



THE TRIBUTARY

A Newsletter of the

Western Division of the American Fisheries Society

Volume 36, Number 1

February 2012

Inside this issue:

WD Annual Meeting	1
Officers	2
President's Hook	3
Announcements	4
Western Division Awards Meeting Information	5 6—9
Student Writing Contest	10
Nobel Prize Winner	11—12
Western Division Poster	13

Western Division Annual Meeting in Jackson



2012 AFS
WESTERN DIVISION ANNUAL MEETING



"Ecosystem Management in a Twitter World"

March 26—29, 2012

On behalf of the Colorado-Wyoming Chapter of the American Fisheries

Jackson, Wyoming

Society, we invite you to enjoy the beauty and grandeur of Jackson Hole, Wyoming during the 2012 Western Division Annual Meeting from March 26th to March 29th. Be prepared to learn about "Ecosystem management in a Twitter world," where social scientists and natural resource managers will discuss the difficulties and approaches to conducting long-term, ecosystem level management in a society that expects instant results. Important announcements about this meeting can be found on pages 6—8.

For more information please visit:

<http://www.cowyafs.org/annualmeeting/>

Important Deadlines

- **Early Registration Deadline** for the upcoming Western Division Meeting in Jackson, Wyoming—**February 15, 2012**. <http://www.cowyafs.org/annualmeeting/>
- **Abstract Submission Deadline** for the upcoming Western Division Meeting in Jackson, Wyoming—**February 15, 2012**. <http://www.cowyafs.org/annualmeeting/>
- **Scholarship Application Deadline**—**February 15, 2012**. See page 4.
- **Western Division Award Nomination Deadline**—**February 20, 2012**. See page 5.
- **Student Travel Grant Application Deadline** for the upcoming Western Division Meeting in Jackson, Wyoming—**February 20, 2012**. See page 4.
- **Small Projects Grants Application Deadline**—**February 20, 2012**. See page 4.
- **Student Writing Contest Submission Deadline**—**April 15, 2012**. See page 10.

Officers

President

Dave Ward
Senior Fisheries Biologist, HDR Engineering, Inc.
1001 SW 5th Avenue, Suite 1800
Portland, OR 97204
Phone: (503) 423-3824
david.ward@hdrinc.com

President Elect

Christina (Tina) Swanson
Director, Science Center, Natural Resources Defense Council
111 Sutter Street, 20th Floor
San Francisco, CA 94104
Phone: (415) 875-6100
cswanson@nrdc.org

Vice President

Pamela J. Sponholtz
Project Coordinator/Fishery Biologist, USFWS, AZFRO-Flagstaff
323 N. Leroux, Suite 401
Flagstaff, AZ 86001
Phone: (928) 226-1289 ext. 113
Pam_Sponholtz@fws.gov

Secretary-Treasurer

Mary Buckman
Biometrician, Oregon Department of Fish and Wildlife, retired
3248 SW Long Avenue
Corvallis, OR 97333
Phone: (541) 752-2847
mary.buckman@comcast.net

Past President

Lori M. Martin
Aquatic Biologist, Colorado Parks and Wildlife
711 Independent Avenue
Grand Junction, CO 81505
Phone: (970) 255-6126
Lori.Martin@state.co.us

From left to right: Lori Martin, Mary Buckman,
Tina Swanson, Dave Ward, and Leanne Roulson.



President's Hook

Finishing up 2011 with some good news, I am happy to be reporting that in addition to its many other manners of success, the 2011 meeting in Seattle has come through on the financial side as well. All the financial smoke has now cleared, and the Western Division will soon reap a sizeable financial reward from the meeting, as will the Washington/British Columbia Chapter. This is especially good news because the Division coffers were a bit strained after two consecutive years of financial losses.

Making money is great, as long as the Division puts it to good work. First, we will replenish our rainy day fund, to ensure we can continue to weather multiple bad years in the future. Second, we are upgrading the Division website, something that should be in place by the time you read this. It will remain a work in progress, but I invite you to check it out!

Next, we will re-infuse our student travel grant fund. As advertised on the website, via the list serve, and elsewhere in this newsletter, grants are available to help students attend Division meetings, including the meeting March 26-29 in Jackson, Wyoming (more on that in a bit). Finally, we will be setting aside some funds for professional-level travel to the 2014 Division meeting in Mazatlan, Mexico. We realize how difficult it is to persuade government employers to fund international travel, so the Division will provide some assistance. We want to do all we can to help the Mexico Chapter be successful.

