



American Institute of Fishery Research Biologists

Promoting excellence in fishery science

... BRIEFS ...

www.aifrb.org

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President's Message

Greetings AIFRB Members,

This is the final President's Message to be published leading up to the Institute's Board of Control (BOC) meetings on August 15 and 16, 2015 in Portland, Oregon. As is our custom, our BOC meetings take place at the venue of the annual American Fisheries Society meeting, largely to facilitate the travel and expenses for our state and federal agency, academic, as well as private research biologists.

Our Partnership is Strong

Many AIFRB members also enjoy AFS membership, because of the society's far-reaching ability to positively affect the planet's fisheries, from freshwater to marine habitats, and to promote the sustainability sciences to positively influence those resources. We partner with the AFS at many levels, and the AIFRB has long favored our close relationship. We are, after all, sister organizations with similar missions, albeit with a different focus.

Long-time member, David P. Borgeson, retired after a long career working with trout and salmon in California and with the Coho Salmon Fishery in the Great Lakes, recently sent me a note, "*To those who ask why a fishery research biologist should join AIFRB when a larger society is available that purportedly voices his views and concerns, I say this: Join AIFRB if you want to be associated with a special group of seasoned fisheries professionals that you will respect for who they are and what they have done and what they care for. As for me, my association with AIFRB has been far more rewarding than my experience with the larger society. Thanks for all you do.*" Dave Borgeson

Our Membership is Unique

As we are nearing our 60th year of incorporation, I am happy to report that the Institute is still going strong, continues its relevance, and has stayed true to its past, by (and I quote from my previous message) *providing a forum for individuals to discuss and debate positions, especially in the promotion of great science without fear of retribution.* Unfortunately, as with most member driven societies, AIFRB has had challenges over the last decade associated with the world's past financial downturn. As a result, our funding and awarding ability has diminished, which is problematic towards reaching our goal of supporting the professional development of our membership. Our awards program focuses on student research, achievement of our young professionals, and recognition of outstanding achievement of individuals, as well as fishery groups that have done so much for our fisheries and our profession, and is vital to bringing new members on board and keeping our scientific knowledge healthy and sound.

Fortunately, our membership has increased during 2014 and 2015; **the number of membership applications received during 2014 (40 applications) was the highest observed since the mid 1990s, and in 2015, we received a record breaking 57 applications - our largest annual recruitment EVER!!!** About 75 percent of new membership is at the associate level (student and professional), with 25 percent entering the Institute as members or fellows. This increase in membership is due in large part to our outreach activities, including interaction of BOC with members and recruits at the AIFRB

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membership booth during the annual AFS meetings, recruitment outreach by our new membership chair, Todd Chapman, and young professional networking events coordinated by Cate O'Keefe. Todd and Al Shimada (AIFRB Treasurer) have also led our membership upgrade program in 2015, with the goal of ensuring that members who may have joined the Institute as students or associates, for example, are promoted to their appropriate membership levels (e.g., member or fellow). Also, our current district directors are doing a great job of recruiting new members, by holding networking events, dinner/presentation meetings, judging student posters and presentations, and other activities. These actions are encouraging and point to a good future for the AIFRB.



Monsters of Stock Assessment Workshop at AFS 2015 Annual Meeting

The AFS Estuaries and Marine Fisheries Sections are organizing a “Monsters of Stock Assessment” workshop at the 2015 AFS annual meeting in Portland. This workshop will bring together top professors from around the country to provide short lectures on critical aspects of stock assessment science. The workshop may serve to “de-mystify” stock assessment science, which should allow the workshop to appeal to scientists as well as a more general audience.

Lecture topics include incorporating and addressing ecological interactions in stock assessments, communicating stock assessment methods and results, having fun with population dynamics models, and examining whether sex matters to models (a retrospective perspective).

The workshop name is a play on the 1980s “Monsters of Rock” tour that brought together the best heavy metal bands in the world to play together. The workshop will consist of opening remarks and 8 talks lasting around 20 minutes each. The workshop will be a fund-raiser to benefit Estuaries and Marine Fisheries Section student travel awards for the AFS annual meeting. Attendees will be asked to offer a donation of \$20 (students) or \$40 (non-students). If you are interested, please RSVP to Lee Benaka at Lee.Benaka@noaa.gov.

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Balancing Conservation and Utilization to Sustain Fisheries

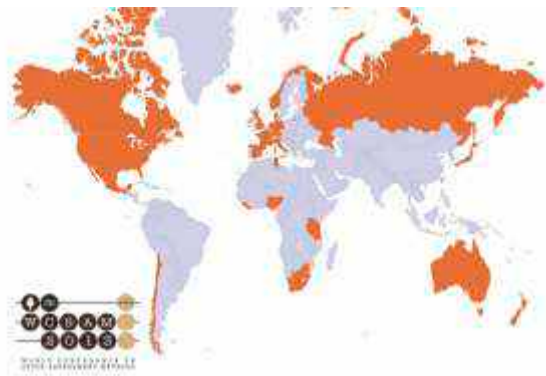
The challenge of managing fisheries is achieving sustainability, not only ecologically, but also economically and socially. Striking a balance among these components of sustainability is even more difficult given ever changing environmental conditions and evolving societal preferences. While fisheries management in North America has been generally effective for avoiding overfishing and has had some successes in rebuilding fisheries there is still debate over conservation and utilization of fishery resources. The demand for seafood in North America has increased, but most seafood products are currently imported, largely as a result of restrictions to North American domestic fisheries. In addition, recreational fishing is a booming industry that needs to be managed in coordination with commercial fisheries, but usually with different objectives and approaches. As human populations continue to increase, particularly in coastal communities, working waterfronts are being out-competed, and some fishing grounds are threatened by other human uses. To address the tradeoffs between conservation and utilization, ecosystem approaches to fisheries management are being developed. This symposium invites fisheries scientists in all relevant disciplines to lend their perspectives on achieving sustainability. Related themes include:

- Current state of fisheries resources in AFS regions and around the world
- Changing perspectives on utilization of wild fishery resources
- Food production vs. environmental conservation
- Economic viability of fishing industries vs. overfishing
- How to balance natural resource utilization with natural resource conservation
- Tradeoffs to conservation or resource utilization (single species management, marine mammals, top predators, trophic impacts)
- Historic and future perspectives: where have we been, where are we going?

