

FSBI medallists for 2024 announced



Professor Skúli Skúlason is the **Beverton medalist** 2024. The FSBI's Beverton medal recognizes ground-breaking research and a lifelong contribution to the study of fish biology. This medal is the most senior award and highest honour awarded by the FSBI. Skúli is a Professor in the Department of Aquaculture and Fish Biology, Hólar University, and the Icelandic Museum of Natural History.

For over three decades Skúli Skúlason has devoted his research to asking fundamental questions in biology. How does diversity arise? What are the mechanisms that drive the very earliest stages of divergence? Under what circumstances do they occur? How fast can this happen and what are the consequences of rapid divergence? These questions have been addressed using fish models. His empirical work takes a comparative approach using rapidly diverging fish populations to understand the evolutionary patterns found in nature, most notably, Arctic charr and the three-spined stickleback in Iceland. He has combined this approach with

laboratory based experimental studies to provide insights into mechanisms that cannot be tested in the field. This combination of study types results in powerful and compelling insights into patterns of divergence in very closely related intra-specific groups living in sympatry but displaying highly divergent ecologies.

His drive to understand these patterns drove him to develop a series of theoretical models to explain the processes that enabled these patterns to arise. That evolutionary divergence can occur in sympatry is now broadly accepted, which was not the case in the early 1990's. Skúli's theoretical framework, and its empirical testing, contributed considerably to the general shift in understanding. His work has demonstrated how the plastic expression of phenotypes can lead to differential selection pressures, assortative mating and the divergence of a single population into two or more.

Apart from research Skúli has developed an internationally respected research group. He devoted a decade of his career to developing Master's and PhD programmes as well fostering a bachelor's degree in fish biology. He has mentored many early career researchers who have in turn gone on to make important contributions in the field.

Dr Peter A Henderson is **LeCren Medalist** for 2024. The FSBI's LeCren medal is awarded annually to an individual or group of



individuals in recognition of a lifelong contribution to the study of fish biology and/or fisheries science, with a focus on conservation, training, or public understanding of the discipline.

Peter is a research scientist and consultant on population dynamics and community ecology. He has spent time as a Senior Research Associate, in the Department of Zoology, University of Oxford and a Visiting Research Fellow at the University of Southampton. As Research consultant, Peter has worked for more than 30 years with NGOs, major international companies, and governmental agencies as an expert witness on energy and port industries in both Europe and North America.

Peter has had a major impact on fish conservation globally. Amongst many other activities he played a pivotal role in the establishment of the Mamirauá Sustainable Development reserve in the Upper Amazon in Brazil (<https://mamiraua.org/>) which is now the largest freshwater nature reserve in the world. ➤

He was a member of the team that oversaw the creation of the reserve in 1999. Peter's leadership of fisheries projects has made a crucial contributions to documenting the fish assemblages in Mamirauá's flooded forests and in underpinning the development of its management plan.

Peter's contributions to conservation, public engagement, and training draws on his extensive integration in the field. He gives regular talks to angling clubs about British marine fish and to fish keeping clubs about Neotropical fish. He has played a pivotal role in training future generations of fish biologists through his books: *Ecological Methods*; *Identification guide to the Inshore Fish of the British Isles*; and *North Sea Fish and their Remains*. In addition, he has lectured on Marine Biology, on Conservation field courses and on Multivariate Statistics at the University of Oxford.

Dr Erika Eliasson is the **2024 FSBI Medalist**. The FSBI medal is awarded in recognition of the achievements of an early-career scientist who has made exceptional advances in the study of fish biology and/or fisheries science. Dr Erika Eliasson is Associate Professor, Department of Ecology,



Evolution and Marine Biology, UC Santa Barbara, & Associate Dean of Science and Horticulture, Kwantlen Polytechnic University, BC, Canada.

Erika's contribution to fish biology is voluminous and broad. To date, she has published over 91 peer reviewed articles and 9 book chapters. This underscores her exceptional productivity and dedication to the field of fish biology as well as the influence her work has had across the community. Her research papers span tropical fish biology to polar species, and elasmobranchs to model fish.

Erika is a physiologist but has been at the forefront of integrating physiology into other disciplines of fish biology including fisheries management, fish behaviour, biotelemetry, and conservation. By embracing new technology

and methods she has been able to push the boundaries of what can be investigated. It has also made her very collaborative bringing the physiological perspective to teams formed from ecologists, wildlife biologists and computational modellers. Her expertise in these areas is evidenced by the additional roles she holds within the fish biology community including being a specialist panel member of the IUCN salmonid specialist group, the editor of several book series in fish physiology and membership of key fish biology journals' editorial boards including the *Journal of Fish Biology*.

Erika is best known for her work on salmonids and for their plight along the west coast of North America. She probes the basis of physiological performance in both the lab and the field and has generated an evidence base that is routinely cited in policy. For example, Erika's *Science* paper on migrating salmon was used by Fisheries and Oceans Canada and Pacific Salmon Commission to help in the management of the sockeye salmon fishery.