In conjunction with the meeting in Jackson, it is time to bestow our AFS awards to worthy individuals, groups, chapters, and subunits. Please take the time to nominate worthy candidates for awards. You'll find further information in this issue.

I will close this short column with a plea to all members to attend the 2012 meeting in Jackson if at all possible. The meeting committee has done an outstanding job of planning and organizing, and it is difficult to think of a more beautiful place to hold a meeting at the end of winter. PLEASE ATTEND! I hope to see you there.

—Dave Ward, Western Division President

The gauntlet has been thrown: Please support the Grants Endowment Fund

Beginning in the very near future, perhaps by the time you receive this, the revised Western Division website will include a front page option for making financial contributions to the Grants Endowment Fund. It's being established through PayPal and will make contributing a very simple process. With your help, individual member contributions have the potential to add significantly to the Grants Endowment Fund over time.

While asking people to donate money is not a particularly pleasant task, we think it is important. The American Fisheries Society is the premier organization for professional fisheries workers, and the Western Division is the largest Division. The wealth and diversity of fisheries resources that members work with and care about throughout the west are incredible; as are the challenges all too often facing those resources. The Grants Endowment fund was created to help fund activities by Division and Chapters members working to meet those challenges. Building the Grants Endowment Fund means greater funding available for more or larger projects, and in some cases it may shorten the time it takes to garner all the funds needed to complete a project. The Yellowstone cutthroat trout video and the Western Native Fishes Initiative may have been completed more quickly had the Western Division been able to contribute more funding.

Not to be accused of talking the talk, but not walking the walk; all seven members of the Grants Endowment Fund committee have pledged \$50 to the fund. No, that isn't a lot of money, but that's the point. If enough of us contribute something over time, it will add up. Our contributions can be painless and hopefully habitual, and Western Division members will thank us down the road.

Remember, you can also make your tax deductible contribution when you register for the 2012 annual meeting (online or in Jackson), or you can send a check to our Secretary-Treasurer Mary Buckman (Oregon Dept of Fish and Wildlife – Retired, 3248 SW Long Avenue, Corvallis, OR 97333). Also please feel free to contact Bill Bradshaw (307-672-7418, Bill.Bradshaw@wyo.gov) for more information.

—Bill Bradshaw - Grants Fund and Investment Committee

Announcements

WDAFS Scholarship Deadline is February 15, 2012

Please be aware that the Western Division of the American Fisheries Society deadline for the 2012 graduate-level student scholarship applications is February 15, 2012. This scholarship program provides up to \$3,000 annually in scholarships to master's or doctoral students in the general area of fisheries science with one to three awards to individual students. Beginning in 2002, the Sustainable Fisheries Foundation established the William Trachtenberg Memorial Scholarship Fund, which augments the Western Division scholarship program. This fund provides up to \$600 annually to a graduate-level student conducting studies on fisheries sustainability. Applications for the Western Division scholarship program will automatically be considered for the Sustainable Fisheries Foundation scholarship program as well. Details and the application can be found online at: <http://www.wdafs.org/students/scholarship-travel-award-information/>. Applications should be submitted, and questions directed, to Bob Gresswell at bgresswell@usgs.gov.

Student Travel Grants Available—Deadline is February 20, 2012

The Western Division AFS is awarding travel grants to help students attend the 2012 annual meeting in Jackson, Wyoming, March 26—29. The application form, with instructions, is available on the WDAFS website at: <http://www.wdafs.org/students/scholarship-travel-award-information/>. Applications must be completed and returned by February 20, 2012 to be considered. Please keep in mind that to award as many grants as possible, each grant will be designed to cover a portion of expenses only. Typical grants in the past have been in the \$500 range. Applications should be submitted and questions directed to WDAFS President Dave Ward at david.ward@hdrinc.com.

Small Project Grants Available—Deadline is February 20, 2012

The Western Division currently has project funding available for Division Chapters, Subunits, and other fisheries-related groups. Grants are usually modest (less than \$2,500 total is available for FY 2012) but can help get a project started or be used to complement other funding sources. Information regarding the application process and criteria for awarding grants can be found at: <http://www.wdafs.org/awards/small-project-grants/>. Applications must be received by the Western Division President no later than February 20, 2012. Questions should be directed to WDAFS President Dave Ward at david.ward@hdrinc.com.