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AIFRB Past-President Steve Cadrin's paper in ICES Journal of Marine Science: Stock assessment methods for sustainable fisheries

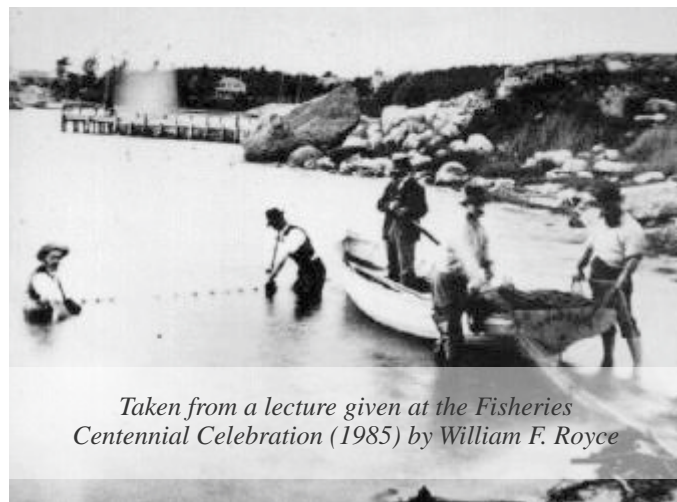


This special volume of the ICES Journal compiles contributions from the World Conference on Stock Assessment Methods for Sustainable Fisheries (July 2013, Boston, USA). The conference was the product of a strategic initiative on stock assessment methods that engaged many national and regional fishery management organizations to assure that scientists can apply the most appropriate methods when developing management advice. An inclusive workshop was designed to evaluate the performance of a variety of model categories by applying multiple models to selected case study data as well as simulated pseudo-data that had realistic measurement error. All model applications had difficulties in recovering the simulated stock and fishing mortality trends, particularly at the end of the assessment time series, when they are most important for informing fishery management. This general result suggests that the next steps in evaluating the performance of stock assessment methods should include stock status relative to sustainable reference points, catch advice, multi-model consideration, and alternative management procedures. Recognition of the limitations of conventional stock assessment methods should promote further development of data-limited approaches, methods with time-varying parameters, or spatial complexity, and a more revolutionary shift towards the application of multispecies and ecosystem models. The contributions in this volume address methodological themes that are expected to improve the scientific basis of fishery management. Furthermore, the limitations of stock assessment methods and associated uncertainty should be more extensively considered in fishery management strategies and tactical decisions. Recommendations developed during the conference called for the establishment of a global initiative to synthesize regional advances, form guidance on best practices, promote strategic investments, and highlight research needs for fish stock assessments.

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ICES Journal of Marine Science (2015), 72(1), 1–6.
doi:10.1093/icesjms/fsu228

The Historical Development of Fisheries Science and Management



Taken from a lecture given at the Fisheries Centennial Celebration (1985) by William F. Royce

I propose to examine the history of fishery science and management with emphasis on the socioeconomic aspects, in addition to the biological or ecological aspects of the resources with which many of us are familiar. I do so especially because we have three kinds of fisheries, around which fishery science has developed, which differ radically in their social dimensions. These are 1) recreational fisheries; 2) commercial fisheries; and 3) fish farming.

In the first kind, when any resident of northern America goes angling in public waters, he or she usually buys a state license and pays a substantial Federal tax (10 percent) on the equipment used. The license fees for the rights to fish and the special taxes pay for most, if not all, of the public costs of management and enhancement.

Second, when any resident of northern America goes commercial fishing in public waters to catch perhaps a thousand times as many fish as the angler, he or she pays only modest "taxes" for license or landing fees on a per-fish basis, which pays very little of the public costs for research on and management of the commercial fishery resources. In addition, the commercial fishermen are heavily subsidized by both Canadian and U.S. governments, as well as much of the rest of the world, through low-cost loans, special advisory services, and unemployment insurance.

Third, when any farmer in northern America grows fish, he or she may have to obtain some special permits, but will usually operate in waters that are completely controlled by lease or ownership, and will have exclusive rights to the organisms. Fishery scientists serve all three kinds of fisheries with similar biological studies. However, these fisheries have very different socioeconomic situations which, I believe, deserve greater understanding and attention from fishery scientists.

The difference in public costs between recreational and

continued...

commercial fisheries is surprising because 1) there are more than 200 times as many anglers in northern America as commercial fishermen; and 2) the overall economic value of the recreational fisheries, with all of their supporting activities, is much greater than the value of the commercial fisheries. One might expect that general revenues rather than special revenues would be used for an activity popular among about 20 percent of our people, and that special services to less than one percent of our people would require some special taxes on them. But no, the commercial activity of a few is deemed important enough to require continuing transfer payments from the rest of the people; whereas, the recreation for many largely pays its own way.