The **Huntingford Medal**, awarded for the best paper by an early career scientist in the *Journal of Fish Biology*, will be announced later.

Professor Michel Kaiser, Editor in Chief of the *Journal of Fish Biology* outlines changes on the editorial board as of January 31st 2024

The *Journal of Fish Biology* is an international journal and as such our editorial board needs to be representative of the global community of fish and fisheries researchers. For that reason, we recently undertook a recruitment campaign to fill some of the gaps we have for certain areas of the world. The competition attracted over 70 applicants who were shortlisted by a team of

editors led by Kath Sloman. After interviews were conducted, 10 new appointments were made from countries that include South Africa, Turkey, Malaysia, and Timor Leste (see pictures below). In addition as editor I was pleased to invite Sofia Graca Aranha to join the board after winning the Huntingford medal in 2023, and Kim Birnie-Gauvin joined the board to replace a gap in our expertise.

Our publisher – Wiley – continue to provide excellent support and are continually innovating such that in February 2024 our Special Issue focused on China will appear with both English and Chinese abstracts and a bilingual editorial. On that note, we record the sad news of the death of our colleague Gordon Copp who was also involved in the production of the aforementioned special

issue. New innovations for the future include the possibility to include a graphical abstract (inspired by the workshops at the 2023 FSBI conference) and

to embed a live video in the html version of papers. While thanking my board for their continued support to the journal, I would like to reiterate the importance of

the science community's role in reviewing papers – it is becoming increasingly hard to find reviewers that provide quality reviews of the papers we receive.



Natasha Wasnick



Maria Eugenia Lattuca



Ömerhan Dürrani



Murray Duncan



Sofia Graça Aranha



Rodrigo Rodrigues Domingues



Louw Claassens



Abdulwakil Olawale Saba



Lubabalo Mofu



Kim Birnie-Gauvin

And two I cannot find pictures of (ed), Mariana da Fontoura Martin, Wilbert Takawira Kadye.

Editorial

The biography of William Yarrell, reviewed in this newsletter, is a reminder of how our profession has changed since the early 19th century. In Yarrell's time most work on natural history, which was then the name of the activity, was carried out often by wealthy amateurs. Such people, and they were mostly men, had private means so could devote themselves to their interests in the natural world. For those who lived in or near London there were many societies either in existence or founded at the time, that catered for diverse interests and attracted a lively attendance at meetings. After these members would often go out for dinner so creating strong social bonds between individuals. Charles Darwin is an archetype of this type of scientist, whose private means meant he could

spend all his time on science.

Such times are in strong contrast to the present day. Most scientists work in institutions. According to one eminent sociologist an institution can be defined as '... an internally justified fixed set of arbitrary rules designed so that a group of people can perform a particular function'. Often an institution is set up to fulfil a certain function but as time goes by the development and survival of the institution becomes more important than fulfilling the function it was first set up to do. Essentially the environment within which an institution works changes over time and the institution must adapt to keep its head above water. British universities are a case in point. Forty or so years ago a university in Britain was a loose association of independent

academics either working on their own or with relatively small groups. Most of their time would be spent on research or teaching. Administration was at a minimum. The present-day university is now burdened with the struggle to obtain enough money to survive and to fulfil all the extra rules and regulations that have been imposed by government. Staff seem to spend more time dealing with EDI and Health and Safety than teaching or doing research. In Yarrell's day, naturalists had none of these distractions and could spend most of their time working on biology. How can we return to that nirvana?

Paul J B Hart
Leicester February 2024
Next deadline: 1st May 2024

Obituary – J.H.S. Blaxter 1929-2023



A long, long time ago – in fact before most of us were born, John Blaxter published his first paper in *Nature* – starting his long-term investigations in to the mystery of Atlantic herring (Blaxter, 1953). That paper had its 70th year anniversary last year, and like all of John’s work and activities it continues to be relevant today.

John Harry Savage Blaxter graduated from University of Oxford in 1952 and was recruited to the Marine Laboratory in Aberdeen. There he worked with Fred G.T. Holliday to establish a research programme combining field studies and laboratory experiments, as part of the new wave of fisheries scientists focusing on the biological processes supporting commercial fisheries. Questions that were formulated at the start of ICES (International Council for the Exploration of the Seas) and by J. Hjort in the first two decades of the 20th century were systematically tackled by John and others who were in the first cohort of these “fishery scientists”.

