker
Kentucky Department of Fish and Wildlife
Resources
#1 Sportsman's Lane
Frankfort, KY 40601
PH# (502) 564-5209
Fax# (502) 564-3667
eric.brooker@ky.gov

Note: The entry fee for the 2013 awards competition has been waived. No entry fee will be required.

Each entry shall be emailed to the Committee Chairman no later than Midnight **June 14, 2013** (Eastern Time Zone). If submittal is larger than 10 MB then the entry can be submitted on a CD to the Committee Chair. The entry shall include:

1. A copy of the ACE Declaration of Intent form as previously submitted.
2. Letter from the agency or owner giving written permission allowing for publication of any feature or innovation found to be of interest to the members of the Association.
3. ACE Data Sheet 1 (attached).
4. ACE Data Sheet 2 (attached).
5. Drawings up to a maximum of 4 sheets as needed to delineate project.
6. Colored photographs (a maximum of six) may be utilized to complement the written description.

Project Panel

To be completed before the 2013 Conference

A project panel will be required of those winning entries receiving an Award of Excellence or an Award of Merit, and is requested, but optional, from the winner of the Award of Honor. The project panels will be on display during the annual conference for viewing by all those in attendance. Project panels will be returned after the conference.

Project panels will be restricted to one 30" x 40" heavy weight crescent or mat board, or two 20" x 30" boards hinged and capable of standing on an easel. Material displayed shall be either B/W or colored photos, printed texts or drawings which best describe the features of the entry. Project panels shall be identified with the name of the submitting department or agency, the name of the project and its location.

Competition Announcement and Rules

For use of award chairperson only

PROJECT REG. NO. _____

Received _____

ACE 2013 DESIGN AWARDS DATA SHEET #1

PROJECT NAME: _____

1. Agency / Firm Making Submittal: _____

2. Address: _____

3. Contact Name: _____ Contact Phone No: _____

Fax No: _____

E-mail: _____

4. Project Location: _____

5. Project Category: _____

6. Outside Consultant(s): _____

7. If a winning entry, please give exact name(s) or title(s) as they should appear on the plaque or certificate:

Competition Announcement and Rules

Judging

The judging panel shall consist of not less than three nor more than five judges. All judges will be qualified design professionals such as engineers, architects, biologists, botanists, or others involved in the conservation or environmental field. At least two of the judges will be a member of ACE. The judges will be selected by the Awards Committee and may reside in the state hosting

the conference. The judges will meet soon after the submission deadline to evaluate and select the projects to receive awards. The judges' decision shall be final.

None of the judges may submit entries nor be identified with any submitted entry.

Definitions of Ratings Guidelines

1. Originality / Innovation / New Application of Existing Techniques:

- Does the entry represent any new branch of conservation engineering or some type of breakthrough in general knowledge of our environment?
- Does the entry represent a unique mix of different techniques, materials or equipment?

2. Technical value to the Conservation Engineering Profession:

- Does the entry advance the state of the conservation engineers' art?

3. Complexity:

- Does the entry involve very complex criteria or types of problems to be addressed?
- Were extraordinary problems of site, location, hazardous conditions, project requirements, or similar elements present?
- Does the entry require out-of-the-ordinary technology and ingenuity for achievement?

4. Meeting and Exceeding Owner's Needs:

- Is it an economical and cost-effective solution?
- How did final cost relate to original budget estimate?
- How closely does the entrant's solution meet the total goals of the owner?
- Does the entry meet and justify its original concept?
- Did the entrant meet the owner's time schedule?

5. Natural Resources and Environmental Considerations:

- Does the entrant's solution bring into play an improved program, i.e., are additional benefits realized as a spin-off?
- Does the entrant's role provide society with any useful advancement in the area of conservation and environmental sciences?
- Is the public health, safety, or welfare enhanced as a result of the entrant's role in the project?

Awards

The jury shall make awards to three meritorious entries. At the discretion of the jury, the number of awards may be limited or expanded. The following awards will be issued:

Award of Excellence.....Special Award
 Award of Merit..... Plaque
 Award of HonorPlaque

A certificate of participation may be presented to all other qualified entries. From time to time a letter of recognition or certificate may be awarded to other entries as the judges may recommend.

