



STAGES

Newsletter of the
Early Life History Section
of the American Fisheries Society

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Lee A. Fuiman, Editor

October 2006

Geoff Moser is First Winner of Elbert H. Ahlstrom Award



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Our sincerest congratulations to H. Geoffrey Moser, the inaugural recipient of our Section's Elbert H. Ahlstrom Career Achievement Award. Geoff has had a long and distinguished career in research on the early life history of fishes. His meticulous larval descriptive papers have become touchstones for the field, and his pioneering use of characters of larval fishes in systematic studies has stimulated a generation of researchers. Geoff's painstaking analysis of the distribution and ecology of larvae of fishes of the California Current region led to the use of the CalCOFI time series in solving fisheries management problems. Geoff's publication record, including *The Ontogeny and Systematic of Fishes* and *The Early Stages of Fishes of the California Current Region*, set standards that others can only try to attain. Thanks Geoff, for inspiring so many of us!

Geoff was unable to attend the 30th annual Larval Fish Conference in Lake Placid where the award was announced. Bill Richards of the Miami NOAA Fisheries Laboratory accepted the award on Geoff's behalf and read a statement Geoff prepared (see p. 9 in this issue of STAGES).

The Elbert H. Ahlstrom Career Achievement Award recognizes sustained scientific excellence through research, teaching, administration, or a combination of these three involving the
...continued on p. 4

ELHS Back Then

- 5 years ago:* Lee Fuiman steps down as publications editor after serving for 12 Years.
- 10 years ago:* Former Secretary (1983-1984) Perce Powles retires from Trent University but remains active in the University and the Section.
- 20 years ago:* ASIH asks ELHS to consider a joint meeting, citing the Section's "strong focus on the basic biology (e.g., development, ecology, behavior) of fishes." The joint meeting was held in 1988 at the University of Michigan.
- 25 years ago:* 107 people from US and Canada attended 5th LFC at Louisiana State University. First LFC with papers on marine larvae.

President's Message



Greetings to all! It is with great pleasure and excitement (and some degree of foreboding) that I take on the office of Section President. I am taking the reigns from a good friend in Howard Browman. He and his support staff have left the Section in very good shape. As President, Howard will be leaving a lasting mark on the Section through the initiatives that he undertook and accomplished in his two-year tenure. Just to mention a few, the LFC website is a fabulous asset to the Section and especially to the LFC local committees who host our conferences. Howard has been a tireless promoter of our Section. Moreover, he has pushed and pulled our Section members to rise to greater involvement in Section activities including by standing in consideration for elected office and by serving our Section through

involvement in standing committees, ad-hoc committees, and regional representatives. A job well done, Howard. We all thank you!

Indeed, it was Howard who asked me to consider taking on the President-Elect position of our Section, with ascendancy to Section President, after the unfortunate death last September of President-Elect Joe Brown. Joe was a dear friend to both Howard and me. He was always an asset to any group – professional or social – to which he belonged. He is missed by many in Newfoundland and in our larger professional community. So, I begin my tenure as Section President knowing that I will be unable to replicate Howard's competency in the position and to replace Joe's infectious humor and consistent good will. But I know that both of these friends will be a source of inspiration.

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Deadline for material to be included in the next issue of Stages:

January 5, 2007

News from the Regions



Southern Region

Claire Paris

From: Texas A&M University, Galveston

Survival skills of hatchery produced red drum

Researchers at Texas A&M University (Jay Rooker, Jessica Beck) are currently examining the influence of various pre-release exposure techniques on the survival skills of hatchery red drum. The project is being conducted with larval red drum provided by the Texas Parks and Wildlife Department (TPWD) hatchery program. The ability of naïve hatchery individuals to develop key survival skills is being tested through a series of behavioral trials where fish are exposed to natural stimuli such as predators, prey types and complex habitats. Survival skills of individuals reared with and without exposure to these stimuli are then quantified using high-speed video through a suite of variables linked to prey-capture performance and anti-predator response. Additionally, the survival skills of hatchery and wild red drum from the various TPWD facilities and bay systems along the Texas coast are also being compared in order to determine how survival skills differ between hatchery and wild individuals.

Preliminary analyses indicate that survival skills of hatchery red drum are improved with pre-release exposure to predators and prey types, while habitat presence does not appear to afford any significant benefits. Information from this study may be used to develop and implement pre-release techniques into hatchery rearing protocols in order to increase survival rates of artificially propagated individuals.

Early life ecology of billfishes in the northern Gulf of Mexico

Several data sources indicate the northern Gulf of Mexico (GOM) may serve as important habitat of adult blue marlin, white marlin, and sailfish, which often occur in this region during documented spawning periods. In response, a team of researchers from Texas A&M University (Jay Rooker, Jaime Alvarado) and the University of Texas Marine Science Institute (G. Joan Holt and Scott Holt) is evaluating the role of the GOM as it relates to early life habitat of Atlantic billfishes. The PI's working hypothesis is that the northern GOM represents essential spawning/nursery habitat of blue marlin, white marlin, and sailfish. To date, all three species have been collected from neuston net collections (see photo on p. 6) and identifications have been confirmed genetically. Moreover, collection numbers of blue marlin and sailfish larvae are comparable to other areas considered to represent critical spawning habitat of both species,

suggesting the sustainability of these stocks may be linked to activities in the northern GOM. These researchers are also examining basic life-history parameters (age, hatch-date, growth rate) of billfishes, and assessing the habitat quality through the use of biochemical condition (RNA:DNA) and growth (otolith microstructure) measures. The goal of this component of the project is to describe oceanographic features (e.g., upwelling zones, Loop Current and associated fronts, warm/cold core eddies) that favor the production, retention, and survival of billfish larvae and juveniles. The team is also using age information along with physical models to retrospectively determine the location of spawning.