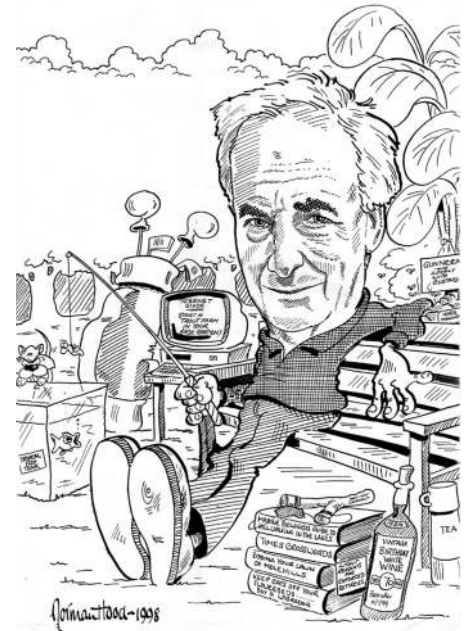
Herring became a focus for John’s research, and he explored the biological and physiological differences that characterized each herring stock – a topic that still continues to be high on the agenda of both researchers and managers. In the early days

of comparing early life history characteristics of different herring populations, his work on egg size, size at hatching, yolk sac utilization and how these differences might be linked to other differences in herring populations grew out of the increasing application of scientific process to fisheries problems – and herring was the perfect testbed for this.

By 1964 John had moved to the Natural History Department, University of Aberdeen, where his work turned to behavioural physiology. He established groups of herring in tanks to study their shoaling behaviour and their responses to light and motion, and developed a standard methodology for incubating herring eggs and rearing the larvae “to metamorphosis and beyond” (Blaxter 1968).

The Scottish Marine Biological Association (SMBA, now Scottish Association for Marine Science) moved into the new Dunstaffnage Marine Laboratory near Oban in 1970 and Blaxter was one of the first principal scientists recruited there. And it was his connection with F.G.T. Holliday, the Professor of Biology at the new University of Stirling, that led to a formal link between Dunstaffnage and Stirling, and an honorary Professor title for John. This enabled PhD students to register at Stirling, but to work at the SMBA in Oban. John supervised nine PhD students from Stirling between 1972 and 1988, and I was lucky enough to be one of them!

In autumn 1963, John presented his work on the feeding of herring larvae at the “First Larval Fish Biology Conference” in LaJolla, California. This symposium was hosted by the California Cooperative Oceanic Fisheries Investigations. Later, working with ICES committees, John volunteered



Advice for retirement projects for John’s 70th Birthday.

to convene a symposium on the early life history stages of fish. The 1973 meeting in Oban produced the classic book – the *Early Life History of Fish*, followed by further meetings and proceedings published by ICES in 1982 and 1989. These helped catalyse research on fish larvae across different themes: recruitment, taxonomy, aquaculture, physiology, development. Many of the attendees joined the Early Life History Section of the American Fisheries Society, where the annual Larval Fish Conferences now host the John Blaxter Award for best student poster. This legacy is an enduring reminder of the way John encouraged young scientists to reach out and participate in the scientific community through learned societies.

At Dunstaffnage John delved into sensory physiology, working with Eric Denton (Marine Biological Association, MBA) on the acoustic-lateralis system of herring; he also continued his research on hearing, vision and development. His interests also included aquaculture and restocking, and he wrote

about the future of fish culture and the problems of adapting reared marine fish to survive after release. He collaborated widely, with the cohort of researchers that defined the themes of early life history studies (e.g. G. Hempel, H. Rosenthal, R. Lasker, J. Gamble, E. Houde) as well as inspiring and working with the following cohort (e.g. R.S. Batty, K. Bailey, L. Fuiman).

One thing that stands out about his work is the comparative approach. John often contrasted herring and plaice in his experiments. These were his two model species – separated morphologically, behaviourally, phylogenetically as emphasized in many of his publications.

John officially retired in 1989, but he continued getting his hands wet and was active in the marine science community for at least another decade. John delivered the 1996 Annual Newth Lecture on “Enhancing Marine Fish Stocks” as a SAMS Honorary Fellow, and continued in that role until 2001. He was the FSBI president from 1992-1997, and received the FSBI Beverton Medal in 1998. He was elected to the Royal Society of

Edinburgh in 1974. He convened his fourth larval fish conference, the 1997 FSBI symposium on Ichthyoplankton Ecology at University College Galway, with J. Fives and A.J. Geffen.

John took on several major editorial tasks over the years. In addition to several books, he was Editor-in-Chief of the *ICES Journal of Marine Science* from 1991-1997. John had first published in *Advances in Marine Biology* in 1963, and he returned to serve as an editor from 1980-2000, together with A. Southward, P. Tyler and others. John certainly used this as a vehicle to “commission” in-depth reviews of timely topics. When his last paper was published there in 2000 (Blaxter, 2000), it completed a run of nearly 50 years of publications with over 150 papers and book chapters.

The lasting impact of John’s work was recently highlighted in the 50th anniversary volume of the journal *Fish Physiology*. John’s 1969 chapter on fish egg and larval development is reprinted, preceded by an aptly named review chapter: “...Beginning with Blaxter...” (Mueller 2023).

Truly, so much of our fundamental knowledge of fish biology and physiology was initiated by the work and writing of John H.S. Blaxter.