Awards will be presented during the Awards Banquet at the ACE 52nd Annual Conference in Breckenridge, Colorado, September 15-19, 2013.



For use of award chairperson only

PROJECT REG. NO. _____

Received _____

ACE 2013 DESIGN AWARDS DATA SHEET #2

PROJECT NAME: _____

In approximately 500 words (total), write a short summary of the project features and solutions that best answer the following rating guidelines:

- | | |
|---|------------|
| 1. Complexity of Program: | 15% |
| 2. Technical Value to Conservation Engineer's Profession: | 20% |
| 3. Originality/Innovation/New Application of Existing Techniques: | 15% |
| 4. Meeting and Exceeding Owner's Needs: | 25% |
| 5. Natural Resources & Environmental Considerations: | <u>25%</u> |
| | 100% |

Note: The unnecessary use of names of agencies, departments, consultants, or individuals should be avoided.

James (Jim) Schalk Memorial Association of Conservation Engineers Scholarship

Application Requirements

1. The purpose of this program is to promote the Association of Conservation Engineers (ACE) and the continued study and learning required for the conservation, preservation, and restoration of our natural, cultural, and renewable resources in the areas of preservation and recreation. ACE is an international organization of engineers and allied personnel employed by conservation and natural resource agencies and consultants with specialized interests in the areas of fish, wildlife, parks, forests, and related conservation/recreation fields. Additional information about ACE can be found at our web site: www.conservationengineers.org.
2. The selection of scholarship nominees shall be according to the following eligibility guidelines:
 - a. The selection shall be restricted to junior and senior class students enrolled in an accredited course of college study directed toward a degree in engineering, any of the natural sciences, ecology, or agriculture.
 - b. Students shall carry a full program and be enrolled as a full time student.
 - c. The student shall submit a technical paper of 1250 words maximum but not less than 750 words written in essay form. The paper's topic shall relate to the conservation and/or preservation of natural, cultural or renewable resources. The student selected by the selection committee may present their paper orally on the final day of technical paper presentations of that year's annual conference.
 - d. A recommendation letter, on university letterhead, from one of the student's instructors shall accompany the submitted technical paper stating the student's qualifications for this scholarship.
3. The monetary value of this scholarship shall be \$1,500.00 (one thousand five hundred dollars) paid directly to the recipient. Formal presentation of the scholarship shall be at the annual closing banquet of that year's ACE Conference. It is the discretion of the recipient on how the award shall be used.

**James (Jim) Schalk Memorial
Association of Conservation Engineers Scholarship**

2013 Application Form

Name: _____ Date: _____

Address: _____

Phone Number: _____

E-mail Address: _____

Major: _____

Class (circle one): Junior / Senior Anticipated Graduation Date: _____

Name of School: _____

Address of School: _____

Email the completed Application Form, instructor's letter of recommendation and written essay to: stephen.atkinson@mdc.mo.gov

The instructor letter should be sent from the university email address.

Applications must be received no later than August 1, 2013

Winner will be notified by September 15, 2013

HDR helps education meet process at Auburn University

To supplement our nation's demand for healthy food sources and maximize the wise use of our world's limited natural resources, Auburn University proposed two new buildings dedicated to fresh water and coastal marine species research and fish propagation. HDR Engineering (HDR), Inc.'s Fisheries Design Center in Springfield, IL, was selected by the University to develop a programming document followed by architectural and engineering design of a new Aquatic Resource Center and Aquatic Research Laboratory. Key features of the facility design included:

- A modern aquatic research facility including water temperature management, photo period control and climate controlled rooms.
- Water saving and energy efficient operation using today's recirculating aquaculture technology.
- Overall reduction in water use as compared to conventional wet laboratories.
- Biosecurity systems to meet strict U.S. Department of Agriculture requirements.
- Enhancement of the Department's educational capabilities.
- Demonstration of live fish sales through the public market area designed into the facility.

