



Volume 33

Issue 3

November 2007

INSIDE THIS ISSUE:

President's Message	1
Listserver information	1
2008 Meeting Plans	2
First Call for Papers	3
Student Sub-unit update	4
Factors Influencing Brook Trout and Cutthroat Trout	5
Call For Nominations for Ex-Comm	5
Call for Award Nominations	6
AFS Books	7
External Committees	7
Request for Proposals	7
Understanding Complex Life History of a Lacustrine Sucker	8
President's Report to WAFS	9
Editor's Note	10

President's Message

Like many of you, my interest in fish management started as a youth going fishing. My fishing experiences started when a neighbor gave me some of his old lures and hooks and line. I quickly cut a willow and was headed down the Sevier River. I use to sit on the bank of that river for hours watching my line and waiting for usually a carp to bite. Later my father and I would fish Seven Mile and the Freemont River for cutthroat trout. My father and uncle and I would walk the banks of Box Creek Reservoir fly fishing until it was pitch black. Or, we would ride the waves during a wind storm at Otter Creek or Koosharem Reservoir while trying to fish from my grandfather's old boat. On the calm days, I remember how hard we used to laugh as my grandfather or an uncle would fall asleep and a fish would grab their line and you'd see a row of bubbles as their fishing pole went to the bottom of the reservoir. I also remember my visits to the privately owned Ford Fish Hatchery, that my great-grand father had started, or to the State's Glenwood Hatchery.

help but wonder what kind of memories I'm leaving behind for my children or for that group of scouts I'm involved with. They are growing up in the city and there is no river within walking distance. What will their experiences be and how will fishing change in their life time? Fish and land managers are facing some of the greatest challenges ever seen in their careers. There are more non-native aquatic species then ever before, many of which we have no idea on how to selectively treat and/or remove from the streams or lakes. Urban growth continues to expand and the demand for water increases. To address these and other threats will require the brightest minds this country can produce. I would ask each of you to consider what you're doing to inspire the biologists and scientists of the future to take up this challenge. It may start with something as small as a school presentation or talking to a child at a free fishing activity or inviting a neighbor to go fishing with you. I would encourage you to take a few minutes and examine what you can do to help find these future scientists and managers and inspire them. For me it was a small gift of a few old lures and hooks and a bit of line.

I'm now the one running that same old boat and my father is now the grandfather. I can't

(Continued on page 2)

AFS LISTSERVER INFORMATION

The mailing list for Bonneville AFS is hosted on a computer at Utah State University. As is the norm for the digital world, USU has upgraded both the hardware and software used for hosting mailing lists at the university. The new machine also comes with a new address. The mailing list is now at Bonneville\_AFS@lists.usu.edu. A few things to note about the new mailing list:

1. If you're not already member of the list go to [http://lists.usu.edu/mailman/listinfo/bonneville\\_afs](http://lists.usu.edu/mailman/listinfo/bonneville_afs) or send an email to [BONNEVILLE\\_AFS-JOIN@lists.usu.edu](mailto:BONNEVILLE_AFS-JOIN@lists.usu.edu).
2. If you want to post to the list you must be a member of the list. Membership is not screened.
3. The list is not moderated.
4. To change the characteristics of your subscription (e.g. email address, digested postings, etc) visit the link in #1 above.
5. The new software provides an archival feature thus if you want to recover a previously deleted post go to the link in mentioned in #1 above.

If you want to post a message to the list server, simply send a new message to [BONNEVILLE\\_AFS@lists.usu.edu](mailto:BONNEVILLE_AFS@lists.usu.edu). You may type in the subject and your message just like you would for any other email. To view the list archives go to the link above and follow the instructions at **Using Bonneville\_AFS**. Address any other questions to the list administrator at [Bonneville\\_AFS-owner@lists.usu.edu](mailto:Bonneville_AFS-owner@lists.usu.edu).

