

A newsletter for the Association of Conservation Engineers

January 2018

Enhancing our Natural Resources



57th ACE Conference October 14-18 2018

to the Eugene Baker & Carl Anderson Award Winners!

## Committee Members

2017 - 2018

#### **Executive Committee**

- Natalie Little, UT President
- Terry Boyd, AL President Elect
- Terra McParland, IL Secretary
- Howard Thomas, MO
  Treasurer
- Holly Bentz, WA
  Past President
- Dale Gunter, AR Past President
- Sarah Lau, ID At-Large member
- Hans Nielson, CO At-Large Member

#### <u>Awards</u>

Holly Bentz, WA (Chair) Linda Logan, MO Breagan Eicher, IN

#### <u>Bylaws</u>

Norval Olson, CO (Chair) Greg Mihalevich, MO Dave Bumann, WY

#### <u>History</u>

Terry Boyd, AL (Chair) Norval Olson, CO Holly Bentz, WA

#### <u>Membership</u>

Holly Bentz, WA (Chair) Gary Wilken, IL Jeff Leftwich, MO Tom Hohman, IN Terry Boyd, AL Howard Thomas, MO

Nominating Committee Norval Olson, CO (Chair) Gary Wilken, IL Breagan Eicher, IN

#### **Operations Manual**

Tom Hohman, IN (Chair) Randy Knott, GA Breagan Eicher, IN Dale Parsons, MO

#### Past Presidents Committee

Dale Gunter, AR (Chair) Joel Krause, MT Breagan Eicher, IN

### <u>Program</u> Janet Gillis, OK (Chair) Natalie Little, UT Holly Bentz, WA



### **Publications/Newsletter**

Norval Olson, CO (Chair) Dale Gunter, AR Greg Mihalevich, MO Natalie Little, UT

#### <u>Scholarship</u>

Champak Patel, IN (Chair) Joel Krause, MT Terra McParland, IL

#### <u>Special Communications/</u> <u>Social Media</u>

Norval Olson, CO (Chair) Holly Bentz, WA

## Time & Place

Bo Vandergriff, OK (Chair) Dale Gunter, AR Norval Olson, CO

Joel Krause, MT

## ACE 2017 — 56th Annual Conference

The 56th Annual Conference for the Association of Conservation Engineers was held in Ogden, Utah. Conference presentations provided attendees with the opportunity to learn about new methods, technologies and projects occurring across the United States. In addition, the two field trip days were packed full of information, site-seeing and adventure around the Ogden, Salt Lake and Park City areas. The conference presented a great opportunity for presenters, attendees and vendors to reconnect, mingle and meet with new people.



Natalie Little – 2017 Conference Host



Group Photo – 2017 ACE Conference



Guest Speaker John Loveless–Living a Net Positive Life



Tuesday Field Trip – Ogden Dinosaur Park

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## ACE 2017— Conference Photos cont.



## Meet the 2017-2018 ACE President

Natalie Little is the Intermountain Regional Sustainability and Climate Coordinator for the Forest Service in Ogden, Utah. She has worked for the USDA Forest Service for 25 years and came up through the field on the Humboldt-Toiyabe National Forest. Natalie has been a member of ACE since 2013 and is also on the ACE Program Committee. She is excited for the opportunity to be president and is looking forward to the upcoming year.

## Carl V. Anderson Awards

## 2017 Projects

Awarded annually, the Carl V. Anderson Project Awards recognize ACE members for outstanding projects in conservation engineering. The purpose of the awarded competition is to give recognition to those members, consultants 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. All of the submitted projects are excellent examples of engineering, maintaining, and improving access and enjoyment of the natural world. Any governmental or non-government agency or owner, or its selected consultant, engaged in fields of recreation, wildlife preservation, tourism and/or conservation and restoration of the natural and historic environment, who is a member of or has completed a application for a ACE membership, is eligible for this awards program.

### Award of Honor

The 2017 Award of Honor was presented to the United States Forest Service National Technology & Development Program for their Hands-On Log Cabin Preservation technical report. This report is a practical guide for preserving historic log cabins, of which land management agencies still have and use. Preserving these buildings means agencies don't have to spend money and use environmental resources on new buildings. This guide covers everything from building part terminology to details of how to scribe and shape a full dovetail corner notch.



https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf15232802/1523-2802\_Dovetails+Broadaxes\_Sec508\_08-09-17\_WEB\_150dpi.pdf



### **Award of Merit**

The 2017 Award of Merit was presented to Colorado Parks & Wildlife for the Upper Arkansas River Aquatic Habitat Enhancement project. The project is one part of a restoration effort around Leadville, Colorado to restore the California Gulch Super Fund site that received environmental damages from mining in the area since the mid-1800s. The objective of the Arkansas River Aquatic Habitat Restoration project was to enhance aquatic habitat for an 11-mile reach of the Arkansas River.