Society for Freshwater Science (Formerly NABS) Annual Meeting

The Society for Freshwater Science (formerly NABS) will be holding their 2012 Annual Meeting in Louisville, Kentucky, May 20—24. For more information visit: <http://www.freshwater-science.org/>

American Society of Ichthyologists and Herpetologists Annual Meeting

The American Society of Ichthyologists and Herpetologists (ASIH) will be holding their 2012 Annual Meeting from August 8—14 in Vancouver, British Columbia, Canada. The ASIH is dedicated to the scientific study of fishes, amphibians and reptiles. The primary emphases of the ASIH are to increase knowledge about these organisms, to disseminate that knowledge through publications, conferences, symposia, and other means, and to encourage and support young scientists who will make future advances in these fields. The programs of the ASIH are part of a global effort to interpret, understand, and conserve the Earth's natural diversity and to contribute to the wise use of natural resources for the long-term benefit of humankind. For more information visit: <http://www.asih.org/>

Western Division Awards

Nominate now for Western Division Awards!

Now is the time to recognize your friends, colleagues, chapters, organizations, and others you feel have gone beyond the call of duty for fisheries management and conservation in western North America. The good news is the application process won't take more than a few minutes of your time, and will mean a lot to both the person awarded, and the fisheries profession. Please take the time and recognize someone special! Below are the available awards. Nominate now! Nominate often!

See <http://wdafs.org/awards/> for links to a list of prior recipients:

Award of Excellence

This is the most prestigious award offered by the Western Division and it is intended to recognize sustained professional excellence. It is given annually to an AFS member who has demonstrated outstanding achievement and exceptional competence in fishery resource applications through monumental works, new methodologies, or multiple successful contributions that benefit our resources and profession. Successful nominees have usually excelled in research or management programs at the regional, national, or international levels. Other examples include fresh, innovative approaches to improving our understanding of aquatic resources, and imaginative and successful programs in education at any level of teaching and imaginative and successful programs in education at any level of teaching.

Award of Merit

This award is given to an AFS member(s) who has made a regionally significant and worthy contribution to our Division, our profession, or our fishery resources.

Award of Special Recognition

This award is given to an individual or to an entity (AFS member or non-member) making a significant contribution to the development and success of the Western Division.

Robert Borovicka Conservation Achievement Award

This award is given annually to an individual (AFS member or non-member) who has significantly contributed to fishery conservation within the Division. The individual may be a non-member of AFS.

Conservation Achievement Award

This award is typically given to an entity (such as an agency, tribe, or organization) that has demonstrated a significant contribution to the conservation of fishery resources within the Division.

In addition to the awards described above, the Division also awards the **WDAFS Outstanding Chapter Award**, the **WDAFS Outstanding Student Subunit Award**, and the **WDAFS Riparian Challenge Awards** (see next page). For all awards besides the Chapter/Student Subunit Award, write a no more than a one page description why the individual or organization deserves the particular award. For the Chapter/Student Subunit Award, nominate using the template for chapter award nominations on the parent society web site (www.fisheries.org). Awards will be presented at the WDAFS meeting in Jackson, Wyoming in March. Please email all award nominations to Lori Martin at lori.martin@state.co.us by **February 20, 2012**.

Western Division Meeting Information

Registration:

The only way to register before the 2012 Western Division AFS Annual Meeting is by registering online; however, those that wish to register at the meeting will be permitted to do so.

EARLY REGISTRATION BY THE FEBRUARY 15, 2012 DEADLINE IS REQUIRED TO ATTEND THE BANQUET, WD BUSINESS MEETING BREAKFAST, OR THE COWY CHAPTER BUSINESS LUNCH.

To register visit: http://www.cowyafs.org/annualmeeting/?page_id=62

All registrations must be processed through online registration or at the door. Payment can be made with credit card (Visa, MasterCard, or American Express) or check. Please make checks payable to CO-WY AFS. If you wish to register online but pay by check please mail check to:

Paul Gerrity, 260 Buena Vista, Lander, WY 82520.

Registration is required to attend any technical sessions, workshops, or associated events. Please note that all attendees, including oral and poster presenters, are required to register and pay for the conference. Also, those planning to attend the continuing education classes are encouraged to register as soon as possible, because space is limited. Any questions about registration can be directed to Paul Gerrity at paul.gerrity@wyo.gov.

When registering, please note that some Monday continuing education workshops run concurrently. **For instance, if you are attending the Introduction to R workshop, please do not select another workshop.** You will be charged for as many as you select.

Please indicate on the online registration page if you will be attending the business meetings or socials by selecting the appropriate check box(es). All four events are included with early registration, but you must indicate whether you will attend. The Tuesday CO/WY Chapter Business lunch is restricted to CO/WY Chapter members only.