As students we lived in fear of John’s wrath if we flooded any part of the aquarium or constant temperature rooms. He was a wonderful supervisor, guiding but not interfering, formal but with a sense of humour (I once found a note on a draft of my thesis: “I wasted no time in reading your last chapter”). He wanted us to stand on our own feet (or fins) and continued to keep track of our careers and send advice over the years. Eventually he closed down his office and withdrew from scientific circles, but stayed active in local affairs and his favourite trio: sailing, gardens, golf, and always dedicated to his family and friends. John influenced so many of us, as colleagues and students, and we will all miss him.

Audrey Geffen

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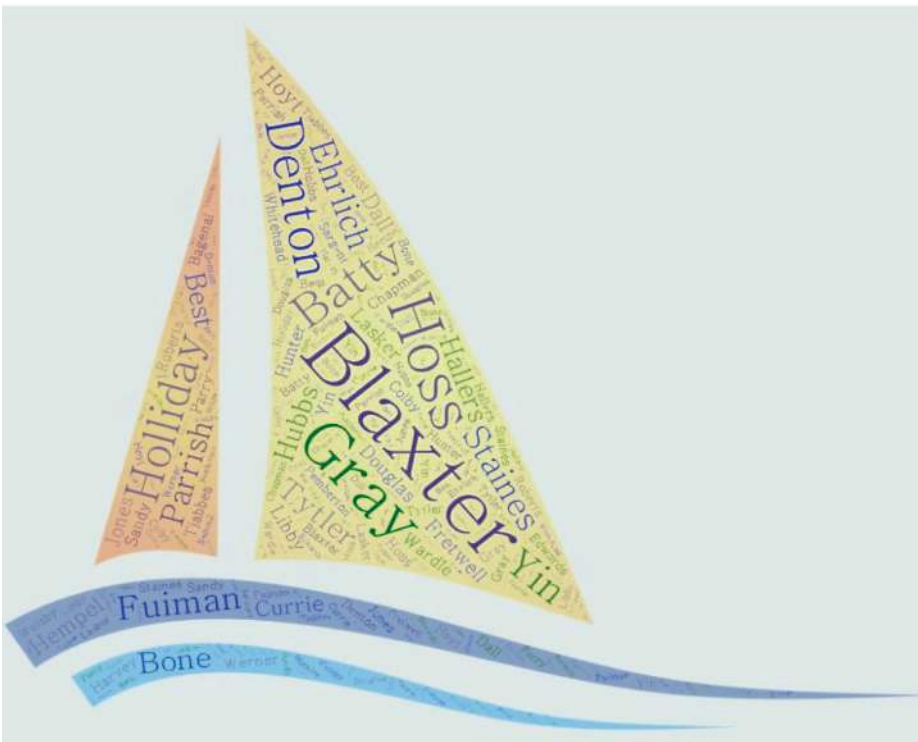
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Word Cloud of John Blaxter’s co-authors, formed as a sailboat representing John’s long-time love of sailing.

Andrew McMains was the 2024 recipient of the AFS IFS Fellow Award, which is supported jointly by the FSBI and the International Fisheries and Education Section of the American Fisheries Society. This funded his travel to the 2023 FSBI Annual Symposium at the University of Essex. Here he reports on his experience.



In the days leading up to my trip, I was excited but nervous to attend my first international conference. I learned that there were

underground strikes that would potentially add to the complexity of my travel (luckily these stopped before I arrived) raincoat, I was ready to go!

Following a smooth day of travel, I made my way to the University of Essex in Colchester. I enjoyed exploring around the town and campus, which was beautiful despite the drizzle. I got a sneak peek at the Essex Business School building where we would have most of our presentations, a striking zero-carbon building with gardens inside and a living roof. My conference experience began with a riveting excursion first thing Monday morning with Dr. Tom Cameron, where we explored the Essex Wildlife Trust's Abbots Hall saltmarsh and discussed their use as fish nurseries and the oyster industry in the local area. It is incredible how different the marsh is from what I am used to on the

east coast of the US! Having an outing like this early in the meeting was a great way for a newcomer like me to make easy connections (thanks Matt Hatfield).

The meeting opened with an excellent lecture by Dr. Steve Campana discussing shifting baselines in fish distribution and growth using a myriad of methods including aging otoliths found in archaeological digs. The sessions were well organized and featured cutting-edge research from across the globe. I had the pleasure of presenting one of my research projects where I used acoustic tagging to record fine-scale habitat usage data for an estuarine fish (sheepshead, *A. probatocephalus*) surrounding an oyster aquaculture installation in North Carolina. I was grateful that the talk was well received by the audience, including some excellent questions. During a later networking time, I met Zoe Morrall who is working on a restoration project in the Solent and we discussed the feasibility of including oyster aquaculture gear to improve water quality and provide fish habitat. Connections like this are, in my opinion, the most important part of conferences.

Throughout the conference, I was continually impressed by the broad international representation. According to a post meeting update, there were 200 in-person attendees from 26 different countries. I had the pleasure of discussing my research, along with other topics, with scientists from across the British Isles, Germany, France, Denmark, Norway, Slovenia, Australia, South Africa, and the Netherlands. I greatly enjoyed the wide range of networking opportunities provided by the meeting including a wine reception at the Wivenhoe House, a movie night showing Riverwoods, and a delicious three course banquet with a band held at the Prested Hall.