Assessment of bathymetric highs as nursery habitat of newly settled snapper

Identifying areas where newly settled snapper aggregate is prerequisite to employing habitat-based management strategies such as closures to reduce this species' mortality within the shrimp fishery. Scientists from Texas A&M University (Jay Rooker, Andre Landry, Tim Dellapenna, Joe Mikulas) have spent the last few years investigating the potential value of bathymetric highs in the northwestern Gulf as nursery habitats of red snapper and lane snapper. Four bathymetric highs on the inner continental shelf in the Northwest (NW) Gulf of Mexico (Freeport Rocks,

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Secretary-Elect

position vacant

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postal address with our
Secretary.*



European Region

Audrey Geffen

From: University of the Algarve, Faro, Portugal

Maria Alexandra Chícharo (mchichar@ualg.pt) and her colleagues Luis Chícharo, Pedro Morais, and Ana Faria from the University of the Algarve, Faro, Portugal, are using light traps to study larvae in MPAs in the project "Development of new methods for sampling and evaluation nutritional condition of marine fish larvae in estuarine and coastal areas." The first results were reported in a recent GLOBEC newsletter:

"This study is a task of a new project "Nutritional condition of fish larvae in two marine protected area of the South of Portugal (Ria Formosa and Guadiana estuary) (Guadiria)" (POCTI/BIA-BDE/59200/2004). The project is now testing new methods of sampling fish larvae, in order to minimize the physiological stress and the avoidance of traditional ichthyoplankton gears. A number of different methods are available to sample the complex assemblages of early life-history stages. To catch larvae for the analysis of nutritional condition, it is usual to use towed nets. However, the problem with this sampling strategy is that they cause the death of the larvae and also tend to under-represent late-stage larvae. In order to minimize the physiologic stress caused by towed nets and to increase the size of fish larvae caught by traditional ichthyoplankton gear, light traps could be a solution, especially because they allow capture of live larvae. This is precisely the innovative aspect of this study, which aims to compare the efficiency of two sampling strategies of capturing larvae (net tows and light traps) and its implications for the larval length of captured larvae and physiological condition by measurement of the RNA/DNA ratio.

The light trap we developed (Figure 1) is a cylindrical acrylic tube (25 cm x 50 cm), with several holes that allow larvae to enter, but difficult to find their

way out. It is similar to the one used on coral reefs, but smaller, with high light intensity and more use of acrylic, in order to face the low depth and the high turbidity, typical of coastal and estuarine areas.

The first results show, that the light trap does, in fact, catch larvae alive and not stressed, with bigger sizes than collected by net, nevertheless the species diversity was low for samples collected with the light trap. This may result from different responses to light by fish larvae from different species and different development phases.

In the next phase of the project, larvae such as *Engraulis encrasicolus* and *Sardina pilchardus* (species with positive response to the light trap) will be sampled and their nutritional condition analysed through RNA/DNA ratios. The sampling area is off the south of Portugal, outside and inside two important marine protected areas: the Ria Formosa and the Guadiana Estuary. This will answer the question: Is the nutritional condition of fish larvae higher inside these systems compared with the same species captured in adjacent coastal areas?

From: Institut de Ciències del Mar, Barcelona, Spain

Pilar Olivar (polivar@icm.csic.es), at the Institut de Ciències del Mar of Barcelona (ICM) reports on their 3-year project aimed to define the horizontal and vertical scales of spatial distribution of eggs and larvae of hake, anchovy, and pilchard and their prey in the NW Mediterranean. The study follows a comparative approach with the objective of ascertaining the life strategies of these species and the effect of physical and biological factors in determining larval survival. These are the three main fish species in the NW Mediterranean fisheries: anchovy (*Engraulis encrasicolus*), pilchard (*Sardina pilchardus*), and hake (*Merluccius merluccius*).

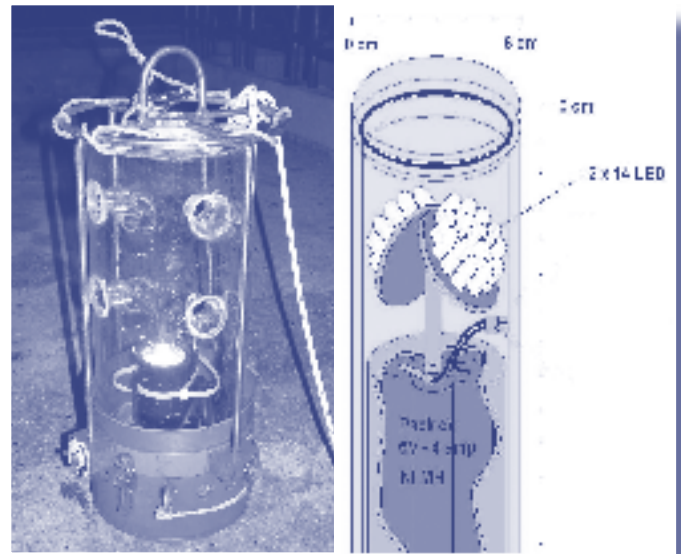


Figure 1. Schematic photograph and diagram of the light trap deployed by M. Chícharo and colleagues to trap larvae for studies of nutritional condition.