After recognition of these anomalies and the difficulties of managing a resource of the commons, it is perhaps less surprising that the research on and management of the recreational fisheries is a conservation, social, economic, and political success story; whereas, the research on and the management of the commercial fisheries just may be a conservation and a social success, but it is potentially, in many circumstances, an economic and political disaster.

This situation is not unique to northern America, even though the recreational fisheries are as well developed in few other countries. The commercial fisheries (in the developed countries of the world) are almost all in a similar situation, and the subsistence or commercial fisheries of the lesser developed countries, which have had such high hopes with the new Law of the Sea, are moving rapidly in the same disastrous direction. In fact, the subsistence and the small-scale commercial fisheries, which have sustained village people for centuries, are really endangered. To afflict them with our modern development practices is a prelude to social disaster. My assignment from the organizers of this Celebration is to review the development of fishery science and management. I shall try to do so with emphasis on the major steps that have resulted in the present situation, with the hope that we shall arrive at a clearer understanding of what lies ahead.

This would be an impossible task, had I not the benefit of several excellent histories, and I should first pay tribute to the authors and editors. They include Paul Galtsoff, who wrote the story of this laboratory (Galtsoff, 1962); Norman Benson, who edited the compendium on "A Century of Fisheries in North America" (Benson, 1970); Arthur Went, who prepared the history of the first 70 years of ICES, the International Council for the Exploration of the Sea (Went, 1972); Kenneth Johnstone, who wrote the history of the Fisheries Research Board of Canada (Johnstone, 1977); and Albert Koers of the Netherlands, who detailed the history of regional fishery organizations (Koers, 1973). They all deserve our thanks for their painstaking scholarship.

I shall not attempt a chronology of the long tug-of-war between fishery science and fishing experience; rather, I shall describe a series of epochs, five of them, that I think illustrate the successive steps in the application of science to management and the problems that have arisen. My interpretations will be based on my own biases, and I hope they will be more enlightening than controversial.

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The Myth of Control

Having logged 60 years as an angler, and 40 as a professional in the sciences addressing management of aquatic resources (particularly fisheries), there is a tendency to think that I might know what I'm talking about in these arenas and be able to do things...and make things happen. As an angler I've caught lots of fish. As a scientist I've conducted lots of research. I've written papers, given presentations, directed theses and dissertations, and even served as president of the American Fisheries Society. I've provided management recommendations based on science and salted with "experience". I can speak with authority and conviction. But regardless...I'm currently humbled in the pursuit of my personal Holy Grail: growing a two-pound "brim" (Bluegill *Lepomis macrochirus*) in my Mississippi farm pond.

As an infant my father held bluegill under my nose so that I'd imprint on them. When I was a young child he would take me with him as he traveled throughout the Southeastern U.S. as an aquatic weed control specialist. I met Homer Swingle (the "Father" ...some would say "Deity"...of farm pond fisheries management) on the Auburn University experiment station in the early 1950s when I was four years old. I can only remember meeting a kindly old man on the edge of a pond and spending a long day looking at lots of ponds while my father and the old man talked about stuff. Thirty years later I completed my Ph.D. in fisheries at that university. Only then did my father tell me who it was that we met on the pond bank.

I was hired by Mississippi State University because of that Auburn training. During my career I've drifted into lots of other sorts of fisheries, but



the foundation of it all is Dr. Swingle's work with ponds. There are certainly variations on the theme, but the core elements have stood the test of time: carrying capacity, species interactions, functional groups, growth, condition, recruitment processes, harvest strategies... and they've served me well as frameworks of operation.

I bought a fifty-acre farm twenty years ago. On that property I have a pond just a tad larger than one acre. I killed the catfish in it and restocked it with bluegill and largemouth bass *Micropterus salmoides*. The pond is well protected from poaching. I've worked hard to ensure that water quality is good. I've provided habitat for spawning and recruitment. I've carefully managed harvest, maintaining "bass-crowded" conditions and releasing bluegill over nine inches long (total length) until I see body condition of larger bluegill begin to slip...then carefully and slowly removing (with a wonderful 2-weight Sage fly rod) a few of the big scrappers...until I see body condition in the larger fish improving.

It is a simple system: one species of predator, and one species of prey. It is a small system. I have absolute control (or so I think). I know the literature. I consult with colleagues. I invest time, money and materials. I administer prescriptions in accordance with both the science and the art of farm pond management. I am patient (twenty years is a long time...for me at least). And...while I can consistently grow a 13 inch long, 30 ounce bluegill, I cannot break 32 ounces! Now...just for reference, a 13 inch long bluegill will

Letters

Letters to AIFRB from a Member



Dear Tom

I enjoyed your President's message, Winter 2015, very much. I especially liked "...providing a forum for individuals to discuss and debate positions, especially in the promotion of great science without fear of retribution, that's one of the Institute's strongest traits."

I continue to think Briefs is a wonder and have said so many times in the past, but not to the current editor, Sarah Fox. To you,

and to her, my hat is off. On the back page of each Briefs it says "Briefs is intended to communicate the professional activities and accomplishments of the institute and its members; results of research, effects of management, unusual biological events, matters affecting the profession, and issues of importance to the greater fishery community." In my opinion it has always done so, and in a delightfully clear and effortless manner. Real pros always make it look easy.

To those who ask why a fishery research biologist should join AIFRB when a larger society is available that purportedly voices his views and concerns, I say this: Join AIFRB if you want to be associated with a special group of seasoned fisheries professionals that you will respect for who they are and what they have done and what they care for. As for me, my association with AIFRB has been far more rewarding than my experience with the larger society.

Thanks for all you do.

Dave Borgeson

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Jobs



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Survey

We're conducting a survey and your input would be appreciated. Please go to aifrb.org/surveys to take our survey :

Balancing Conservation and Utilization to Sustain Fisheries.