The following table lists prices (\$US) for the meeting, continuing education, banquet and spawning run by membership category and registration period.

	Early Registration	Late Registration
Registration for 2012 Western Division Meeting		
Regular Parent Society Member	\$315	\$395
Student or Young Professional Member	\$125	\$175
Retired Member	\$155	\$180
Non-Member	\$435	\$515
Single Day	\$225	\$305
Continuing Education		
AFS Leadership Workshop (March 25, 12 pm – 5 pm)	Free	Free
Aquatic Plants Workshop (March 26, 8 am – 12 pm)	\$35	\$35
Stable Isotopes Workshop (March 26, 1 pm – 5 pm)	\$35	\$35
Introduction to R Workshop (March 26, 8 am – 5 pm)	\$35	\$35
Wednesday Evening Banquet (Chicken, Salmon, Prime Rib, or Vegetarian)	\$30	N/A
Banquet for spouse or guest of registered attendee	\$35	N/A
Tuesday COWY Chapter Business Lunch (CO/WY Members Only)	Incl. w/ reg.	N/A
Wednesday Western Division Business Meeting Breakfast	Incl. w/ reg.	N/A
Monday Evening Welcome Social	Incl. w/ reg.	N/A
Tuesday Evening Social	Incl. w/ reg.	N/A
Spawning Run (includes commemorative t-shirt)	\$25	\$25

Western Division Meeting Information

Final Call for Papers:

We are once again looking for members to share all of the great work they have been doing over the past year by giving a presentation or poster. All contributions must be submitted on the Western Division Annual Meeting 2012 website at: http://www.cowyafs.org/annualmeeting/?page_id=68

In addition to accepting presentations from all topics, ten exciting symposia are being organized on the following topics:

- Advances in Fisheries Technology
- Anadromous Critters
- Burbot
- Climate Change
- Cutthroat Trout
- Energy Development
- Fish Culture
- Snake River Studies
- Stream Restoration
- Western Native Nongame Fishes

Continuing Education Courses:

Four continuing education courses will be offered at the 2012 Western Division AFS meeting. They are:

1. **Stable isotope workshop** – An introduction to stable isotopes as a tool in Fisheries Science. The workshop will involve a summary of stable isotopes in the environment and how they can be used to address important questions related to fisheries (e.g., characterizing food webs, understanding predator-prey interactions, determining fish origin). The workshop will be led by Dr. Scott Carlton (New Mexico State University, Cooperative Fish and Wildlife Research Unit). 1–5pm, Monday, March 26th; course limited to 40 participants.
2. **Introduction to R** – An introduction to programming in R, the free software environment for statistical computing and graphics. Program R has become a very popular tool for biologists and ecologists. The program is widely used, largely because it is free, flexible, and relatively easy to use. The fact that the program is free allows users to rely on previously developed code regardless of the statistical program licenses available at a given institution. The online help and forums related to R have grown rapidly, which adds to the attractiveness and flexibility of R. The workshop will be led by Dr. Mevin Hooten (Colorado State University, Colorado Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife, and Conservation Biology) and Dr. Viviana Ruiz-Gutierrez (Colorado State University and Cornell University). 8–12 noon and then 1–5pm, Monday, March 26th; course limited to 30 participants; please plan to bring a laptop computer – simple instructions for downloading R and RStudio, as well as course materials will be emailed to you after you register.
3. **Aquatic plant workshop** – In the field of fisheries, we are often faced with understanding and managing fisheries in the context of aquatic plants. Aquatic plants often support invertebrate and fish communities and some species also represent nuisance/invasive species that interact negatively with ecosystems. This workshop will focus on aquatic plant ecology, identification and time permitting, means of controlling invasive plant species. The workshop will be led by Elizabeth Brown, the Aquatic Nuisance Species Coordinator for Colorado Parks and Wildlife. 8–12 noon, Monday, March 26th; course limited to 40 participants.
4. **AFS Leadership workshop** – Targeting leaders at all levels of the Society, the goal of this workshop is to help participants work effectively within the Society's governance structure by helping them understand how things work in AFS. The workshop will review the structure of the Society and the programs that exist, suggesting ways to be more effective within the Society governance structure and within your unit (Chapter, Section or Division). Instructors will relate leadership concepts to the operations of AFS, and participants will be encouraged to participate and share experiences. The workshop will be led by Dirk Miller, Wyoming Game and Fish Department Fisheries Management Coordinator. 1–5pm, Sunday, March 25th; course limited to 40 participants.