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Holly Bentz presenting Tracy Kittell with the Carl Anderson Award of Merit.

## Carl V. Anderson Awards

## 2017 Projects

### **Award of Excellence**

The 2017 Award of Excellence was presented to Hanson Professional Services Inc. for the project: Ahsapa Reconnects Emiquon to the Illinois River.

Emiquon Preserve, is one of the largest floodplain restoration projects in the Midwest; located in Fulton county Illinois. The floodplain had been farmland that was separated from the Illinois River by a levee. Hanson Professional Services and others created a water control system (named Ahsapa) that reconnected the floodplain to the river.

The control system allows researchers to deploy scientific equipment in a fullscale, natural environment laboratory. This structure is believed to be the only one of its kind worldwide.



Holly Bentz presenting Scott Arends with the Carl Anderson Award of Excellence www.conservationengineer.org



Emiquon's new water management structure "Ahsapa"

Ahspa has three primary components: 1) dualgated, concrete conduits through the levee for connectivity between the wetland and the river; 2) facilities for deploying scientific research equipment; 3) integrated pump station with submersible, flood-resilient pumps to provide flood control and allow drawdown of the wetland to mimic historic water-level fluctuations.

The initial goal was water level control to satisfy drainage district and wetland restoration, but the project went beyond water management to incorporate scientific research & monitoring. Design criteria also required nonmetallic components for the reconnection to encourage passage of paddlefish with sensitive electroreceptor sensory organs. The final construction cost was \$5,528,344 and was ready for use September 9, 2016. Scientists from six research facilities are using the structure to evaluate the role of floodplain connectivity in large-river ecology and develop and test new technologies for controlling movements of invasive species.

Visit the <u>Illinois ACEC</u> news release for additional information.

## 2017 Eugene Baker Award

The Eugene Baker Award, established in honor of Eugene Baker, founder of the Association, may be awarded annually to one individual who has made a significant and outstanding contribution in the field of conservation engineering. The recipient need not be an engineer or member of the Association, but must be unmistakably identified with conservation engineering and in keeping with the Association objectives.

Terry Boyd has been the chief engineer for the Alabama Department of Conservation and Natural Resources for 22 years. He has a Bachelor of Civil Engineering from Auburn University. He joined the Association of Conservation Engineers (ACE) in 1985 and is the past president of both ACE and States Organization for Boating Access (SOBA). He also served as ACE Secretary-Treasurer for many years as well as on multiple committees. Terry has been instrumental in acquiring federal funding for and implementing recovery projects in the aftermath of several hurricane disasters that have affected Alabama. including hurricanes Ivan and Katrina. Terry reflects all aspects of merit for nomination of the Eugene Baker Conservation Engineering Award, including "Significant and Outstanding Contribution in The Field of Conservation Engineering."



Norval Olson (right) presenting Terry Boyd with the Eugene Baker Award



Wednesday Banquet

#### **Congratulations Terry!!**

# 2018 ACE Conference — Norman, OK

The 57th ACE annual conference will be hosted by Bo Vandergriff and Janet Gillis. Both Bo and Janet work for IronWolf Manufacturing LLC. Located in Noble Oklahoma, IronWolf is a company that manufactures, sells and rents heavy machinery and equipment.



### **Call for Presenters**

The Association of Conservation Engineers invites presenters interested in the engineering practices of fish, wildlife, and recreation development to respond to this call for presentations at the 57th ACE conference in Norman, Oklahoma. Engineers, architects, designers, technicians, consultants, industry representatives and others in the field of conservation engineering can summit abstracts to Bo Vandergriff (bo@ironwolf.com) or Janet Gillis (janet@ironwolf.com). Presentations are generally scheduled for 30 minutes, plus 10 minutes Q&A. Please respond by April 30th.