AIFRB Business

Seeking Nominations for Young Professional Representative Position AIFRB Young Professional Representative



AIFRB is currently seeking nominations for the Young Professional Representative position. This exciting position is nominated by a regional District Director, current AIFRB member, or self-nominated. The position holds a three-year term as a member of the AIFRB Board of Control, and must be a current member of AIFRB.

Objectives of the Young Professional Representative Position

- Recruit membership of young professionals to AIFRB
- Understand what young professionals as a group desire and/or expect from AIFRB
- Help AIFRB assist young professionals to excel in their career paths, while promoting good science

Young Professional Representative Position Description

- work with the AIFRB Board of Control to develop recruiting methods for students and young professionals
- work with the AIFRB website and BRIEFS editor and manager to generate content and contributions from students and young professionals
- maintain the AIFRB LinkedIn profile and Facebook page
- encourage District Directors to engage young professionals at the district level
- regular contributions to BRIEFS and the AIFRB website
- act as a liaison for students and young professionals to the BOC
- attend the annual BOC meeting and mid-year conference call

Young Professional Position Term

- Nominations for the position occur every two years between the mid-year call and BOC meeting
- The position is filled prior to the BOC meeting and the new representative is expected to attend the BOC meeting, this will overlap with the exiting representative
- The representative will serve two full years after the first BOC meeting (two additional BOC meetings) and will overlap with the new representative
- The position cannot be filled by members of the same District in subsequent terms

Contact: Cate O'Keefe

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Spotlight on Members

In 2012, the AIFRB Board decided to officially recognize and promote the achievements and objectives of young professionals within the organization, and to continue to recruit young members through the creation of the AIFRB Young Professional Representative. I have served in this role for the last two years, and have had the pleasure of working with several exceptional young professional AIFRB members who have strived to meet the objectives of AIFRB in:

- recruiting new young professional members
- understanding what young professionals as a group desire and expect from AIFRB, and
- helping AIFRB assist young professionals to excel in their career paths, while promoting good science.

My term as the AIFRB Young Professional Representative is ending at the upcoming Board meeting in Portland, OR in August. I have truly enjoyed helping to develop the goals and objectives for this position, and have greatly enjoyed my experiences working with young members of the organization. The accomplishments and contributions of young professionals represent a level of commitment to promoting good science and bolstering AIFRB as a highly renowned organization for future generations. The following young professionals are highlighted for their service and inspiration over the last two years. **Cate O'Keefe, PhD**

Dave Bethoney (New England District Director)

Dave received his Ph.D. in 2013 from the University of Massachusetts Dartmouth, School for Marine Science and Technology (SMAST). His dissertation focused on improving understanding of at-sea distribution of river herring and shad, and applying the information to assist mid-water trawl fishermen to avoid catching these species as bycatch through a fleet communication system. After graduating, Dave stayed at SMAST as a post-doc, and was recently promoted to the position of Research Assistant Faculty in the Department of Fisheries Oceanography.

Dave joined AIFRB as a student associate member in 2011 and received the Clark Hubbs Research Assistant Travel Award in 2012. Dave has been very active in AIFRB events since joining the organization, including presenting research at the 2012 AIFRB Symposium in New Bedford, "The Relative Importance of Fishing and the Environment in the Regulation of Fish Population Abundance", organized by AIFRB members Steve Cadrin, Dick Beamish and Brian Rothschild. Dave also helped to facilitate the AIFRB sponsored "International Science and Sustainability Forum" in Boston. Dave's experiences with AIFRB showed him that AIFRB can help graduate students and young professionals develop their careers by connecting them to established fishery scientists and provide financial assistance to attend scientific meetings. In 2013, Dave was elected as the District Director for the New England District. In his term as director, Dave has organized an Arc GIS workshop for students and young professional members, an AIFRB social featuring Past President Steve Cadrin playing live guitar, and a recruiting dinner featuring AIFRB members Sean Lucey and Cate O'Keefe leading a discussion on the balance between conservation and utilization in sustaining fisheries. Dave has recruited several student and young professional members since he was elected as district director, and continues to bring fresh ideas to the organization. According to Dave, "AIFRB events and my position as district director have allowed me to continue to provide the opportunities I experienced through AIFRB to the next generation of fisheries scientists".



Dave Bethoney displays a halibut caught on a recent flatfish survey on Georges Bank.

Brittany Jenewein (British Columbia District Director)

Brittany completed both her B.S. and M.S. at Thompson Rivers University in Kamloops, British Columbia. While working on her MS, she conducted research at the Bamfield Marine Sciences Centre on the west coast of Vancouver Island, studying mussels and barnacles. After completing her graduate degree, Brittany worked as a dockside and at-sea observer for the commercial fishing industry. Coming from a long line of commercial fishermen, Brittany was interested in studying fish and fisheries conservation. Since 2013, Brittany has worked as a Fisheries Technician in the Resource Management Branch of Fisheries and Oceans Canada, assisting in catch monitoring for First Nation fisheries in the Fraser River.

Brittany joined AIFRB at the 2014 American Fisheries Society Tradeshow in Quebec. AIFRB activity in the British Columbia District has been scarce in recent years, and through the encouragement of current President, Tom Keegan, and Past President, Dick Beamish, Brittany volunteered to become the director and revive the district. She hosted an AIFRB booth at the 2015 Washington-British Columbia Chapter AFS Tradeshow to recruit new members and plans to attend the 2015 AIFRB Board meeting in Portland, OR. Brittany plans to focus on increasing membership hosting networking events and organizing professional development seminars in the next year. Brittany is excited about continuing as District Director and said, "I believe having this role will greatly help me continue to develop my interpersonal and professional skills, and I look forward to meeting and working with AIFRB fisheries professionals in the future".