Registration (and payment) for courses is part of the meeting registration.

For more information on these courses please contact Jesse Lepak at Jesse.Lepak@state.co.us

Western Division Meeting Information continued

Lodging:

Snow King Resort is offering a special rate of \$100/night (plus tax and fees) for meeting attendees from 3 days before the start of the meeting to 3 days after the meeting is concluded. While making reservations, tell the resort that you are with the American Fisheries Society. There are a number of rooms blocked for the meeting, however, Jackson is a very popular tourist destination, and when blocked rooms are gone, you are not guaranteed a room.

Snow King Contact Information:

www.snowking.com

1-800-522-5464

If you are planning to come to Jackson early, make sure to book your room reservations well in advance. From March 22nd to March 25th, Snow King will be hosting the "Snowmobile Hill Climb". Every year almost 10,000 spectators come to watch snowmobilers race up 1,500 vertical feet on the steepest slope Snow King Mountain has to offer. However, not all the contestants make it to the top. Part of the excitement is seeing vehicles careening back down the mountain. Be sure to get in on the fun and make your travel plans now!

The weekend prior to the start of the meeting is also the last few days to ski on Snow King Mountain just out the back door of Snow King Resort. Skiing closes at Snow King Mountain for the winter season on March 26th.

Jackson Hole Mountain Resort, the large ski hill that Jackson is famous for, will still be open for skiing during and after the meeting. A free shuttle service to the Mountain is offered from Snow King Resort.

Student Volunteers Needed:

Student volunteers are needed to assist with the 2012 WDAFS meeting in Jackson. We are looking for volunteers to help with audiovisual support, registration, and the raffle during the meeting. Hours of volunteer time will be credited and count towards meeting fees; 12 hours of volunteer time for the full reimbursement and 6 hours for half reimbursement. We would like to encourage as many students as possible to volunteer their time.

For more information on volunteering please contact Beth Bear (Beth.Bear@wyo.gov).

Request for Raffle Submissions:

We are compiling items to raise money to help defray meeting costs and provide much needed funds for scholarships and other important monetary requests. We'd greatly appreciate any personal donations. Donations can be anything from money, artwork, or gift certificates, to fishing trips, tackle, hand-made goods and more. Anything and everything helps. Please help out and give a donation today. To donate, contact Dan Brauch (Dan.Brauch@state.co.us) or Anna Senecal (Anna.Senecal@wyo.gov).

Photo Contest:

One of the perks of our work is that we are often spending time in some of the most scenic areas of the country and have opportunities to view and photograph many types of wildlife. We also get an opportunity to admire many interesting fish specimens. If you took advantage of these photo opportunities by snapping a shot, YOU can help the Raffle Committee's fundraising efforts by sending in your photos for our 2012 Western Division Annual Meeting photo contest. We will print and frame the top 3 winners and will raffle them off in our silent or live auctions. Besides helping us out in our fundraising efforts, you can be honored for your photographic skills and may even win a small prize! We will also be including all submissions in a slide show to be viewed during the meeting. Thanks for taking the time to browse your photo files and send us an entry or two for the contest!

The deadline to submit submissions to Dan Brauch (Dan.Brauch@state.co.us) is March 2nd.

Western Division Meeting Information continued

Trade Show:

Vendors – Tables are still available in our trade show area. For more information please contact Steve Gale (Steve.Gale@wyo.gov).

Tours and Sightseeing:

- Downhill skiing and snowboarding is available at both Snow King Resort (until March 26th) and at Jackson Hole Mountain Resort. Lift tickets are \$42/day at Snow King (\$24 for those staying at the resort) and \$95/day at Jackson Hole.
- Backcountry skiing, cross country skiing, and snowshoeing opportunities are abundant in the Jackson Hole area.
- Tubing is available at Snow King Resort at the rate of \$16/hour or \$21/two hours, or \$14/\$19 for those staying at the resort.
- Ice skating is available at Snow King Resort.
- Snowmobile tours and rentals are available leaving from Jackson.
- The National Elk Refuge offers sleigh ride tours every day of the conference for \$18
- A free tour of the Jackson National Fish Hatchery will be available on March 29th.

Smith-Root Introduction to Electrofishing Courses

Introduction to Electrofishing Course

7—8 March, 2012 in Vancouver, Washington

and

12—13 April, 2012 in Vancouver, Washington

<http://www.smith-root.com/calendar/train/introduction-to-electrofishing-class-march-2012/>

These are 2-day courses being held at Smith-Root, Inc. headquarters in Vancouver, WA. The first day consists of a classroom lecture-based session covering basic electrical theory, electrofishing equipment, operation and safety, and applied electrofishing methods. The second day is a practical field-based session where participants operate electrofishing equipment and apply information learned in the classroom.