Previous studies showed that anchovy spawns during the stratified season (late spring–summer) on the shelf and shelf-break area, while pilchard spawning occurs during the mixing period (autumn–winter) on the continental shelf area. Hake has more protracted spawning, extending for most of the year, but in a more restricted zone, preferentially at the shelf-break. The project focuses on the analysis of spatial structure of larvae and their prey at a higher resolution than is available at present. Two surveys were carried out during the main spawning periods of the species: June 2005 and November 2005. Bongo, LHPR, and Calvet gears were used for ichthyoplankton and zooplankton collections, and CTD cast, Nv-Shuttle, and Doppler were employed to define the hydrographic environment (Figure 2).

The project activities include a) analysis of the horizontal and vertical scales of spatial variability of eggs and larvae in relation to physical environment, b) assessment of the influence of hydrographic variability on the distribution of prey, and c) assessment of the role of prey concentrations on feeding, growth rates, and condition in the larvae of the three species.

The underlying hypothesis of this investigation is that physical mechanisms of aggregation and dispersion of larval prey are the main

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Figure 2. Deployment of LHPR off the Tarragona during cruises of P. Olivar and colleagues to study the distribution of eggs and larvae of hake, anchovy, and pilchard and their prey in the NW Mediterranean Sea.

European Region...cont'd from p. 3

processes that influence larval survival. The variety of processes involved requires a multidisciplinary approach with specialists on ichthyoplankton, zooplankton, physical oceanography, and spatial statistics. The project is carried out by the ICM in collaboration with the University of the Basque Country and is financed by the Ministry of Science and Education of the Spanish government. The analysis of the zooplankton samples is being carried out by colleagues from the University of the Basque Country, and the ichthyoplankton and hydrographical studies are conducted at the ICM.

From: Institut Mediterrani d'Estudis Avançats, Mallorca, Balearic Islands, Spain

Manuel Hidalgo (manuel.hidalgo@uib.es), a PhD student working at IMEDEA (Institut Mediterrani d'Estudis Avançats, CSIC-UIB) in Mallorca, Balearic Islands, Spain reports on his investigations which are linked to the project IDEA ("Influence of oceanographic structure and dynamics on DEmersal populations in waters of the BAlearic Islands," www.ba.ieo.es/idea). The project concerns the influence of abiotic and biotic factors on the ecosystems and demersal resources, as well as the population dynamics of two species subjected to exploitation on the shelf and slope of the western Mediterranean: hake (*Merluccius merluccius*) and red shrimp (*Aristeus*

anntenatus). The study focuses on the area off the island of Mallorca (Balearic Islands), which can be considered as an quasi-isolated demersal ecosystem, showing large oceanographic spatio-temporal variability.

M. Hidalgo is currently finishing his thesis dealing the inter-annual and seasonal variability of the population dynamics of the European hake,

highlighting the recruitment process and the role of environmental factors driving the success of recruitment events. The thesis work covers four main issues, using different tools to answer ecological questions (i.e. pattern and mechanism affecting abundance and condition of recruits across different spatial and temporal scales). The first part is more dynamic modelling oriented on the inter-annual landings of hake in the islands at different age-classes. The main objective in this issue was to explore the occurrence of different regime shifts on the populations since the 1960s.

In the second part, the time scale was reduced to the season. Six trawling and hydrographical research surveys were carried out during one year (2003-2004). Two areas under two different oceanographic conditions were simultaneously studied, one in the north and other in the south of Mallorca Island. The high spatio-temporal heterogeneity in the hydrographical conditions is due to two main water masses flowing to the islands: the arrival of cold waters from the Gulf of Lions to the northern basin and the arrival of warmer waters of Atlantic origin to the southern basin. These main water flows are also conditioned by the water masses circulating through their channels. In the present study, our aim was to explore seasonal and short-spatial patterns in the hake recruitment process taking into account the

mesoscale environmental variability, the abundance, and fish condition.

In the last two parts, the time-keeping properties of fish otoliths make them an important tool for age estimation in fisheries management and ecological studies. We used the otolith to extract ontogenetic ecological information of hake fish. Firstly, different recruitment pulses were identified in 2004 at both areas. They could be followed throughout the different surveys and commercial monitoring. These data helped us to indirectly validate the daily growth increments in the first year of life reading the otoliths. On the other hand, the energy condition of different recruitment pulses were explored in order to search for environmental windows that favour the abundance of recruits, by the match-mismatch of the food availability and the occurrence of the early life stages of hake.

Lastly, the chemical composition of the otoliths can be used to trace the history of environmental conditions experienced by fish across different life stages. The combination of $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ provides insight into the changes experienced by fish related to metabolism and water mass conditions. We analysed the stable oxygen and carbon isotope composition of European hake otoliths and seawater collected throughout the year taking into account mesoscale spatial variability around the Balearic Islands. Using the isotopic composition at the inner part and the edge (early life stages and recruits, respectively) of the otolith we explored the ontogenetic biological and environmental conditions experimented by hake. §

Ahlstrom Award...cont'd from p. 1

early life history of fishes. The award is given at a frequency dictated by qualified and endorsed nominations, but no more frequently than annually. Details about qualifications for, and nominations of, Ahlstrom Career Achievement Award recipients can be obtained from the Ahlstrom Award Committee Chairman Art Kendall (Art.Kendall@noaa.gov). We thank Art and his committee members, Jeff Govoni, Churchill Grimes, and Jeff Isely, for their work on behalf of the Section. §