.....Jim Shoemaker



## President's Message

*(Continued from page 1)*

This year I would like to see us focus on a couple of key items. These are:

- (1) Reaching out to the public and especially the youth around us and encouraging them to become involved in managing their aquatic resources;
- (2) To work as a chapter to develop united approaches between the various institutions that we work for to benefit the aquatic resources of Utah; and,
- (3) And finally to deal with the five boxes of history that are passed from president to president. I hope to see us get these into an electronic format by September of next year. I also hope as part of this we have a short history written of the Chapter.



.....Paul Cowley

Paul Cowley at Box Creek Reservoir at Age 11

## 2008 Meeting Plans

### Utah Chapter of the American Fisheries Society Annual Meeting

**The Utah Chapter of the American Fisheries Society Meeting will be held February 25-27, 2008 in Moab along the banks of the Colorado River at Red Cliffs Lodge.**

**A**fter four consecutive years of meeting in the northern portion of the state the 2008 meetings will be in beautiful Moab, Utah. We are meeting independently once again allowing us to reacquaint ourselves with what biologists, managers, aquaculturalists, administrators, and researchers are doing and learning through the state. You all have a lot to offer and share with the rest of your peers regarding the work you are involved in and the issues you are dealing with in your respective responsibilities. We will be trying to meet in one large meeting room so that we can all share and participate in the great work we are all involved in. There will be sessions on native species, sport fish, ecological and habitat issues, aquaculture and more. Please give it some thought and begin preparing to share some of your work with the rest of us through your oral/poster presentation.

The meeting schedule will be similar to last years and will start Monday, February 25, with a continuing education course (statistics for fisheries professionals) put on by the USU student chapter. The opening social will be held Monday evening at 7:00 pm in Moab at ZAX (pizza). The banquet will be Tuesday night at the Red Cliffs Lodge banquet room and will include the raffle with some very nice prizes. Our general presentations and plenary session will run Tuesday morning through Wednesday afternoon. The business meeting will be held over breakfast on Wednesday morning.

We are asking for **ANY PHOTOS** you can all submit for a running slide show to provide some entertainment, enjoyment and perhaps a little elbowing of one another. We would like to see photos taken of the latest hunting/fishing trips, working, bloopers made by your buddies, scenery, fun etc... This is your chance to let us all see what is "really" going on around the state. **PLEASE START SUBMITTING** all your photos electronically to Richard Hepworth at [richardhepworth@utah.gov](mailto:richardhepworth@utah.gov) who will be putting them all together. We will display the photos dur-

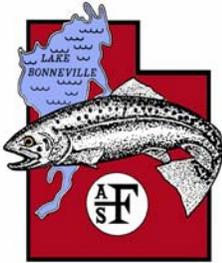
*(Continued on page 6)*



---

# FIRST CALL FOR PAPERS

*“Aquatic Resource Management/Stewardships”*



*Utah Chapter  
American Fisheries Society  
Annual Meeting  
Moab, Utah February 25-27, 2008*

Abstracts for oral and poster paper presentation are due by **February 11, 2008**.

Please indicate the category that best suites your presentation:

- I. Native Species
- II. Sport Fish and Fisheries Management
- III. Ecological and Habitat Issues
- IV. Aquaculture
- V. Other

Please submit abstracts electronically to Jackie Watson,

Email: [jackiewatson@utah.gov](mailto:jackiewatson@utah.gov)

Abstracts should include the following information:

**Presentation Format:** Poster or Oral Presentation

**Name of presenter:** Student or Professional

**Affiliation/ Contact Information:**

Address

Phone/Fax

E-Mail

Co-Authors

**Title:**

**Body of the abstract:**

Abstracts are used to evaluate and select papers for inclusion in the sessions of the 2008 Utah Chapter AFS Annual Meeting. The abstracts will also be printed in the meeting program. The abstract title should be descriptive but brief. The abstracts should be 300 words or less and should contain a statement of the problem, study objectives, summary of the methods, major findings and key conclusions.