Brittany Jenewein displaying the 21-pound lake trout that won her the Deka Lake Fishing Derby in British Columbia in 2015.

Kim Anthony (Southern California District Director)

Kim Anthony has been a Long Beach resident since her tenure at California State University Long Beach (CSULB), where she earned a B.S. in Marine Biology and M.S. in Biology on the "Translocation, homing behavior and habitat utilization of oil platform-associated groundfishes in the East Santa Barbara Channel." Her graduate research, combined with working full-time managing the CSULB Marine

Lab provided a skill set that led to her current employer, Southern California Edison (SCE). Because of SCE's presence along the coast (e.g., San Onofre Nuclear Generating Station, SONGS), the company houses its own marine mitigation and coastal resources group. Kim managed the SONGS reef mitigation project and worked closely with state and federal agencies to ensure compliance with permits and regulatory policies. In 2013, SONGS announced its permanent shut down, which led Kim to a more specialized job function as a project manager for plant decommissioning, serving as the company's subject matter expert for environmental issues and coastal resources.

Kim first became involved with AIFRB as an undergraduate, attending meetings and networking with other students and professionals. According to Kim, "AIFRB has been an important part of my professional development. Since my undergraduate years, I've been able to network with students and professionals in my field of work and areas of interest like no other organization." Kim was elected as the Southern California District Director in 2014, and attended her first Board meeting in Quebec, Canada. She now leads an active district and has organized several recruiting and networking events. Kim describes her district with the following comments, "Regular AIFRB members in our district are involved in the latest research, technology and policies in fishery science. They are down-to-earth, accessible and approachable. As District Director, I hope to not only increase our local membership, but continue to build and strengthen our network and further develop Southern California's contributions to the advancement of fishery science through AIFRB."



Kim Anthony, the Southern California District Director.

Patrick Lynch (Capital District Member)

Patrick Lynch works for the NOAA Fisheries' Office of Science and Technology in Silver Spring, MD, where he is responsible for national coordination of NOAA's fish stock assessments. He received his Ph.D. from the College of William and Mary in 2012 and worked as a post-doctoral researcher for NOAA in Narragansett, RI focused on quantitative fisheries science and fish ecology including projects to estimate climate change effects on river herring, understand population dynamics of large pelagic highly migratory species, and quantify feeding rates and nutrient cycling in Atlantic menhaden. Patrick's current work with NOAA includes managing projects and programs that intend to improve stock assessments and the assessment process, and help NOAA continue to meet federal fishery mandates, provide fishery managers with high quality scientific advice, and satisfy a growing demand for stock assessments.

Patrick became involved with AIFRB after attending the 2012 AIFRB Symposium in New Bedford, "The Relative Importance of Fishing and the Environment in the Regulation of Fish Population Abundance", organized by AIFRB members Steve Cadrin, Dick Beamish and Brian Rothschild. He officially joined AIFRB in 2013, and attended the AIFRB-sponsored ICES World Conference on Stock Assessments Methods in Boston, MA. Patrick was selected as the 2014 W.F. Thompson Award recipient for the best student paper published in 2012. Patrick's paper, "Performance of methods used to estimate indices of abundance for highly migratory species (Lynch et al., 2012)" was published in the journal Fisheries Research, and nominated by his faculty advisor Dr. Robert J. Latour. Upon receiving the award, Patrick said, "I am very honored and thankful to have received this award. Overall, AIFRB offers strong support for the professional development of its members and a particular focus on aspects of fisheries science that closely aligns with my personal interests. It is for these reasons that I find membership in AIFRB to be rewarding, and I hope that by being an active member, I can help others experience these benefits". Patrick has remained an active member of the Capital District and recently organized a networking event for over 75 DC-area fisheries researchers.



Patrick Lynch, 2014 W.F. Thompson award winner for best student paper published in 2012.

Jon Carey (Northwest Washington District Member)

Jon received his M.S. from the University of Massachusetts Dartmouth, School for Marine Science and Technology (SMAST). Jon's research focused on examining the spatial interactions between juvenile and adult sea scallops and potential implications for population dynamics. Jon started at SMAST as a Research Technician in 2006, focused on the coordination and analysis of an annual survey for sea scallops from Maine to Virginia using video camera technology. After completing his degree, Jon was offered a position with the Washington Department of Fish and Wildlife as a Selective Fishery Biologist responsible for evaluating recreational mark-selective fisheries in Puget Sound and coastal waters of Washington. Jon has recently started a position as a Fishery Modeler for Washington Fish and Wildlife developing and implementing fishery regulation models for chinook and coho salmon.

Jon joined AIFRB in 2011, while attending the American Fisheries Society Annual Meeting in Seattle, WA. Jon attended several AIFRB events in the New England area before moving to the west coast. Since relocating to the Northwest Washington District, Jon has been an active AIFRB member and recently applied to advance to the Member level of the organization. Jon is excited to maintain his involvement with AIFRB on the west coast, and encourage participation from other young professionals. Jon said, "At every activity I have attended I am continually impressed by the dedication that AIFRB members display towards young professionals. This is something that sets AIFRB apart from other professional societies and institutions; AIFRB is devoted to helping young professionals grow and putting them in a position to succeed and make an impact in fisheries science".

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Jon Carey displaying a salmon caught during a sampling trip in Puget Sound.