HDR incorporated traditional fisheries production technology into the learning and research environment. The design team worked with Auburn University's world renowned aquatic researchers to bring the University's existing inland fisheries program into a new era of teaching and research. Cutting edge research is now being conducted in a building that is certified Silver by the U.S. Green Building Council. It's one of the first buildings in the country conducting aquatic research, often extremely power and water consumptive, with this level of energy and resource conservation certification. Designers are often challenged to stick with "tried and true" methods over innovation when developing facilities with a client's budget. The facilities at Auburn are a



1. Students perform water quality analyses in one of the laboratory rooms dedicated to aquatic research.
2. Because aquatic research is very water consumptive, the new wet lab features a water recirculation systems. The set-up of aquaria and tanks in the wet lab is very flexible due to the overhead water and electrical and data supply systems.
3. Unique to the Auburn facility, an overhead crane allows for easier transport of fish from one location of the holding/shipping area to another or even to transport trucks. Fish are weighed in the same operation.

breakthrough for designers of research laboratories because they show how innovation and use of energy and resource effective processes can be incorporated while still maintaining traditional building functions. In addition, some of the metrics being validated by this facility will assist engineers in future projects since some parameters such as quantity of low pressure air, diversity of connected electrical loads, and effectiveness of cranes for movement of fish do not currently have design guides available.

The new facility is north of campus, and consists of an administration building with more than 20,000 SF and a 17,000-plus- SF laboratory building that together enhance the university's ability to meet its land-grant mission of research, teaching and outreach, in addition to expansion of the main campus to this north location owned by the University.

The administrative building includes office space for Shell center staff as well as a teaching lab, a meeting room that is available to campus and civic groups, a 6,354 SF holding area for sorting, weighing and counting fish as needed for research projects and a new market area for sales to the public. It also features classrooms and a visitor-friendly reception area that is home to

educational kiosks and displays ranging from virtual tours of the research station to aquariums filled with live fish to historic information about Auburn's world-class fisheries and allied aquaculture program.

The adjacent laboratory building houses fish tanks and state-of-the-art labs, including several wet labs that have complete climate control and as such will allow year-round research. It also offers a significant amount of flex space in which researchers can set up a wide range of multidisciplinary studies in ecology, physiology, fish health, genetics and water quality. Special spaces are included for Environmental Chambers and a large open Laboratory space. Areas for Crustation and Shellfish studies round out the building functions.

"The HDR team did an excellent job of meeting the complex requirements and needs of scientists and universities engineers," Dr. David B. Rouse, Head of Auburn University's Department of Fisheries and Allied Aquaculture. "There were a number of innovations in the building that relate to Biosecurity and to energy efficiency that will not only be useful for own needs but will be used to guide future directions for work in aquatic resource management."

Bob Roads
HDR Engineering, Inc.

Editor's Message

LYNDA CLIBURN

I totally agree with Keith Parker's assessment of the members of ACE, "...this was not just an engineer's organization but a diverse group of professionals dedicated to conservation." In the many years I have been putting together the ACE Newsletter and the times I have been able to attend the annual conference, I have come to admire the sincere love of conservation engineers our members have. For this group, it is more than just a job! I hope you are all reaching out to others to invite them to become a part of this dedicated group of individuals and join ACE.

Beginning with this issue, we are sending the Newsletter as a pdf file via email to all members with an email addresses on the membership roster. A hard copy is only being "snail-mailed" to members with no email address on file. If you are receiving a print copy of this email and would like to receive it via email, please send your email address to: Lynda.Cliburn@hdrinc.com.

Lynda Cliburn
Editor



Norval Olson (far right) and Tom Hohman (far left) assure you that you won't be roughing it like this when you attend this year's 52nd Annual Conference in Breckenridge, CO, this September 15-19! Norval and Tom, along with two others recently went on a trip to the Grand Canyon and are pictured here at India Garden.

ACE RESOURCES

inside...

2013 Call for Papers

Awards Submittal Information

Scholarship Application

Roundup of 2012 Conference

HDR Engineering Inc.

5201 South Sixth Street Road

Springfield, Illinois 62703-5143

217.585.8300