— Chris Chambers

“Larvae on the Rock” 2007 Larval Fish Conference

The 31st annual Larval Fish Conference, entitled “Larvae on the Rock,” will be held 9-12 July 2007 in St. John’s, Newfoundland, Canada (www.stjohns.ca/visitors/index.jsp). Come and kayak with the whales and puffins, and sample some Screech and cod cheeks! Visit the Larval Fish Conference website (www.larvalfishcon.org) for updated information. The call for abstracts will go out in mid-November with closure in late February 2007. Theme sessions will include physiological ecology (fish bioenergetics, biochemical measures of condition and adaptation, foraging behavior, feeding ecology, predation), connectivity and dispersal (aspects of larval fish ecology that influence the dispersal and connectivity of populations), parental effects (are maternal effects adaptive or are they merely physiological side effects?), and academia to application (moving from research to application, including conceptual views on novel research areas and topics, and how they can serve advisory agencies, industry, and the public). There will also be a contributed paper session. The organizing committee of Pierre Pepin, Ian Fleming, Bob Gregory, and Paul Snelgrove looks forward to seeing you there! §

32nd Annual Larval Fish Conference Slated for Germany

At the ELHS business meeting in Lake Placid, section membership approved the offer from Catriona Clemmesen for the University of Kiel to host the 2008 Larval Fish Conference. Plans for the conference will appear in future issues of STAGES. §

Other Upcoming Conferences

10th *Flatfish Biology Conference*. November 29-30, 2006. Water’s Edge Resort, Westbrook, CT. Contact Renee Mercado-Allen at renee.mercaldo-allen@noaa.gov or www.mi.nefsc.noaa.gov/flatfishbiologyworkshop.html.

Challenges for Diadromous Fishes in a Dynamic Global Environment. June 17-24, 2007. Halifax, Nova Scotia, Canada. Contact Alex Haro, tel. 413-863-3806 or www.anacat.ca §



New Frontiers in Marine Science

*An ICES/PICES Conference for
Early Career Scientists*

June 26–29, 2007, Conference Center, Maritime Institute, Baltimore, Maryland, www.pices.int/newfrontiers.aspx

Background and objectives

To encourage greater involvement of young scientists in international scientific investigations and to foster their involvement in the management of the marine environment, the International Council for the Exploration of the Sea (ICES) and the North Pacific Marine Science Organization (PICES) are co-sponsoring a conference for Early Career Scientists in Baltimore, U.S.A., in June 2007. The conference will provide an opportunity for marine scientists who are at the beginning of their careers to meet colleagues from around the globe who share similar interests in marine science. The goal of this conference is to foster the development of contacts, collaborations, and associations among early career scientists that will persist for decades, and to establish personal and institutional networks that will help to advance our understanding of the marine environment.

Scientific themes and sessions

The scientific theme “New Frontiers in Marine Science” was chosen to encourage contributions that explore processes at oceanic extremes, apply innovative approaches and cutting-edge technologies, develop new ideas, or tackle

current or upcoming global or regional environmental issues. Contributions should address one of the following six session topics:

- Biodiversity and productivity of marine organisms from pole to pole
- Processes at ocean margins
- The last frontier: processes in the deep sea
- The role of behavior in marine biological processes
- The effect of climate on basin-scale processes and ecosystems
- Humans and the marine environment

Detailed session descriptions can be found on the conference website. Papers on other, related topics may also be considered.

Participation

All early career marine scientists who can contribute to the conference topics are encouraged to apply for an invitation to attend (Application and abstract submission deadline: January 15, 2007). Application procedures are described on the conference website. Approximately 100 early career scientists will be invited based on criteria established by the Scientific Steering Committee. There is no explicit age limit, but the conference is intended to attract individuals with research experience ranging from advanced stages of a Ph.D. program up to postdoctoral researchers (with priority given to those with no more than 5 years since obtaining a Ph.D.). There is no registration fee and most participants should be prepared to pay only for the cost of travel to/from Baltimore. Additional travel support may be available on a limited basis. §

— Elizabeth North

Recent Events

30th Annual Larval Fish Conference

The meeting opened with an excellent plenary led by Joanne Lyczkowski-Shultz, who reviewed the role of early life stages in fishery assessments. Joanne was followed by Tom Miller, who reviewed the development of coupled physical-biological models for understanding fish recruitment. The session ended with Bob Cowen's overview of an in-situ ichthyoplankton imaging system. The three speakers did an excellent job presenting some of the past, but really focusing on the future of early life history studies. After the plenary, we broke into two concurrent sessions with talks grouped by content including eels, freshwater, salmonids, community structure, and many more. In all, there were 90 talks, 37 of which were student presentations.

There were also about 30 posters. The poster area outside the meeting rooms was a little dark, but thanks to the Trade Show Booth gang and a couple of other volunteers, we made some last minute changes to get more light on the posters. Thanks to those who moved poster boards around up to the beginning of the poster session. Following the 'official' poster session, we had a poster social with a good crowd enjoying themselves up to the business meeting. The boisterousness

of the crowd carried into the business meeting, but a lot was accomplished.

The two Section student awards were given to Klaus Huebert (Sally Richardson Award) and Dave Richardson (J.H.S. Blaxter Award). In addition, Pascale LaFrance received an Honorable Mention in the Sally Richardson Award competition (see p. 8). Congratulations! And thank you to all the students who participated; your talks and posters were very much appreciated.