I am extremely grateful to both AFS and FSBI for the opportunity to attend the 2023 FSBI Annual Symposium. I would not have been able to attend an international meeting without their support. I had a great time at the conference networking with other scientists and learning about fisheries research on an international scale. Thank you to the organizers of the conference, and I hope to come back to another FSBI meeting soon!



Research report

Emma Weschke reports on research done during her FSBI Studentship and supported by a Small Research Grant report.



Nocturnal reef fishes have been underrepresented in the literature on coral reefs compared to their diurnal counterparts, despite actively occupying half of the diel cycle of coral reefs. In the day nocturnal reef fishes have extremely high fidelity to their chosen daytime refuges where they can be found resting. After sunset they emerge from daytime

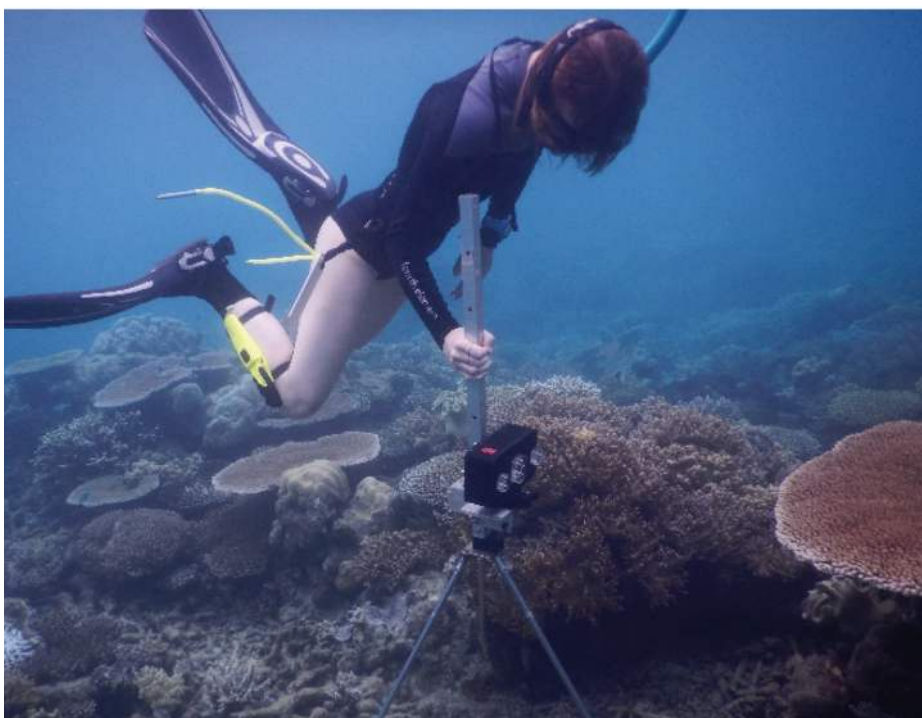
refuges to venture across coral reef associated habitats in search for prey. However, their behaviours, activity and whereabouts at night remain largely unknown. This is likely due to the logistical challenges associated with collecting surveys and behavioural observations on the reef at night, outside our own diurnal activity pattern and liveable environment. Furthermore, this field of research presents the challenge of capturing observational data without the use of visible light, the most limiting environmental factor on reefs at night. When artificially modified this light environment, can significantly disrupt natural behaviours and distributions.

During my FSBI-funded PhD I have dedicated my research efforts to shedding light on the behavioural ecologies of nocturnal reef fishes at night through the application of underwater infrared video, revealing aspects of nocturnal fish ecology that we remained in the dark about until now. At the end of 2022 I was fortunate enough to receive the FSBI Small Research Grant that, combined

with my FSBI Studentship, funded the development of underwater infrared camera equipment and three months of fieldwork with Masters student Evie Croxford and Amelia Clarke for my final data chapter at Lizard Island Research Station on the northern Great Barrier Reef. In this project we used our purpose-built infrared light and camera systems to investigate the nighttime association of nocturnal reef fishes to healthy and degraded reefs and explored the influence of the lunar cycle on their nighttime composition and activity levels.

It is common knowledge that coral reefs around the world face significant threat from bleaching and cyclones induced by climate change and research has uncovered disastrous consequences for coral reef inhabitants. Nocturnal reef fishes rely on the complex three-dimensional substrate created by healthy growing scleractinian (hard) corals to provide refuge during the day, yet their interaction with healthy and degraded reefs when foraging at night remains unknown.