Boat Electrofishing: Principles and Practices

20—22 March, 2012 in Tempe, Arizona

<http://www.smith-root.com/calendar/train/boat-electrofishing-principles-and-practices1/>

Electrofishing is an effective way to sample freshwater fish populations. However, electrofishing may cause fish injury or mortality. Proper balance between efficient sampling and minimal harm is achieved through the knowledge of electrofishing principles and proper use techniques. This three-day course is intended to meet the National Marine Fisheries Service (NMFS) training requirements for electrofishing field staff.



Win the honor of having
YOUR writing published
In Fisheries!

Student Writing Contest Now Accepting Submissions

Submission deadline

April 15, 2012

Submissions should be directed to:

Walt Duffy
California Coop Fish &
Wildlife Unit, Humboldt
State University, Arcata, CA
95521

Questions?

Call Walt Duffy at (707) 826-
5644 or email
walter.duffy@humboldt.edu

The American Fisheries Society **Student Writing Contest** recognizes students for excellence in the communication of fisheries research to the general public.

Undergraduate and graduate students are encouraged to submit a 500- to 700-word article explaining their own research or a research project in their lab or school. The article must be written in language understandable to the general public (i.e., journalistic style). The winning article will be published in *Fisheries*.

Students may write about research that has been completed, is in progress, or is in the planning stages. The papers will be judged according to their quality and their ability to turn a scientific research topic into a paper for the general public and will be scored based upon a grading rubric. Check the AFS Web site (www.fisheries.org) awards page for the grading rubric.

Taking Science Mentorship to a New Level: A Nobel Prize in the Family!

As a professional society, we seem to be doing an admirable job of mentoring our fisheries students and young professionals (e.g. the various events and programs that our Division and other units host to recognize and support student members). Our students are, after all, at the core of our future in natural resource conservation. But are we doing all we can do a little closer to home ... in teaching and introducing our sons and daughters to the fascinating world that can await them in the realm of scientific discovery?

This is the tale of a father and his son who seem to have achieved that goal in a very big way. It culminated (or perhaps has just begun!) in a recent telephone call from the 2011 Nobel Prize Award Committee based in Stockholm, Sweden.

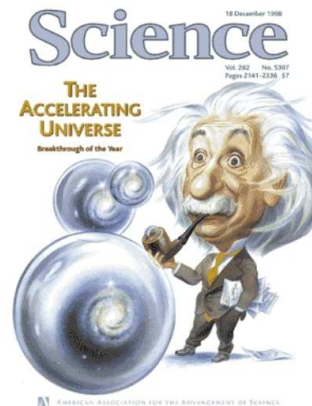
The proud father is known to many of us in WDAFS circles (Dr. Dana Schmidt, a past president of both the International Fisheries Section and the Alaska Chapter). His son, Brian (also a Dr. Schmidt!) just won the 2011 Nobel Prize in Physics (an award he shared with two other colleagues in the field of astrophysics). Brian currently resides in Australia with his wife Jenny and their two sons. He is a professor at the Australian National University (as well as a Laureate Fellow at the Mount Stromlo Observatory there). He and the research team he led (the High Z SN Search Team; a group of 20 scientists on 5 continents) had been scouring space for several years in search of supernovas. Using Doppler-Shift and other innovative distance measuring technology, Brian and his team helped show what Einstein was unable to address and believed to be his biggest failure: evidence that the universe was actually expanding. Not too surprisingly, this discovery was named by Science Magazine as its "Breakthrough of the Year" in 1998. The interpretive article by a staff writer described "an extraordinary conclusion about the nature of the universe by two teams of astronomers ... that the unexpected dimness of exploding supernovas indicates a large-scale repulsive force permeating the universe, accelerating its expansion, and sweeping distant objects unexpectedly far away."

Following publication and intense peer-reviews and challenges of these data, the accolades soon began to pile up. For Brian, they have included such prestigious honors as the:

- Malcolm McIntosh Award for Achievement in Physical Sciences in 2000;
- Australian Academy of Sciences Pawsey Medal in 2001;
- Astronomical Society of India's Vainu Bappu Medal in 2002;
- Shaw Prize for Astronomy in 2006 (shared) in Hong Kong;
- Gruber Prize for Cosmology (another prestigious, shared honor);
- and numerous published works in Science Magazine plus election as Fellow to the Australian, Spanish and U.S. National Academies of Sciences.