On the lighter side, the joint meeting with AFS was a lot of fun. The LFC was about a 10-minute walk from the main AFS venue; enough distance for autonomy yet close enough for exchange. The High Peaks area of the Adirondacks was beautiful – even though Lake Placid was not that easy to get to. Many of the attendees got out and explored the area before, during, and after the meeting. The Opening Social on Sunday was on the outdoor speed skating oval – no ice. New York themed food and beverages were on hand along with local merchandise. The ice cream line remained short through the cold night and the bonfire was extinguished promptly at 9:30, which drove everybody either home or to a bar. Monday night saw the Trade Show Social in one of the hockey rinks – Do you believe in miracles! Chris Chambers and others put together

a wonderful booth and raised a lot of money for the Sally Richardson Raffle. Two LFC attendees won the Silver Medal in the bobsledding event: Denice Drass and Lanora Lang (see p. 10). For a while they were considering continuing their bobsled training, but then the dream gave way with talk of malacanthids and larval vertical distributions. That evening concluded with a beer-garden type event and a live band playing a combo: German-Jamaican-Classic Rock-Party Music. A fun time was had by all and too much fun was had by some. After the meeting ended on Thursday, there was a closing reception at the Crowne Plaza. The highlight was when Catriona Clemmesen, who earlier in the week submitted a successful bid for the 2008 LFC in Kiel, won a kayak in an AFS raffle. We look forward to seeing that kayak in Kiel in 2008!

In closing, we owe a lot of thanks to AFS and the AFS 2006 Organizing Committee for including us and for doing 95% of the work. Thanks also to everyone who participated in the 30th LFC. §

— Jon Hare, Local Committee Chair,
30th LFC



Young marlin from the Gulf of Mexico. Photo by Jay Rooker.

ELHS Maintains Booth at AFS Trade Show

Did you see our booth at the AFS Trade Show?! Because our Section brought in more than 150 attendees to the American Fisheries Society annual meeting this year, we were offered a freebie booth at the Trade Show to promote our wares. We took advantage of this opportunity to talk about our Section; distribute Section brochures, posters, and other promotional literature; hawk raffle tickets; and puuuusshhh T-shirts – all with great success. We raised over \$1,150 in the raffle for the Sally L. Richardson best student presentation award, sold over 130 T-shirts (and still counting), and recruited new members, including the staunchly independent 2006 Sally Richardson Award winner, Klaus Huebert (now that was a hard sell!). I want to thank those of you who donated items to the raffle, and especially the many friends who helped make this happen by prepping for, and staffing the booth, schlepping items to and from Lake Placid and between two venues while there, and all done with a smile (and a dose of tough skin). Now we REALLY know how to run a booth! §

— The Prez



The Boothians getting warmed up. The many friends who helped make the ELHS Trade Show booth a grand success (not pictured: Mick Walsh and Mike Fahay – you two shouldn't have left Sandy Hook!).

Our new leader! (in waiting). Congratulations to Dr. Jon Hare as our new President-Elect of the Early Life History Section! Jon, now of the NOAA Fisheries Service's Narragansett Laboratory, was elected by you, our membership, in a closely contested race with John Lamkin. Sincere thanks to Jon and John for placing their names in consideration. For those of you who do not know Jon, he is a Research Marine Scientist at the Narragansett Laboratory where he leads the Plankton Investigation, the group charged with monitoring the abundance and distribution of zooplankton and ichthyoplankton on the northeast U.S. continental shelf. His group conducts six plankton surveys per year from Cape Hatteras to the western Scotian Shelf and operates two continuous plankton recorder transects: one crosses the Gulf of Maine and another crosses the Mid-Atlantic Bight shelf. Jon's research involves i) the biological and physical processes that drive the dynamics of marine fishes, ii) bio-physical coupling in the marine environment, and iii) larval fish ecology and taxonomy. Jon received his Ph.D. in 1994 under Bob Cowen's tutelage at SUNY Stony Brook. He moved to the NOAA Beaufort Laboratory on a National Research Council Research Associateship and was hired to the permanent staff in 1998. He moved to the Narragansett Lab in 2005. Jon has been an active participant in the Larval Fish Conferences and in ELH/AFS business since being a graduate student. He helped organize the 23rd annual Larval Fish Conference in Beaufort and recently did a superb job, along with Robin Griswold, hosting the 30th annual Larval Fish Conference in Lake Placid, New York. President-Elect Hare will assume the responsibilities of the presidency at the 2008 Larval Fish Conference business meeting in Kiel, Germany.

ELHS voting demographics. Ballots were distributed via email on September 1, 2006 to all individuals listed as full members (i.e., AFS and Section memberships). The distribution list was provided by AFS through then ELHS Secretary Bruce Comyns and to me on August 30, 2006.

New Brochure

Thanks to Bruce Comyns and team for pulling together a top-notch brochure. The layout is very professional (thanks to graphic artist, Diana Reid, of the University of Southern Mississippi) and the pictures are superb (Bruce gives credits for the photographs in the brochure). If you are interested in obtaining brochures for local distribution or to take to meetings, please contact Denice Drass, our Section Secretary, at Denice.Drass@noaa.gov. Thanks



again, Bruce. Your efforts will keep the Section promotion in high gear! §

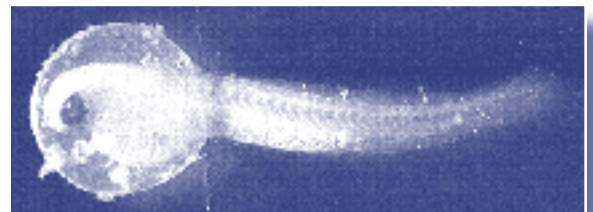


Jonathan Hare, new ELHS President-Elect.

message, while two of you were 'out of office' during the period of voting. You will soon be receiving another ballot for Secretary-Elect, so please, if you are reading this and did not receive a ballot, we need to hear from you! Please pass on this request to other ELHS members in your group who might not be getting their own copy of STAGES.