---

## Student Sub-unit Update

The Subunit at Utah State University is having a great semester so far this fall. We have elected new officers for this year: vice president is Christy Meredith, treasurer is Andy Hill and secretary is Jared Bottcher. We also made a trip to Porcupine Reservoir to view kokanee spawning, which was really cool! We have another eventful year ahead with a suite of activities planned. In November/December we plan to conduct a fly casting/tying workshop. In January, we plan to fish for cisco and ice fish for cutthroat in Bear Lake. In February, we will organize events for the UAFS annual meeting, including a continuing education course on statistics for fisheries professionals co-taught by Drs. Robert Al Chokachy and Stephen Bennett. We will host the stu-

dent social, which is tentatively scheduled at the Moab Brewery. We will also be conducting our student raffle for the fish of flies. Start tying now so you can donate flies and receive extra raffle tickets. In April, we will be assisting in the Logan River salmon fly transplant. For additional information about the USU Subunit visit our website at <http://www.cnr.usu.edu/departments/wats/grad-program/usu-student-subunit-of-the-bonneville-chapter-of-american-fisheries-society>, or contact the President Brian Hines at [brian.hines@aggiemail.usu.edu](mailto:brian.hines@aggiemail.usu.edu).

.....*Brian Hines*



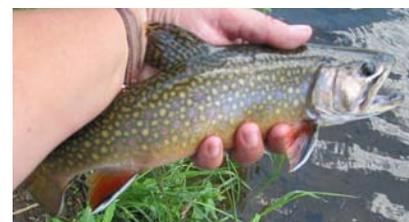
Kokanee moving upstream to spawn on the Little Bear River, Cache County, UT.

## Factors Influencing Brook Trout and Cutthroat Trout Distribution in the Mill Creek Drainage, Utah

**W**e are investigating the factors that influence brook trout (*Salvelinus fontinalis*) and Bonneville cutthroat trout (*Oncorhynchus clarkii utah*) distribution in the Mill Creek drainage, Utah. Through well-documented competitive interactions, invasive brook trout are implicated as a primary factor leading to the decline in distribution and abundance of native cutthroat trout. Typically, when brook trout are introduced into non-native habitats, they quickly invade and become established, ultimately impacting native trout through reduced growth, condition, and ultimately fitness. However, based on spatially-explicit patch occupancy data, it appears that brook trout are patchily distributed throughout portions of the Mill Creek drainage and have not invaded nearby tributary streams, despite no apparent physical or biological barrier. To determine the factor(s) that influence the relative distribution of brook trout and Bonneville cutthroat trout in the Mill Creek drainage, we collected a suite of biotic and abiotic data from ten representative index sites throughout the drainage. Additionally, at each index site, we conducted three-pass depletion electroshocking surveys to determine

fish species composition and relative abundance, as well as a comprehensive presence/absence survey of fish distribution throughout the drainage. To characterize drainage-wide fish movement, and to investigate the invasion potential of nearby tributary streams, we deployed two-way weir traps throughout the study area. Movement data will be used to develop a spatially-explicit patch occupancy model using program MARK. As a result, we observed considerable variation in biotic and abiotic factors across index sites (e.g., conductivity 21.3-447  $\mu\text{S}/\text{cm}$ ). Preliminary results indicate that stream gradient may inhibit brook trout expansion into some portions of Mill Creek and its tributaries, and brook trout and cutthroat trout exhibit patterns of restricted movement throughout the study area. These findings will help the Utah Division of Wildlife Resources further develop and refine Bonneville cutthroat trout management actions in the Mill Creek drainage by identifying portions of Mill Creek and its tributaries that are at risk of invasion.

.....Ben Nadolski



## UTAH CHAPTER IN SEARCH OF NOMINATIONS FOR 2008

**T**he Executive Committee of the Utah Chapter of the American Fisheries Society is seeking nominations for Chapter members to serve on the Executive Committee. This is a great opportunity to get involved and serve the members of our Chapter. This year, the Utah Chapter will fill two vacancies during our annual meeting in February in Moab. The positions to be filled are Vice President and 1st-Year Committee Member.