The different phases of the lunar cycle are responsible for timing many of the biological processes on coral reefs, scheduling spawning across vertebrate and invertebrate taxa and initiating recruitment of settlement stage larval fish. It has been suggested these key life history events occur at night, around the new moon to minimise predation from visual hunters. This, in turn, would suggest that a full moon night might pose a greater predation threat due to an elevated activity of nocturnal fishes that are utilising the subtle increase in natural light to forage. The handful of previous studies that sought to investigate the influence of the lunar cycle

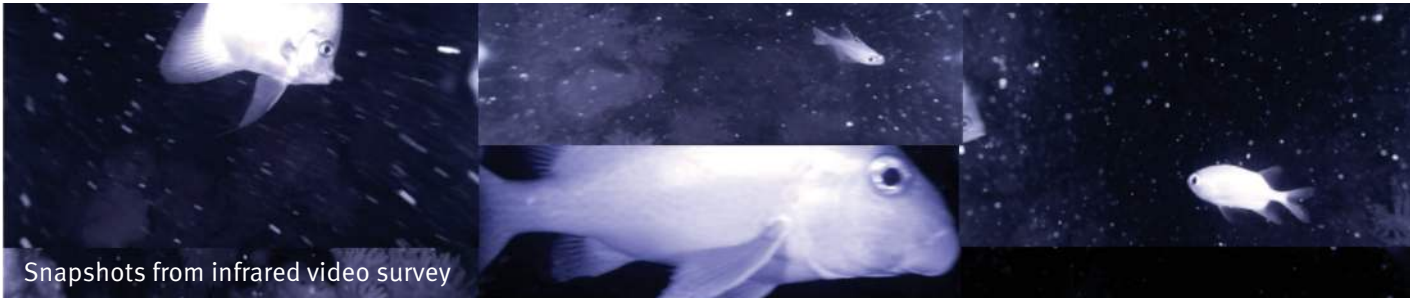


on nocturnal coral reef fish communities have not found any such effect.

The cameras we developed with engineers at the University of Bristol and tested at Bristol Aquarium captured high resolution footage of nocturnal fishes identifiable to genus and often species level. We conducted fish surveys using the footage

and extracted the frequency and duration of occurrences which can provide insights into the associations of nocturnal fish species to healthy and degraded habitat at night, along with their activity levels across the lunar cycle. Analysis of these data has uncovered a strong effects of reef health and lunar phase on the nighttime community composition

and activity of nocturnal coral reef fishes. In addition, we were surprised to observe high levels of nocturnal activity displayed by a coral reef fish family previously thought to be diurnal. This chapter is near to completion and we look forward to submitting it for publication and sharing it with you in the new year.



Snapshots from infrared video survey

Book Review

Christine E Jackson. (2021)
A Newsworthy Naturalist: The Life of William Yarrell. Published by John Beaufoy Publishing in association with the British Ornithologists' Club. RRP £25.00.

When I was an undergraduate studying for a degree in Zoology I took a special course on freshwater fish and fisheries in the third year. This was supervised by Jack Jones the first President of the FSBI. His teaching style was, to be kind, laid back and consisted mostly of providing us with a long reading list with relevant books and papers and then leaving us to get on with it. I am sure that on this list was William Yarrell's *A History of British Fishes*, which was published in two volumes in 1835-36. This was subsequently updated over time but it was still rather antiquated at the time I did my degree in the 1960s. In its day, Yarrell's book was equivalent to Alwyne Wheeler's *The Fishes of the British Isles and North-west Europe* (1969).

Yarrell, who lived between 1784 and 1856, was a true amateur natural historian and followed his interest in fish and birds whilst running his newsagent and book selling business in London, Jones and Yarrell, together with his business partner and cousin

Edward Jones. Both were sons of men who had started the business. The company still exists although no longer situated in the centre of London. It has a Royal Warrant and supplies newspapers to the King and Prince of Wales, a task it carried out in Yarrell's day. Yarrell's family had country links in Hertfordshire and would spend time there observing the natural world. Over time he came to know some of the leading natural historians of the day, including Charles Darwin. Eventually he became a leading light in the London natural history scene and was on the council of the Linnean Society, its treasurer for a while and also Vice President. In addition he was Secretary and then Vice President of the Zoological Society. He was also a founding member of the Entomological Society and on the council of several other natural history societies of the day. All these activities were performed in time outside his business operation, but as he never married, he did not have the responsibilities of sustaining a family so freeing up time for his many natural history activities.

One interesting insight into the social structure of the period relates to the Royal Society. Yarrell was proposed as a fellow but

was told that the Society did not recognise scientific contributions from those in trade and so he had no chance of being admitted, and he withdrew his application.

For obvious reasons I have focussed on Yarrell's contributions to fish biology but he was also a keen ornithologist and produced *A History of British Birds* in three volumes between 1839 and 1843. Christine Jackson has written an engaging and beautifully illustrated book with many black and white engravings taken from Yarrell's books or from contemporary sources illustrating life in the early 18th century. For anyone interested in how knowledge of British fishes developed and was published, this book is an excellent source. Jackson's book is also an excellent account of how natural history, in the early 18th century an essentially an amateur activity, became established in the nation's culture. Yarrell was only able to sustain his interests because he remained single and had a good business the supplied his living. The prose is very readable and the book is not expensive but has excellent quality in terms of the illustrations and the robustness of the book as an object.