A note about our elections. First, this is a volunteer-based organization and we need all of your contributions! To see the responsibilities of each office on our Executive Committee (President, President-Elect, Secretary, Secretary-Elect, and Treasurer), and the listing of appointed and ad-hoc committee memberships, please go to our Section website and browse the Section bylaws and rules under 'About ELHS' (www2.ncsu.edu/elhs/history.html). Our five officers have voting rights on Executive Committee matters (ExCom). Each officer serves for 2 years, with the exception of a 4-year term by our Treasurer. The ExCom meets at least annually at the LFC and communicates more frequently by emails and conference calls. Once again, we need your support and involvement, so step up. §

- Chris Chambers, Elections Committee Chair



Formalin-preserved red shiner (Cyprinella lutrensis) larva (4.1 mm TL) hatching from egg (1.35 mm diameter); reared by Michelle McGree and photographed by Lynn Bjork for Darrel Snyder, Larval Fish Laboratory, Colorado State University. Darrel reports that he was funded last spring to begin work on a four-year project to prepare a guide and computer-interactive key to the cyprinid larvae of the Upper Colorado River Basin, including red shiner.

People



Above: Grace Klein MacPhee presents this year's Sally L. Richardson Award to Klaus Huebert at the 30th annual Larval Fish Conference in Lake Placid, New York. Left: Pascale LaFrance received honorable mention for her fine presentation.



Huebert and LaFrance Honored in Richardson Award Competition

The 21st annual Sally L. Richardson Award for best student paper at the Larval Fish Conference was awarded to Klaus Huebert from the Rosenstiel School of Marine and Atmospheric Science for his talk entitled "Can pelagic coral reef fish larvae regulate their swimming depths via hydrostatic pressure cues?" Honorable mention was given to Pascale LaFrance from Quebec University for her talk entitled "Survival and hatch-date distributions of Arctic cod in relation to sea ice and surface temperature in the Beaufort Sea." Her co-authors were Jacques Gagne and Louis Fortier.

We were honored to have the first recipient of this prestigious award, Dr. John Olney, to share the moment with us. The first two Sally Richardson awards were not student awards, so technically he was not the first student winner, but it was exciting to have him there nonetheless. This year, 35 student papers were presented, and the competition was very close. Congratulations to both, and a hearty thanks to all the students who presented talks and the people who judged them. §

— Grace Klein MacPhee

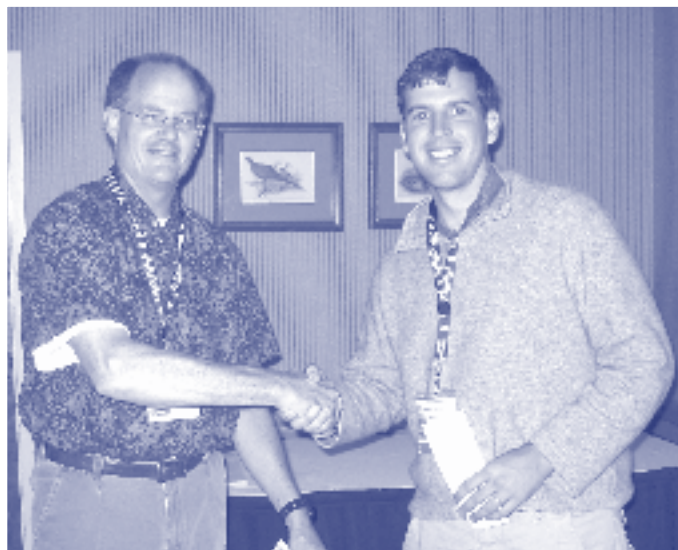
Richardson Honored in Blaxter Award Competition

The winner of the 2006 J.H.S. Blaxter best student poster award is David E. Richardson. His poster, presented at the 30th annual Larval Fish Conference, was entitled "High-throughput genetic species identification: From DNA isolation to bioinformatics." David and his co-authors, Jeffery D. Van Wye, Amy M. Miyake, Douglas L. Crawford, and Robert K. Cowen are from the Rosenstiel School of Marine and Atmospheric Science, University of Miami. David received a plaque, a check for \$300.00, and a 1-year membership in the American Fisheries Society Early Life History Section. Congratulations to David and his colleagues. §

— Don Hoss

Rich McBride Moves Back to the Northeast

After 12 years, Richard McBride is trading in grouper and snapper for cod and haddock. Rich left his position as a Research Scientist with the Florida Marine Research Institute, where he started as a fresh post-doc in 1994. Just last month, he moved to Woods Hole, MA, with his family and started as the Chief of the Population Biology Branch at NMFS's Northeast Fisheries Science Center (www.nefsc.noaa.gov/femad/pbio). He can be reached at richard.mcbride@noaa.gov.



ELHS President Chris Chambers (left) congratulates David Richardson on winning the John H. S. Blaxter Award for best student poster at the 30th Larval Fish Conference.

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Words of Thanks from Geoff Moser

[Editor's note: Geoff Moser prepared the following remarks about receiving the Ahlstrom Award, which were read by Bill Richards at the 30th annual Larval Fish Conference.]

I deeply appreciate the honor bestowed on me by the Early Life History Section and wish I could personally thank everyone here. So many of you have helped me over the years and I have enjoyed your friendships immensely. Thank you, Bill, for accepting the award on my behalf. Ahlie was a mentor and close friend and we collaborated on many projects during the years that I had the good fortune to be associated with him. After he passed on, my principal goal was to try to further the ideals and research that he so fervently espoused during his long career. Many colleagues had similar feelings and that resulted in the Ahlstrom Memorial Symposium, to which so many ELH and systematics colleagues contributed. Working with the steering/editorial committee for that symposium – Dan Cohen, Mike Fahay, Art Kendall, Bill Richards, and Sally Richardson – will always be a highlight of my career. Especially memorable were the days spent with Bill Richards in Miami and in Lawrence, Kansas during the final editing and publication of the book. The support of Reuben Lasker, our division director, was