Dr. Brian Schmidt, 2011 Nobel Laureate



Science "Breakthrough of the Year" Issue (1998)

Noble Prize continued

The key paper that Brian senior-authored demonstrated the utility of using Type 1A supernovas for measuring the relationship between “redshift” and luminosity for galaxies that are several billion light years away. Brian’s paper was key because it allowed calibration of that relationship (i.e. that supernovas can be used as “standard candles” to determine distance at the point in space from Earth — and hence time — when light left an exploding star). That calibrated relationship between luminosity and redshift then allowed Brian’s co-laureates to determine that galaxies distant from our Milky Way were substantially further than predicted by a constant-rate expansion model. (The *a priori* expectation before this research was that supernovas at a high redshift value would be closer than predicted under a constant-rate model ... because it was assumed that expansion of the universe was slowing, or de-accelerating, due to certain gravitational attractions.) In the world of astronomy, this finding is bigger and perhaps even more awe-inspiring than predictions of life on Mars, or asteroids wiping out dinosaurs.

There is likely no other example of an AFS member or one of their immediate family members receiving a Nobel Prize accolade. I look back on a close personal friendship that began with Dana and his family while in graduate school at Oregon State University in the early 1970s. Brian was just a 4-year-old at the time but he accompanied his mom and dad on just about every camping, fishing or hunting trip they made. Inspired by his dad, Brian had an obvious interest in science and nature from an early age. One Christmas, Santa showed up with a pretty nice present: a new telescope for Brian. And dad helped explain the constellations and amazing planetary features that were now within view on a clear night. The rest is, more or less, history!

Dana moved his family to Anchorage, Alaska in the mid-1980s where Brian graduated at the top of his high school class. From there it was a scholarship to the University of Arizona for undergraduate degrees in physics and astronomy (1989) followed by a persistent recruitment effort by Harvard University for Brian to come East for graduate study. His PhD in astrophysics was earned in 1993 while working under the tutelage of Dr. Bob Kershner, then a world-recognized authority in supernova physics and Chair of the Smithsonian Center for Astrophysics.

The work of Brian Schmidt and his team led to additional theories about dark matter and dark energy. Brian’s research involved data obtained by using telescopes located around the world and is an example of how modern astronomy requires such a system of multiple telescopes to address conundrums and challenges. Confirmation of the data proving acceleration was made with the Hubble Space Telescope. However, the original work was a ground-based result and represents the first Nobel Prize for research done using optical telescopes.

So there we have it: perhaps an extreme, but a very fine example of what a little exposure to science, a good dose of parental guidance and mentorship, and an appropriate Christmas present can mean to the future career paths and lives of our children. Despite the outstanding mentorship we do for AFS students, it goes without saying that we need to do as much and more for those in our own families. You never know where it might lead! There can be no greater honor as a scientist to see your son or daughter receive a Nobel Prize. The American Fisheries Society congratulates one of ours (Dr. Dana Schmidt) and the phenomenal achievements made by his son (Dr. Brian Schmidt) in astrophysics. (The family recently returned from travel to Stockholm, Sweden where that country’s King presented Brian with a well-earned share of the 2011 Nobel Prize in Physics on December 10.)

—Carl Burger, Past AFS and Western Division President

Job Announcement

The North Pacific Fishery Management Council announces job openings for a Fishery Analyst and a Fishery Economist to work as part of a professional analytical team to prepare environmental, regulatory, and/or economic analyses to modify the ecosystem-based fishery management programs for the Federal groundfish and crab fisheries off Alaska.