**Times Contract** 



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University of Oklahoma

## ACE Updates & Current Events



### ACE News Opportunity for all members

Do you have an interesting conservation or recreation project you are working on or a personal accomplishment you would like to share? ACE members have the current opportunity to send in their updates & current events for the next ACE newsletter. To be featured in the July newsletter, members will need send their update and optional photos to Norval Olson (<u>nojo5co@msn.com</u>) and Natalie Little (<u>nlittle@fs.fed.us</u>) by June 1st.

### Looking to the future....

We are working on preliminary plans for the 2019 ACE Conference to be in Mobile, Alabama (October 2019).



### A New Newsletter Editor is Needed

ACE is looking for a new newsletter editor. The editor would produce 2-3 newsletters a year; featuring conference news, awards & scholarship and any additional topics of interest to members. If interested please contact Norval Olson at nojo5co@msn.com or Natalie Little at nlittle@fs.fed.us.

### **Inside Glance at Meetings Northwest**

Meetings Northwest provides administrative support and strategic event/meeting planning to organizations. ACE began working with Meetings Northwest in 2008. In 2017, ACE completely transitioned our database management and conference registration processes to Meetings Northwest to manage. They also maintain the ACE website and annual memberships.

Special thanks to Howard Thomas for his hard work in getting this done!



## ACE Updates & Current Events

## All About ACE Membership

All ACE membership actions (applications, renewals and updates) are now completed online through the ACE website and will continue to operate online in the future. The purpose to change to an online format is for easier maintenance, to make dues payment, and contact information updates more convenient, and to improve the accuracy of our records. During the transition, committee members will be making the effort to reach out



to all members. If there are problems with getting the system to work or questions about the online membership, please contact <u>admin@meetingsnorthwest.com</u>.

**Member Dues & Goals:** Association memberships are paid annually and are comparatively low in price to other engineering organizations. One of ACE's goals are to have at least one member from every state.

**Types of Members:** The Association of Conservation Engineers have three types of membership: <u>Active Members</u> (must be engineers, allied professionals or technicians engaged in the endeavors of conservation engineering), <u>Associate Members</u> (persons engaged in similar pursuits who are employed by conservation-recreation agencies) and <u>Student Members</u> (persons enrolled as a full-time student at an accredited college or university in a program leading to a degree in engineering or engineering technology).

# The Association of Conservation Engineers always welcomes new members.

Current members are encouraged to talk to peers, and spread the word at events. Members can showcase the organization with the <u>Introductory ACE Brochure</u>.

Additional information about memberships, contact information and member applications can be found at: <u>http://www.conservationengineers.org/</u> <u>membership.html</u>



## ACE Updates & Current Events

### Arkansas News: Upper Arkansas River Aquatic Enhancements cont.

Leadville Colorado (approximately 100 miles west of Denver) was historically a rich mining district for silver, gold copper, zinc, manganese and lead. Due to environmental damages from mining, the area became the California Gulch Superfund Site and was placed on the U.S. Environmental Protection Agency's (EPA) National Priorities List in September 1983. The site covers about 18 square miles with thousands of piles of mine waste and drainage sites that discharge into the California Gulch from underground abandoned mines. The EPA began emergency remediation in 1986, which has continued to this day.

Money from the Natural Resource Damage settlement with mining companies was used to fund many restoration projects within and around Leadville. The Upper Arkansas River (UAR) Habitat Restoration project was one of the overall restoration efforts for the fund site. The objectives of the UAR project was to enhance aquatic habitat for an 11-mile reach of the Arkansas River and Lake Fork Creek. Colorado Parks and Wildlife was responsible for habitat restoration and monitoring on about five miles of public lands within the project site. Instream construction began in July 2013 and were completed in August 2014.

Project goals were focused primarily on enhancing brown trout health and population in the UAR. Habitat treatments addressed these goals by stabilizing stream banks and promoting diverse stream morphology; enhancing overhead cover for trout; increasing spawning areas; and providing refugia for juvenile trout. Other features of this project include the installation of livestock fencing and development of grazing management plants to promote rotational grazing near the river corridor.



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Two years post construction monitoring has shown moderate success in obtaining goals. Fish populations, macroinvertebrates and habitat quality continues to improve. Since construction, there has been observed increase in fishing activities as the public is discovering this fishery. The project is still active with monitoring activities to determine if the project goals are being met and to determine what can be improved for future projects.



Founded on March 6, 1961, in Washington, D.C., the organization's objective is to bring together the knowledge and experience of engineers and other personnel employed by conservation and recreation agencies and consultants who have a community of specialized interests in the areas of fish, wildlife, parks, forests and related conservation and recreation fields.

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