Paul J B Hart

Reports from FSBI sponsored events



The FSBI sponsored a workshop organised by the Mediterranean Elasmobranch Citizen Observations (MECO) Oct 20-22, 2023 in Brighton, England. The organisers provided the following report.

Key Achievements

- 1. Productive Annual Workshop:** MECO hosted a highly successful annual workshop. The event was attended by nine passionate participants representing Spain, Montenegro, France, Greece, Austria, and Turkey. During the workshop, the team achieved several significant milestones:
- 2. Project Vision and Goals:** Participants collectively refined the project's vision and goals, ensuring alignment with the objectives of elasmobranch conservation in the Mediterranean.
- 3. Plan for 2024:** A comprehensive plan for 2024 was developed, which outlines strategies for project growth, expanding impact, enhancing communication, and securing sustainable funding.
- 4. Enhanced Personal Relationships:** The workshop provided an invaluable opportunity

for personal and professional relationship-building among participants. It strengthened the team's cohesiveness and commitment to MECO's mission.

Communication of the Workshop on Social Media

The workshop was communicated extensively through various social media platforms, including the MECO project's official Facebook and Twitter pages. Throughout the event, we shared real-time updates, key insights from workshop sessions, and highlights from our discussions. In these posts, we made sure to prominently tag and express our deep gratitude to the Fisheries Society of the British Isles (FSBI) for their vital support, which made this gathering possible.

Future Direction

The workshop has been instrumental in galvanizing our team and setting a clear course for MECO's future initiatives. The achievements and outcomes of this workshop lay the foundation for our ongoing efforts in elasmobranch conservation,

biodiversity management, and citizen science.

We would like to express our deep appreciation to FSBI for making this impactful workshop a reality and for their continued support in our mission to protect sharks and rays in the Mediterranean.

Adi Barash
Sharks in Israel, Director
And the complete MECO team

Wales Ecology and Evolution Network (WEEN) 2023

A student-run conference for Welsh university postgraduates partially funded by the FSBI

The Welsh Ecology and Evolution Network (WEEN) is an annual student-led conference for early career researchers of any biological field studying in Wales. WEEN brings together postgraduates from Bangor, Cardiff, Aberystwyth, and Swansea universities to network and present their ongoing research. This year, over 60 delegates attended the event, conjugating at the Centre for Alternative Technology (CAT) in Machynlleth. Among the funders ➤



The committee of this year's WEEN conference. From left to right: Agnethe Seim Olsen (Cardiff University); Mica Gallagher (Aberystwyth University); Lewis Fisher (Aberystwyth University); Sophie Mallet (Cardiff University); Ruby George (Swansea University); Sara Bariselli (Bangor University); Joseph Pickard (Swansea University) and Jack Cooper (Swansea University).



The sponsorship talk promoting the activities and objectives of the FSBI, given by FSBI PhD student Jack Cooper.

of this event was the FSBI, who kindly sponsored the Aquatic Ecology session, a session of talks held at WEEN every year.

The WEEN committee greatly thanks the FSBI for their continued support of this event over the years, which allows delegates to network with peers from all over Wales. WEEN has since become a hub for FSBI student members to advertise the organisation. This year in particular had multiple attendees from previous FSBI symposia, as well as an FSBI

student on the committee and promoting the society to the delegates at the beginning of the Aquatic Ecology session.

Event summary

All delegates arrived at CAT for the evening of Friday November 24th, with talks and events taking place in the Wales Institute for Sustainable Education (WISE), a gorgeous building that uses an open, natural light environment for speakers in the lecture theatre.

Kicking off the conference was an introduction to WEEN by committee members Agnethe Seim Olsen (Cardiff University) and Jack Cooper (Swansea University who is also an FSBI PhD student) and to CAT by staff, who detailed its origins as a hub for sustainability and spoke to its key objectives in energy efficiency and working towards a zero carbon Britain. This year marked 50 years of CAT's operations, and thus, this introduction allowed some time to reflect on CAT's accomplishments and future goals. After a vegetarian dinner, delegates were treated to a keynote lecture from Dr Dylan Phillips of Aberystwyth University, who discussed the Genetic Technology bill and its impacts on farming and the environment. Networking concluded the evening, allowing delegates to start mixing or to rest following the drive up to CAT.

Saturday November 25th, began with a session on Conservation, chaired by Agnethe Seim Olsen, and a session on Terrestrial Ecology chaired by Ruby George (Swansea University). A vegetarian lunch was followed by a tour of the CAT grounds, as well as a workshop involving the identification of lichen, run by Steve Chambers. The last session of talks for the day was the Aquatic Ecology, beginning with a promotion of the society and its objectives by FSBI student Jack Cooper. The evening concluded with an annual general meeting and a final session on posters and speed talks, which displayed a wide range of interesting work. Among these works were several presentations related to fish biology and ecology. These included a poster on freshwater pollution by Charlotte Robison-Smith (Cardiff University) presented at the 2023 FSBI symposium, as well as a poster by Chessie Mason (Cardiff University) studying 51 years of ecological data of local angelsharks



(*Squatina* spp.). A pub quiz served to conclude the evening, allowing delegates of the four universities to mix further.