critical to realizing the symposium and book and I owe much to Reuben and to John Hunter, his successor, for the support they gave my research group over the years. I was blessed with a talented and dedicated staff who shared Ahlie's vision. Elaine Sandknop Acuña, David Ambrose, and Sharon Charter continue in the research group under the leadership of William Watson. Amelia Gomes served as our technician during the early years. Elizabeth Stevens retired some years ago. Barbara Sumida MacCall moved to Santa Cruz, where she continues ELH research on contract. Morgan Busby moved on to the Alaska Fisheries Science Center and John Butler directs other research projects in the Southwest Fisheries Science Center. The partnership with Richard Charter and his group was critical to our success. He continues his outstanding contributions as CalCOFI data manager and field survey chief. Collaborations with Paul Smith on ELH ecology were productive and enjoyable. Especially rewarding was the opportunity to work with students during their early days in fisheries and then to continue those associations as they went on to positions of leadership. A long friendship and collaboration with George Boehlert began during his student days at Scripps Institution. I was so very lucky to be able to work forty years in a field of science that I loved. Any accomplishment during those years would not have been realized without the love and support of Pamela, my wife of forty-five years, and our children. §

— Geoff Moser

Publications



Available now: Recent Advances in the Study of Fish Eggs and Larvae

Edited by M. Pilar Olivar & J. Jeffrey Govoni

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Complimentary hard copies of the book will be mailed in October 2006 to all conference delegates and reviewers of the manuscripts. The book contents are available online at: www.icm.csic.es/scimar/scimar3.html as pdf files.

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- Chang, M.-Y., C.-H. Wang, C.-F. You and W.-N. Tzeng. – Individual-based dispersal patterns of larval gobies in an estuary as indicated by otolith elemental fingerprints 165-174 §

— M. Pilar Olivar & Jeff Govoni



Lanora Lang, a graduate student at Dauphin Island Sea Lab (Alabama), and Denice Drass, ELHS Secretary, took the silver medal in the women's bobsled event at the Fishtoberfest social at the AFS meeting in Lake Placid. Lanora (left center) and Denice (right center) sailed through the half-mile course with a time of 43.29 seconds. Also in the photograph are the driver and brakeman, who were provided by the Verizon sports complex bobsled program.

Other Recent Publications of Interest

- Eggs and Larvae of North Sea Fishes.* P. Munk and Jørgen G. Nielsen. Published by Biofolia Press. ISBN 0849319161. 2005.
- Early Stages of Atlantic Fishes: An Identification Guide for the Western Central North Atlantic.* Edited by W.J. Richards. Published by CRC Press. ISBN 0849319161. 2005.
- Developmental Biology of Teleost Fishes.* Y.W. Kunz. Published by Springer Press. ISBN 1-4020-2996-9. 2004.
- Early Life History of Fishes in the San Francisco Estuary and Watershed.* Edited by F. Feyrer, L.R. Brown, R.L. Brown, and J.J. Orsi. Published by the American Fisheries Society. ISBN 1-888569-59-X. 2004.
- Freshwater Fishes of the Northeastern United States - A Field Guide.* R.G. Werner. Published by Syracuse University Press. ISBN 0815630204. 2004.
- The Development of Form and Function in Fishes and the Question of Larval Adaptation.* Edited by John Jeffrey Govoni. Published by the American Fisheries Society. ISBN 1-888569-58-1. 2004.
- The Larvae of Indo-Pacific Coastal Fishes: An Identification Guide to Marine Fish Larvae.* (2nd edition). J.M. Leis and B.M. Carson-Ewart. Published by Brill Academic Publishers. ISBN 90-04-13650-9. 2004.
- The Big Fish Bang. Proceedings of the 26th Annual Larval Fish Conference.* Edited by Howard I. Browman and Anne Berit Skiftesvik. Published by the Institute of Marine Research, Bergen, Norway. ISBN 82-7461-059-8. 2004.
- Reproductive Biology and Early Life History of Fishes in the Ohio River Drainage: Ictaluridae - Catfish and Madtoms, Volume III.* T.P. Simon and R. Wallus. Published by CRC Press. ISBN 0849319196. 2003.
- Fishery Science: The Unique Contributions of Early Life Stages.* Edited by Lee A. Fuiman and Robert G. Werner. Published by Blackwell Publishing. ISBN 0-632-05661-4. 2002.

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Sabine Bank, Heald Bank, Rio Grande Bank) have been characterized using digital side scan sonar and multi-beam bathymetry data. The investigators then used acoustic data to create habitat maps, which were needed to direct trawling activities. Results from this work indicate that temporal variability in the settlement season of red snapper and lane snapper in the NW Gulf of Mexico is relatively low, while regional variability in recruitment to natural banks is high. In addition, findings from this work showed that newly settled red snapper and lane snapper settle successfully to a variety of areas, including both structured (shell hash) and unstructured (mud bottom) substrates. Assessments of growth and mortality are also being used by the investigators to determine the recruitment potential of different banks, habitats, and cohorts of snapper recruits using these banks. §

President's Message...cont'd from p. 1

I have been involved in the Section since my first Larval Fish Conference in 1987. During this period I have experienced many of the opportunities afforded by our Section – hosting two LFCs, representing the Northeast Region for our Section newsletter, and membership on Section standing and ad-hoc committees. I have also taken advantage of the many benefits the Section offers – consistently high quality annual conferences, superb newsletter and websites, and a wealth of new colleagues and friends.