The primary responsibilities of the Vice President are to act as a liaison between external committees and the Executive Committee. The Vice President also serves as the raffle chairman for the annual Chapter meeting. The Vice President also assumes the duties of the President-Elect in the event of his or her absence or inability to act, and perform other duties as assigned by the President. Upon completion of the one-year term as Vice President, he or she will move on to serve as President-Elect and then as President of the Utah Chapter.

The 1st-Year Committee Member, in addition to general assistance, will serve as the Resolutions/Bylaws Officer and is primarily responsible for the resolutions and bylaws of the Chapter and other general duties as assigned. Upon completion of

the 1st year term of Resolutions/Bylaws Officer, this person will succeed to 2nd-Year Committee Member and serve as the Nominations/Membership Officer for the second year of the term. The Nominations/Membership Officer is responsible for naming a slate of candidates for Chapter officers.

Involvement and service with the Executive Committee is a great way to rub shoulders with other members of the Chapter, help make a difference in our profession, understand how the chapter and parent society work, and showcase your natural leadership skills. The Utah Chapter plays an important role in facilitating professional development, networking among the fisheries personnel in our state, and addressing important aquatic resource issues. There are a lot of you out there that would do a super job and benefit the Chapter, so please, nominate yourself or someone else you think would be an asset to the Chapter. The only requirement to serve on the Executive Committee is to be a member in good standing with the Utah Chapter and parent society.

For more information or to place a nomination, contact Ron Brunson at (435) 781-5202 or [rbrunson@fs.fed.us](mailto:rbrunson@fs.fed.us)

## 2008 Meeting Plans

(Continued from page 2)

ing the socials and on the screen during breaks as a "screen saver".

### Lodging Information:

There is a block of 65 rooms reserved at the Red Cliffs Lodge in Moab, Utah. Room rates are \$70.00 per night. This rate does not include taxes. Red Cliffs Lodge accepts Cash, Visa, MasterCard, Discover, and American Express credit cards.

**Call for Reservations: 866-812-2002**

If you have any questions please contact: Mike Slater at: [michaelslater@utah.gov](mailto:michaelslater@utah.gov) or 801-491-5650.

### Additional Lodging in Moab Includes:

Archway Inn 800-341-9359  
Big Horn Lodge 800-325-6171



### Directions to Red Cliffs Lodge:

- \*Approximately 1.5 miles south of the Arches National Park entrance you will come to the Colorado River.
- \*After crossing the river bridge you turn left (East) onto scenic Highway 128 and drive for 14 miles.
- \*Red Cliffs Lodge is the second entrance on the left side of the road (Milepost 14 - Highway 128).

## REQUEST FOR AWARD NOMINATIONS

**U**tah Chapter awards will be presented this winter at the Annual Utah Chapter meeting in Moab. The deadline for nominations is **January 15, 2008**. Nominations should be no longer than one page in length and should demonstrate how the individual has fulfilled the criteria of the award for which they are being nominated.

**Please send your nominations to:**

Patrick Goddard  
1165 South Highway 191, Suite 4  
Moab, UT 84532  
[patrickgoddard@utah.gov](mailto:patrickgoddard@utah.gov)

### Award Categories and Criteria

#### 1. Award of Merit

- a. Recently performed an outstanding service or presentation for the profession, fishery resource, or peers.
- b. Service or presentation is of local or regional significance.
- c. Individual is well regarded by peers.

#### 2. Lifetime Achievement Award

- a. Fishery professional for more than 20 years.
- b. Significant contributions to the profession on a regional or national level.
- c. Individual is well regarded by peers.

#### 3. Scientist of the Year

- a. Significant scientific contribution to the fishery profession or resource in the last year.
- b. Individual has reported or published subject work.
- c. Individual is well regarded by peers.

#### 4. Professional of the Year

- a. Significant contribution to the fishery resource in the last year.
- b. Accomplishments in administrative, policy or management setting.
- c. Individual is well regarded by peers.

#### 5. Culturist of the Year

- a. Significant contribution, outstanding or reliable effort, or development of a model program or technique in the area of fish culture.
- b. Individual is well regarded by peers

# AFS Books

### Effects of Urbanization on Stream Ecosystems

Larry R. Brown, Robert H. Gray, Robert M. Hughes, and Michael R. Meador, editors.