AIFRB Chapter Meetings

AIFRB at the 2015 AFS WABC Meeting

Author Brittany Jenewein (btjenewein@gmail.com)

The Washington-British Columbia Chapter of AFS held their annual meeting in Richmond, BC this past February. Since this was a conference that was more-or-less local to me, I was eager for the chance to participate as more than an attendee. I signed up for the Steering Committee with the main task of organizing the "Spawning Run", which ended up being a 5K fun run along the Middle Arm of the Fraser River. Thankfully, the rain held off just for that day!

I am also the Director for the BC District of AIFRB, so I wanted to gain exposure for the organization and gather some new members. I hosted a booth at the Trade Show and had plenty of opportunity to chat with local AFS members about AIFRB membership. I admit I focused mainly on the BC'ers, but I promise I put in a solid effort for the Washington District, too! AIFRB member Dr. Richard Beamish has been a great resource as I've worked to set up the BC District, and he stopped by to check out my setup.



AIFRB Booth at the WABC-AFS Trade Show

Dick was also there to accept The Haig Brown Award for the book he recently published with Gordon McFarlane - The Sea Among Us: The Amazing Strait of Georgia. It's a great book worth



Dr. Dick Beamish accepting the Haig Brown Award



Newest AIFRB Member Sarah Luongo, Featured on ABC's "Ocean Mysteries with Jeff Corwin"

Luongo has been doing directed research with Chris Lowe in the CSULB Shark Lab studying how horn shark metabolism changes with temperature.

See the video here > www.youtube.com/watch?v=jtJBnRc95sM



*Check out
Jesse Trushenski's
fishsqueezer.wordpress.com*

AIFRB Member Jesse Trushenski's Video on Why Fisheries and Hatcheries Matter

Why do fisheries and hatcheries matter, and how do they support the American way of life? In this video, AFS Fish Culture Section President and AIFRB member, Jesse Trushenski, addresses both and drives home the importance of "Our Nation's Fisheries".

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AIFRB Member Caitlin McGarigal Anglers Needed in Southern California!

"My research will evaluate the sublethal physiological and behavioral effects of angling and handling stress on kelp bass and barred sand bass, as well as to quantify their rates of post-release recovery.

Blood sample analysis will be used to measure the elevation in cortisol

(major hormone in the stress response), glucose (index of energy), and lactate (index of physical exertion) resulting from angling and handling stress; blood analysis will also be used to quantify physiological recovery by resampling fish tagged, released, and recaptured after varying days at liberty. Active and passive tracking, using acoustic transmitters outfitted with depth and acceleration sensors, will be used to monitor fish behavior immediately after catch and release and throughout the recovery period."

Contact Caitlin directly if you're interested.

Caitlin.mcgarigal@gmail.com

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continued...

checking out if you're interested in the biology, oceanography, and geology of the Strait of Georgia in the North East Pacific. You can find it on Amazon or through Harbour Publishing.

I always have a hard time choosing sessions to attend at conferences, and even a relatively small conference like this one was no exception. There were only two concurrent sessions, yet the talks I was most interested in always seemed to conflict with each other.

The main theme for the conference was "Communications and Modern Tools for Research and Management." There were many great talks that inspired me to push for better communication among researchers, fishers, and managers – the main reason I'm starting to blog! The short-list of tips:

1. Know your audience
2. Make the information appealing - Tell a story!
3. Embrace social media
4. Have a sense of humour!

There was also a good dose of new fishy research presented (that is... research on fish, not suspicious research...), which included many excellent student papers from both Washington and BC. After going through about 20 pages of notes, the only way I can think to summarize these talks is: brilliant people doing incredible work. I have since followed several presenters on LinkedIn and Twitter so I can be the first to know when their research is published.

Although I am not doing my own research right now, I love attending conferences as a way to quickly get up-to-speed on current research, meet awesome like-minded people, and maybe learn some new skills. I have now attended a parent AFS meeting and a local chapter meeting, and both have a very different feel. I encourage everyone to attend local chapter meetings as much as possible, and if you can spare the time to volunteer on the Steering Committee, it is a very rewarding experience.

Volunteering bonus: You're guaranteed to know at least 10 people there with whom you can easily strike up a conversation! It was great to be able to represent AIFRB at this conference and I want to thank the AFS-WABC Executive Committee (again) for supporting their sister society. Hope to see some of you in Portland!
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AFS CalNeva 49th Annual Meeting



Look at our photo from the AFS CalNeva 49th Annual Meeting, where the NorCal District did the student judging. The picture is of Tom Keegan congratulating the poster winners and the presentation winners.

Northern California District Presides over Judging of Student Awards

For the 15th straight year, the Northern California District of the American Institute of Fishery Research Biologists (AIFRB) presided over the judging of student oral presentations and posters at the 49th AFS Cal-Neva Meeting in Santa Cruz, California, 2015. Eleven student papers and eleven student posters were in the running for cash prize awards, including \$175 each for Best Student Oral Presentation and Best Student Poster. Best Student Presentation and Poster – Runner up were each awarded \$125; and Third Place winners each received \$75.

Best Student Oral Presentation Awards

1st Place | Matthew J. Young, UC Davis

Fish & food: how habitat and trophic subsidies structure resource use in the Sacramento-San Joaquin Delta

2nd Place | David C. Fryxell, UC Santa Cruz

Sex ratio variation determines the ecological impacts of Mosquito fish populations

3rd Place | Rosalyn T. Lam, UC Davis, Bodega Marine Lab

The impacts of polystyrene plastic and polycyclic aromatic hydrocarbons (PAHs) on the development of Zebrafish (Danio rerio)

Best Student Poster Awards

1st Place | Meredith Nagel, UC Davis

Winter food-limitation: Impacts on adult Delta Smelt reproduction and health

2nd Place | Travis M. Apgar, UC Santa Cruz

*Quantifying the costs and benefits of migration in the evolution of life history variations in *Oncorhynchus mykiss**

3rd Place | Ben A. Wasserman, UC Santa Cruz

Dynamic estuary environments promote intraspecific diversity in threespine stickleback

Katrina Martens (Cramer Fish Sciences)

Poster Award

Gina Marie Contolini, UC Santa Cruz

Ecology and Evolution in Acid: Influences on an Intertidal Interaction

Congratulations to the winners and many thanks to the AIFRB and AFS Cal-Neva Chapter member judges who participated in the student evaluations.