Who we are. Enough about me, let's talk about us! Do you realize what a great Section we belong to? Our members are diverse, energized, and fun to be with. The latest membership data from our past Secretary, Bruce Comyns, reveal that we have 277 full and 28 affiliate members, respectively, from 25 countries. Our office holders and committee members (all volunteers!) provide a wealth of expertise to keep this train running. We just completed our 30th annual Larval Fish conference – each with its own pizzazz and many with fine publications associated with them (see <http://www2.ncsu.edu/elhs/elhspubs.html> for a complete listing). Our own newsletter, STAGES, is a benchmark for a clear, timely, and professional production. Kudos to Lee

Fuiman for carrying that portfolio onward and upward. The Section's website and the LFC website are key portals to our activities (history, governance, newsletter, conferences, awards, job listings, links, and much more). Did you get a chance to see our new Section brochure at the Lake Placid meeting? It looks great (see p. 7)! Thanks to Bruce Comyns for pulling that together. To all of you volunteers and contributors, you are an inspiration!

Where are we going? Forward! During the next two years, I will be continuing with the several initiatives begun by President Browman (e.g., the push for online balloting of Section officers, archiving early LFC proceedings) and promoting several new initiatives of my own. I will present these new initiatives in greater detail in the next issue of STAGES, but mention now that I am looking for mechanisms to increase our recruiting of new members, Section officers, and committee members. To that end, I think that the Section booth at the AFS Trade Show will be a great way to advertise our Section to a wide target audience. I will also be promoting an updated and turn-key guide to hosting an LFC. Everyone who has hosted an LFC knows that information sharing is critical to running a smooth operation while minimizing risks of calamity (and burn out!).

I also want to mention that as President I will be presiding over our next two LFCs. I know that I am not alone when I say that the LFC is the top annual scientific gathering for me, and one that I make every effort to attend each year. For those of you who may have just attended your first LFC, I am confident that you felt the sense of camaraderie at our conference. It will only get better with time. During 9-12 July 2007, our LFC will be held in St. John's, Newfoundland, where our hosts, Pierre Pepin, Bob Gregory, Ian Fleming, and Paul Snelgrove, will be providing a superlative program and a darn good time, and probably try to get you 'screached in.' I spent four summers in St. John's and nearby outposts during the 1980's. I am not overstating my recommendation when I say that the 31st LFC will be a classic. I also recommend taking some time off to see the 'the Rock.' In 2008 we will return to Europe for the 32nd LFC. Cartriona Clemmesen, Leibniz Institute of Marine Sciences at Kiel University, will host us in what I know will be excellent and warm gathering.

In closing, I want to thank the Section leadership in having the confidence in me to take on this office. Once my tenure is complete, I hope that I leave the post in an even better state than I now find it. §

— R. Christopher Chambers

Editor's Ramblings



A Perfect Choice

I truly believe that one sign of maturity in an organization, particularly a scholarly organization, is establishment of a mechanism to make a meaningful expression of honor, respect, and admiration to the rare individuals who have made extraordinary contributions.

A few years ago, we recognized that the the Early Life History Section was doing quite well financially and that it was time to consider creative ways to spend funds for the benefit of the Section and its members. We had a history of providing "up-front" money for hosting conferences and supporting student travel to the Larval Fish Conference, and even supporting the Section President's travel to meetings, as needed. But two new ideas came forth. One was to provide grants for production of scholarly publications, such as proceedings, books, monographs, or other substantial products, which is now codified in the Section's "Guidelines for Requests for Subventions." The other idea was to establish a prize "to recognize sustained scientific excellence through research, teaching, administration, or a combination of the three involving the early life history of fishes." This is the Elbert H. Ahlstrom Career Achievement Award. The fact that this award is not mandated to be an annual event elevates the prestige and reflects well on the Section.

As a "larval early lifer" in the early 1970's, I knew the names of two giants of the field: Elbert Ahlstrom and John Blaxter. Soon it became clear that Geoff Moser, Dr. Ahlstrom's co-author on so many seminal papers, was also a giant. In the early 1980's Geoff and other very accomplished systematists organized a symposium to honor Dr. Ahlstrom. It turned out to be a truly amazing event that resulted in what some believe to be the single most important publication on larval fishes: the highly prized "Ahlstrom volume" or "red bible." Even so, Geoff's contributions continued...and continued (see cover story in this issue). On top of all that, as Bill Richards pointed out in Lake Placid, Geoff is a truly nice guy!

Who better to be the first recipient of the Elbert H. Ahlstrom Career Achievement Award?!! It's a perfect choice. §

Newsletter Production Team

Stages is published in February, June, and October each year. It is assembled by the Newsletter Editor with contributions from several Regional Representatives and other individuals. Please send any articles, announcements, or information of interest to Early Life History Section members or affiliates to your local Regional Representative or to the Editor.

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Join ELHS

Membership in ELHS is open to all persons or organizations interested in furthering ELHS objectives, regardless of membership in the American Fisheries Society (AFS). If you are an AFS member, simply add ELHS membership when you pay your Society dues.

Affiliate membership is open to persons or organizations who are not members of AFS. Affiliate members are encouraged to participate in Section meetings, committee work, and other activities, but they cannot vote on official Section matters, run for or hold an elected office, or chair standing committees. All members receive **STAGES**.

To become an affiliate member, go to <https://www.larvalfishcon.org/ELHSAffiliate/affiliate-triage.asp> or mail your name, institutional affiliation (if appropriate), mailing address, telephone and fax numbers, e-mail address, and dues (US \$10 per year) for the current and/or upcoming year(s) to the ELHS Treasurer (see page 2).

Please specify the membership year(s) for which you are paying dues. Make checks or money orders payable to "AFS-ELHS."

Remember to check the mailing label for your membership expiration date and renew, if necessary.

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