423 pages

resource managers and land use planners. Urbanization of watersheds is almost invariably accompanied by loss and alteration of aquatic habitats, two of the most frequently mentioned causes for losses of aquatic biota.

Published by the American Fisheries Society

Publication date: December 2005

Stock #540.47P

Symposium 47

As human populations continue to grow, the effects of urbanization on streams and other habitats will become increasingly important to aquatic

This book includes a variety of case studies addressing the effects of urbanization on stream ecosystems at locations ranging from Brazil to Southern California to New York. Of special interest is a group of five papers resulting from an interdisciplinary comparative study of urbanization in Boston, Massachusetts, Birmingham, Alabama, and **Salt Lake City, Utah**. These papers address regional variations in study design and responses of habitat, benthic algae, benthic macroinvertebrates, and fish to urban development.

## EXTERNAL COMMITTEES

An important, and often unheralded service to the Chapter and its membership is the functioning of various external committees. These committees are responsible for keeping the Executive Committee and the Chapter membership informed of current issues in their respective area of focus. Currently, the Bonneville Chapter maintains five external committees, including committees for native fish, legislation action, profession-

alism and continuing education, fish culture and health, and environmental concerns. The Bonneville Chapter Executive Committee would like to thank Rick Hartman for his exceptional service as the Chair of the Fish Culture and Health Committee. We would also like to thank Anna Forest for volunteering to serve on the Environmental Concerns Committee where she will focus on mercury contamination issues in Utah. The Ex-

ecutive Committee would also like to take this opportunity to solicit your help. The Chapter is in need of additional individuals to serve on these various committees. If you are interested, please contact me directly. My contact information can be found at the back of this newsletter. Thank you

.....Ben Nadolski  
Former Second-Year  
Committee Member



*The EXCOMM  
needs YOU*

## REQUEST FOR PROPOSALS

**T**he chapter is looking for opportunity to help support fishery science/management in the State of Utah. Requests for funding should be sent to Paul Cowley at 9914 S. Borg Drive, Sandy, UT. 84092 or emailed to pc4fish@msn.com. Funding requests can be up \$1,500. The request should in-

clude: Project Title, contact information (name, address, and email address), project description and how the project will benefit the fishery resources and the public of Utah. The request should also identify any matching funds. The funds cannot be used for funding one's educational expenses or travel expenses to professional trainings or meeting.

## Understanding the Complex Life History of a Lacustrine Sucker for Conservation and Management

The federally endangered June sucker (*Chasmistes liorus mictus*) is a planktivorous sucker endemic to Utah Lake. They are known only to spawn in the Provo River (the largest tributary to Utah Lake), but data collected during the summer of 2006 revealed that June suckers were present at the mouths of other smaller tributaries during spawning. Due to the lack of individuals and the complexity of the system, little is known about their life history. Understanding this life history is a key component to this species' recovery. The goal of my project is to identify the cues that these suckers use to find and move into the tributaries in which they spawn. This will be done using a variety of methods in four/five Utah Lake

tributaries (American Fork, Battle Creek, Spring Creek, Hobble Creek and possibly Beer Creek) from April-July. We will couple tributary use data with water chemistry (DOC, pH, temperature, oxygen, alkalinity) and discharge data, and use multiple regression and CART models to identify the cues that draw these suckers to certain tributaries to spawn. The knowledge gained from this study will allow us to have a better understanding of the life history of the June sucker and eventually help in the recovery of an endangered species. Any questions regarding this study can be directed to Brian Hines at [brian.hines@aggiemail.usu.edu](mailto:brian.hines@aggiemail.usu.edu).



## President's Report to WDAFS

The Utah (formally Bonneville) Chapter will be holding its annual meeting at the Red Cliffs Lodge (<http://www.redcliffslodge.com/>) on February 25-27, 2008. Located on the Colorado River just outside of Moab, Utah, Red Cliffs Lodge is in close proximity to Arches and Canyonlands National Parks and the Manti LaSal National Forest. After meeting in Northern Utah the last two years this shift to the southern part of the state will allow the Chapter to focus some of the discussion on unique fish found in the Colorado River Drainage. It should also provide a needed getaway to a warmer climate for this time of year with excellent recreational opportunities.