Tom Keegan

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Founding Fellow

Founding Fellow John L. Kask

by William H. Bayliff

John Laurence Kask was born of Estonian immigrant parents at Sytan Lake, Alberta, Canada, on March 21, 1906. In his youth, he worked as a commercial fisherman in British Columbia. He earned his B.A. degree at the University of British Columbia in 1928 and his Ph.D. degree at the University of Washington in 1936. During his long professional career he held many important jobs. His positions included the following: Assistant, Biological Board of Canada, 1928; Assistant Scientist, International Fisheries Commission (now the International Pacific Halibut Commission), 1929-1938; Associate Scientist and Assistant Director, International Pacific Salmon Fisheries Commission, 1939-1943; officer, U.S. Army, 1943-1945; Curator of Aquatic Biology, California Academy of Sciences, 1945-1948; Chief Biologist, Food and Agriculture Organization (FAO) of the United Nations, 1948-1950; Chief Investigator and Assistant Director, Pacific Oceanic Fisheries Investigations (U.S. Fish and Wildlife Service, Hawaii), 1951; Chief Officer of Foreign Activity and Assistant Director of Fisheries, U.S. Fish and Wildlife Service, Washington, D.C., 1951-1953; Chairman and Science Administrator, Fisheries Research Board of Canada, 1953-1963, Director, Inter-American Tropical Tuna Commission (IATTC), 1963-1969. He succeeded Dr. Milner B. Schaefer, another Founding Fellow of the AIFRB, in the last position.

During 1947, while employed by the California Academy of Sciences, he served as a consultant for the government of Costa Rica, and during 1947-1948 he served as a consultant for the U.S. Department of State, for which he helped rehabilitate the Japanese fisheries, which were in need of assistance after World War II. After his retirement, for about 10 years, he did consulting work on fisheries and biological oceanography for FAO. Dr. Kask will perhaps be most remembered for his accomplishments as Chairman and Science Administrator for the Fisheries Research Board of Canada from 1953 to 1963. When he accepted that position, there were about a dozen research stations scattered around Canada, which operated more-or-less independently. He was instructed by the Minister of Fisheries to coordinate the work of those stations and make them more responsive to problems besetting the fishing industry. He succeeded in doing this, and also in making the Fisheries Research Board of Canada one of the finest fisheries research organizations in the world. His prophecies during that period about the dangers of overfishing and pollution proved to be correct.

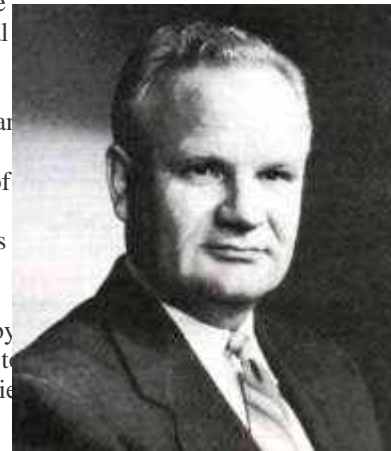
During Dr. Kask's tenure at the IATTC, Mexico and Canada adhered to the Convention in 1964 and 1968, respectively, and catch quotas for yellowfin tuna were first adopted in 1966. Some other highlights of his period as Director were the carrying out of oceanographic studies on the high seas and at the entrance of the Gulf of California, in the Panama Bight, and in the Gulf of Guayaquil.

Dr. Kask was an excellent speaker and writer, and he had the ability to handle people well. During his varied career, he influenced dozens of people who eventually attained positions of great responsibility. All who knew him respected and admired him greatly.

He was a member of the American Association for the Advancement of Science, the American Fisheries Society, the American Society of Ichthyologists and Herpetologists, and the American Society of Limnology and Oceanography, and a Founding Fellow of the American Institute of Fishery Research Biologists. Dr. Kask died in San Diego, California, on August 8, 1998, at the age of 92. and admired him greatly.

References: Anonymous. 2009. Herbert W. Graham [obituary]. AIFRB Briefs, 38 (1): 5-6; Skud, Bernard. 2007. Herbert W. Graham: happy 102nd birthday!! AIFRB Briefs, 36 (5): 6-7; Personal communications: Teri Frade, Karen Heise-Gentile, Suzan Oliver, Bernard E. Skud.

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Founding Fellow Donald R. Johnson

Donald R. Johnson was born on April 27, 1917, in Portland, Oregon. He studied fisheries at Oregon State University in Corvallis, Oregon, from which he obtained his B.S. degree in 1939. He began work as a biologist for the International Pacific Salmon Fisheries Commission in 1939, but in 1942, shortly after the United States entered World War II, he joined the U.S. Army and was sent back to Corvallis for engineer training. While there, he met Kathleen Moore, and on January 2, 1944, they were married.

After the war, during which Don served as a sergeant in the Army Signal Corps in New Guinea and the Philippines, he joined the staff of the Oregon Fish Commission, where he focused on salmon management. In 1949 he was promoted to Assistant Director of Research. In 1951, he accepted the position of Chief Supervisor of Research for the Washington Department of Fisheries (WDF). (He was almost certainly recruited for that position to restore the effectiveness of the WDF after the events described in the biography of William A. Smoker.) In 1958, he left the WDF to become Regional Director of the Pacific Southwest Region of the U.S. Bureau of Commercial Fisheries, where he...