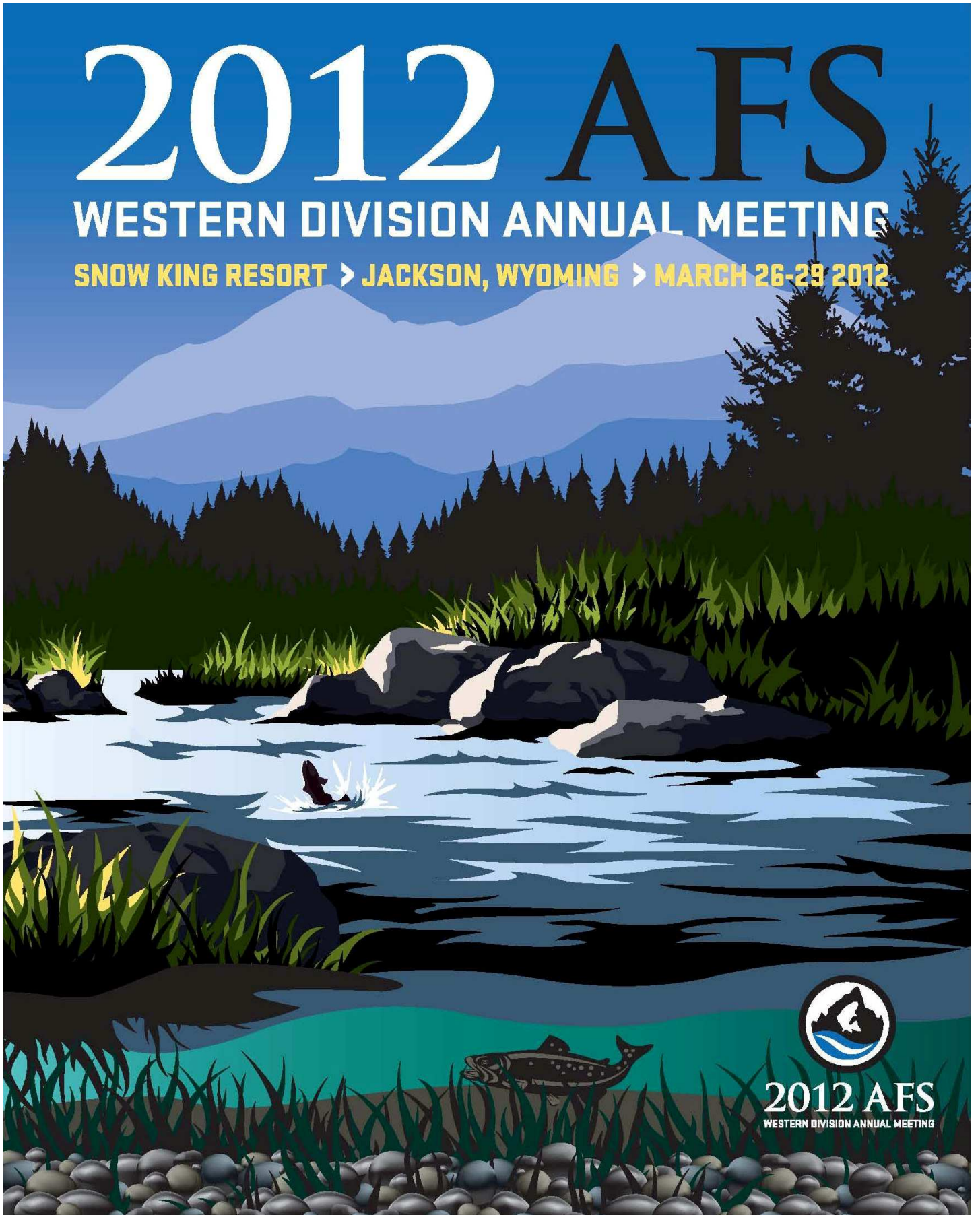
Salary for both positions is \$68,000 to \$98,000/yr (GS 11/12/13 equivalent) DOE. Deadline for applications is February 11, 2012 or until the positions are filled.

See the full announcements on the Council's webpage at <http://www.alaskafisheries.noaa.gov/npfmc>.

2012 AFS

WESTERN DIVISION ANNUAL MEETING

SNOW KING RESORT > JACKSON, WYOMING > MARCH 26-29 2012



2012 AFS
WESTERN DIVISION ANNUAL MEETING



About the Tributary

The Tributary is the newsletter of the Western Division of the American Fisheries Society published four times per year.

Editor

Travis Neebling Travis.Neebling@wyo.gov

About the American Fisheries Society

The mission of the American Fisheries Society is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.

<http://www.fisheries.org>

About the Western Division of the American Fisheries Society

Established as the first Division of the [American Fisheries Society](#) in 1948, the Western Division now includes [Chapters](#) from twelve western states, British Columbia, Yukon Territories, and Mexico. Our members represent a tremendous array of fisheries workers involved in all aspects of the fisheries profession. The collective diversity and expertise of Western Division members is the basis of an intimate and unparalleled familiarity with fisheries resources and issues within our geographic region. Division objectives are to provide a forum for exchanging technical and policy information, promote understanding by regional, Federal, and state policy-makers of the nature and extent of fishery matters of concern to the membership, facilitate timely exchange of information to chapters and the general membership, and provide a vehicle for the active participation of individual members in Society business and professional activities.

<http://www.wdafs.org>