The last day of the conference, Sunday November 26th, consisted of a talk session on Genetics & Biogeography chaired by Lewis Fisher (Aberystwyth University), as well as a final talk session on Ethology & Evolutionary Processes, chaired by Sara Bariselli (Bangor University). These sessions included further discussion on aquatic and fish biology, seen in talks by Clement Prieul and Thom Lyons (both Swansea University) about deep-sea brachiopods and the rare northern pool frog respectively; as well as a talk by Olivia Rose (Swansea University) about how predators, including

fish, may perceive eyespots as eyes.

The standard of presentations was at an all-time high at this year's WEEN, particularly of those regarding aquatic and fish biology. These included the two prize-winning talks of the conference; awarded to Mica Gallagher (Aberystwyth University), who discussed green coastal defences, and to FSBI student Jack Cooper who presented his PhD work on how the functional diversity of sharks has changed over the last 66 million years. The prize for best speed talk was won by Holly Hulme (Cardiff University), who in just three minutes explained why otters were the best sentinels. Finally, the best poster prize was awarded to Ayman Asiri (Cardiff University),

presenting remarkable work on honeybees using smell to detect viral infections. The conference concluded with the annual group photo of all delegates.

The continued promotion of WEEN by the FSBI allows strong work in fish and aquatic biology to continue to be highlighted, with aquatic ecology now becoming an annual session at the conference. Furthermore, its continued presence at WEEN increases awareness of its early-career opportunities to delegates, including to masters students who may be inspired to apply for FSBI PhD studentships. WEEN, now entering its tenth year in 2024, remains indebted to the FSBI for their ongoing support over the years.

Travel grant report



Juliette Tariel-Adam used her travel grant to attend the Indo-Pacific Fish Conference 2023 in Auckland, New-Zealand, coupled exceptionally this year with the annual conference of the Australian Society for Fish Biology.

It was a great opportunity for me to attend one of the biggest fish conference of the world which is only held every 4 years. I presented my work about the use of tools by fish in front of a wide audience (at least 50 people) and received a lot of positive feedback. I created a collaboration opportunity with Celia Schunter

(Assistant Professor, University of Hong Kong) to work on the neural pathways responsible for tool use. I met Vincent Laudent (Professor, Okinawa Institute of Science and Technology) for a future postdoc on the cultural traditions of coral reef fish. I met one of the leading researchers of the FishBase, Nicolas Bailly, for a potential short postdoc to implement behavioural traits in FishBase. I genuinely enjoyed listening about fish for 5 days and expanded my knowledge about them and current research hot topics.

Notice

Senior lecturer in biology specialising in aquatic ecology

This position is at Karlstad University/Faculty of Health, Science and Technology/ Department of Environmental and Life Sciences



Karlstad University has a total of approximately 1,400 employees and 19,000 students spread across two inspiring campus environments in Karlstad and Arvika.

More information at: kau.se/en/work-with-us

The Biology Department

The subject of Biology has a staff of around 40 people and belongs to the Department of Environmental and Life Sciences within the Faculty of Health, Science and Technology. Biology offers a Degree of Bachelor, Degree of Master and Master of Science in Secondary Education in Biology and Science. Biology also offers doctoral studies and currently has 18 doctoral students enrolled. Our main research areas are ecology, evolution and biological education. Ecology research is mainly conducted by the River Ecology and Management Research Group (RivEM) and includes fundamental and applied research on lakes, rivers and streams, as well as their catchment areas. The department offers excellent conditions for aquatic ecology research with access to an aquarium facility with artificial streams, technical support and field material, among other things. Research is primarily focused on sustainable use of natural resources that is mutually beneficial to human

society and nature. This includes research areas such as the effects of hydropower on aquatic and terrestrial environments, invasive species and endangered fish and invertebrate species. Many research projects are carried out in collaboration with stakeholders from industry, government agencies, professional organisations and landowners. You can find more information about us and our research on our websites: kau.se/en/biology and kau.se/en/nrrv.

The job available

We are now accepting applications for a senior lectureship in biology with a specialisation in aquatic ecology. Duties include teaching and research. The position also includes supervising future doctoral students and postdocs in the subject area.

See Senior lecturer in biology with a specialisation in aquatic ecology (varbi.com) for details of how to apply.

Deadline for applications:
28th February 2024.

Information Desk

For all membership enquires please contact the FSBI office at:

Fisheries Society of the British Isles

1 Naoroji Street, London WC1X 0GB

Registered Charity No: 256475

VAT No: 433 4571 60

All enquiries: 020 3925 3477

theteam@fsbi.org.uk

Contact person: Beth Glynn-Ramsden

See <https://fsbi.org.uk/membership/> for further information.

Secretary: Dr Ian Winfield

E-mail: secretary@fsbi.org.uk