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Founding Fellow

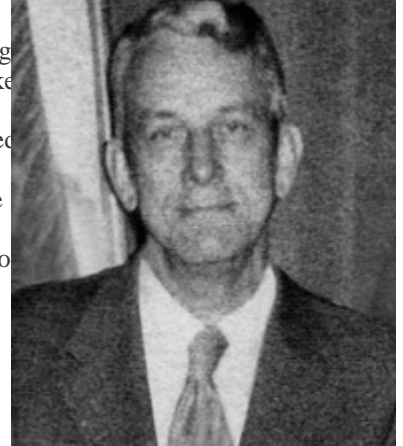
Clarence P. Idyll

Clarence Purvis Idyll was born in Edmonton, Alberta, Canada, on February 10, 1916, and was raised in Vancouver, B.C. He graduated from high school when the Great Depression was at its deepest, but his mother was determined that he would get the education that she had missed. His family moved close enough to the University of British Columbia in Vancouver for him to get there by bus, and he was launched on a long career as a student.

A biologist in British Columbia at that time had the best chance of making a living as an entomologist or a fishery biologist. When he got a summer job in a research fish hatchery on Vancouver Island, run by the Fisheries Research Board of Canada, that did it. He received his B.A. degree with first-class honors in zoology from the University of British Columbia in 1938, and he continued his studies there until he received his M.A. degree in zoology in 1940. The Depression was still being felt, and the prospect of a job in science did not appear promising, so during the second year of his graduate work he also took Teacher's Training and emerged with a certificate to teach high school.

Upon completion of his master's degree, he was hired to teach mathematics and physical education by the Superintendent of Schools, who later became his father-in-law. He found teaching difficult, and decided that there must be easier ways to make a living. From 1941 to 1948, he worked intermittently for the International Pacific Salmon Fisheries Commission while pursuing graduate studies at the School of Fisheries of the University of Washington, from which he eventually earned his Ph.D. degree in 1951.

In 1948, while still enrolled in graduate studies at the University of Washington, he joined the University of Miami staff as a research associate in fisheries for the Florida State Board of Conservation and various foreign governments. Soon thereafter, he was invited to join the faculty of the newly-created Department of Marine Sciences at the University of Miami, now known as the Rosenstiel School of Marine and Atmospheric Sciences, in Coral Gables, Florida, as an Assistant Professor of Fisheries Science. Most of Dr. Idyll's professional life was spent at the University of Miami. When he arrived at the University, he was the only faculty member of the Department of Fisheries, and he was given the exciting challenge of creating a southeastern school of fisheries science that would be the warm-water equivalent of the acknowledged leader in the field, the College of Fisheries (formerly the School of Fisheries) at the University of Washington, from which he had graduated. He was promoted to Associate Professor in 1953 and to Professor in 1956.



The total enrollment in the first course he taught consisted of one student, who later became the Director of the U.S. Bureau of Commercial Fisheries. Many of his students, American and foreign, went on to become scientists and teachers—in some cases heads of research groups and professors and deans of schools of fisheries around the world. He was named Outstanding Teacher of the Year in 1969. The research carried out in his department was chiefly on spiny lobsters, mullet, and shrimp. To a considerable extent, this research was supported by the state of Florida and U.S. government contracts and foundation and private grants. The National Geographic Society provided research grants over many years, and its support made it possible for the University to pioneer in the adaptation of Japanese research on shrimp farming. The University of Miami was one of the first universities to participate in the National Sea Grant Program and the first to have an aquaculture project supported by that program. In that project, shrimp were successfully raised from eggs to adults. By 1971, when he left the University of Miami, the Department of Fisheries consisted of 12 to 15 teaching and research faculty members.

While at the University of Miami, Dr. Idyll was involved in many activities, including consultations for the Food and Agriculture Organization (FAO) of the United Nations (UN), the U.N. Development Programme (UNDP), the U.S. National Academy of Sciences, the U.S. National Oceanic and Atmospheric Administration (NOAA), the U.S. National Parks Service, and the government of British Honduras. He also served on the editorial boards of several scientific journals.

In 1971, Dr. Idyll joined the professional staff of FAO, in Rome, Italy. Over the years he ... Read more at AIFRB.org > Founding Fellows

The Myth of Control continued...

cover a standard piece of typing paper (8.5 X 11 inches) top to bottom, side to side, quite nicely...thank you. Pull a sheet out of your desk and take a look at it. A bluegill that size will double my lightweight fly rod and bring joy to my heart. It will make me late for church, work and family events. When you've caught and released a dozen or so of these fabulous fish in an hour or less on light tackle your mind soars into ethereal dimensions.

But, the reality is that I've failed...so far. I have not been able to achieve my goal...and it isn't about genetics either. Bluegill approaching three pounds in weight, with the same genetics, are swimming around happily in various aquaria. I go to these places, stare at these fish (I swear they stare back and seem to grin), and then I walk meekly back to my pickup truck that's baking out in a parking lot in the summertime sunshine.

Frankly, however, there's something pretty wonderful about failing at so simple a task, and particularly so after putting all your professional expertise to work, expertise garnered over an entire lifetime of angling and an entire career in the field. Nature wins! And, once again I've been humbled by natural variation, intrinsic as well as extrinsic.

However, I'm not giving up on the two-pound brim from my pond. What would be the fun of that? What would life be without a dream? Isn't that what we're all about in science anyway?

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