In 2007 the chapter met in Logan, Utah and had two concurrent sessions with over 30 presentations and posters being presented. Over a hundred people throughout Utah attend the meeting.

The Utah Chapter, like the Western Division, is challenged to try to figure out how to deal with the increasing amount of history that is passed from one EXCOM to another. We hope to tackle this challenge this year in the chapter. Started on April 5, 1963 at the Scott Avenue Fish Hatchery in Salt Lake City, Utah, the original meeting which organized the chapter consisted of 32 people. With Donald R. Franklin, Utah Cooperative Fisheries Research Unit, acting as the temporary chairman, the vote to form the chapter was unanimous. During these early years the meetings were held three times a year in various parts of the state. By 1968, membership had risen to 77 people and included people from Utah State University, Weber State University, Brigham Young University, the University of Utah, Utah Fish and Game, US Forest Service, Murray Elevators, J.R. Clark Company, White's Trout Farm, the Utah Coop. Fishery Unit, and Bureau of Sport Fisheries and Wildlife. Today membership represents many of these same universities, management agencies and private individuals.

.....Paul Cowley



### FISH SHOTS

#### Almost Ice-Fishin' Time!

Bonneville Cisco under the ice at Bear Lake



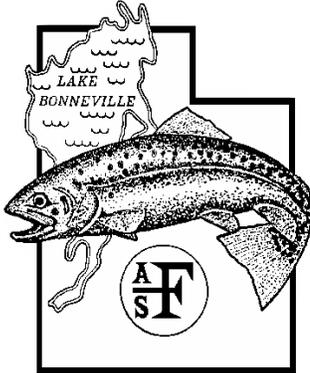
Pineview Reservoir



Bear Lake



Lateral Line Editor  
 Melissa Trammell  
 324 S. State St.  
 Suite 200  
 Salt Lake City, UT 84111  
 Melissa\_trammell@nps.gov  
 801-741-1012 ext 103



**2007-2008 Utah Chapter Executive Committee**

**Editor's Note:**

You may notice a change in our Logo, now that we are the Utah Chapter

.....Melissa Trammell

*Utah [Bonneville]  
 Chapter AFS Home  
 Page Address*

*www.fisheries.org  
 /bonneville*

**President**

Paul Cowley  
 8236 Federal Building  
 125 S. State  
 Salt Lake City, UT 84138  
 (801) 236-3442  
 pc4fish@msn.com

**Vice-president**

Michael Mills  
 Native Aquatics Project Leader  
 Utah Division of Wildlife Resources  
 (801) 491-5678

**Past-president**

Patrick Goddard  
 1165 S. HWY 191, Ste 4  
 Moab, Utah 84532  
 (435) 259-3781  
 Patrickgoddard@utah.gov

**President-elect**

Mike Slater  
 1115 North Main Street  
 Springville, UT 84663  
 (801) 491-5650  
 Michael Slater@utah.gov

**Secretary/treasurer**

P. Aaron Webber  
 Northern Regional Office  
 515 E. 5300 S.  
 Ogden, Utah 84405  
 (801) 476-2772 (office)

**1st Year Committee Member**

Gary Theide  
 5210 Old Main Hill  
 Utah State University  
 Logan, UT 84322-5210  
 (435) 797-2203  
 Cell (435) 770-2397  
 E-mail: gary.thiede@usu.edu

**2nd Year Committee Member**

Ron Brunson  
 85 W. Main St  
 P.O. Box 981  
 Duchesne, UT 84021  
 (435) 781-5202  
 rbrunson@fs.fed.us

**USU Student Chapter President**

Brian Hines  
 5210 Old Main Hill  
 Utah State University  
 Logan, UT 84322-5210  
 435-797-1416 (office)  
 brian.hines@aggiemail.usu.edu

