

Australian Society for Fish Biology: Scientific networking, early career development, international engagement and 50th celebrations



Alison King, Brendan Ebner, Gretchen Grammer, John Morrongiello

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2023

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In submitting this report, the researcher has agreed to FRDC publishing this material in its edited form.

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Acknowledgments

The activities outlined in this report would not be possible without the voluntary support of the Australian Society for Fish Biology's Executive Council, its subcommittees, its membership, and event organising committees and sponsors for 2020, 2021 and 2022. Their contribution to the Society, and to maintaining the core values of the Society, is particularly acknowledged during this period of high uncertainty due to the COVID-19 global pandemic.

Executive Summary

The Australian Society for Fish Biology (ASFB) was founded in 1971 and is a professional, independent, non-profit, and non-aligned organisation. The Society's objectives are to promote research, education and management of fish and fisheries and to provide a forum for the exchange of information. Annual conferences/workshops have been held each year since the Society's inception and provide a forum for scientists, managers, and industry from around Australia, New Zealand and elsewhere to meet and discuss the most recent developments in fish and fisheries science and management.

The annual science conference makes an important and tangible contribution to skill development of people involved in fish and fisheries research and management, particularly offering students and early career researchers opportunities to present their work, interact with peers, develop collaborative links and obtain new ideas. The ASFB has a strong commitment to promoting and communicating science, encouraging sustainable management practices, encouraging excellence in fisheries research, and recognising outstanding contributions of scientists and professionals through various awards and scholarships. Support and encouragement for students and early career researchers to participate in the annual science conferences is provided in the form of travel awards and awards for research presentation.

This project supported the annual science conference in 2020 (virtual conference due to COVID-19 restrictions), 2021 (World Fisheries Congress (WFC), Adelaide), 2022 (changed from joint congress with Indo-Pacific Fish Conference in Auckland NZ to an annual science conference on the Gold Coast QLD due to restrictions from COVID-19 on international travel) and a series of conference associated awards that support student travel and recognise research excellence. The project also addressed three development program goals, namely:

- (i) to encourage knowledge transfer and R&D adoption (ASFB annual science conference)
- (ii) to recognise and promote achievements (ASFB awards), and
- (iii) to enhance industry leadership (bringing together a range of people for the annual conference).

These activities encouraged participation and exchange of information and provided an opportunity to develop networks and collaborations with outside organisations. In addition, we also held an online event during the WFC in Adelaide to celebrate the Society's 50th year and promote the achievements of Australia and New Zealand's fish and fisheries science over the last 50 years.

The ASFB has been, and continues to be, a vibrant and dynamic Society that provides a forum for researchers, managers and stakeholders to meet and discuss issues relevant to fish and fisheries science and management in Australasia. Our membership as of 17th May 2023 is 446. This is an increase from 2021/2022 (432), and trending upwards. Over the period of this project, the Executive Council and operating committees were able to effectively and efficiently pivot to hold modified conference-style and networking events during the COVID-19 pandemic. Key issues addressed by the Society during this project include:

- assisting in development and a signatory on the need to take urgent action against human-caused Climate change (Statement can be found on ASFB website)
- resolution to run and manage an ASFB virtual conference in 2020 (after postponement of WFC in 2020)
- input into operations and management of World Fisheries Congress 2021
- ASFB 50th celebrations
- retention and attraction of members, including a survey of member needs
- consideration (and approval) of ethical banking changeover
- establishment of Google drive set up for ASFB operations and a revamp of the ASFB website

- establishment of a new Fish Welfare Committee
- consideration of Diversity, Equity and Inclusion across ASFB business
- review of non-student award criteria
- increase in social media profile through Facebook and Twitter posts
- active member of Science and Technology Australia (STA) and World Council of Fisheries Societies

The 2020 conference was ASFB's first ever virtual conference, born of the flames of COVID-19 and due to the postponement of the WFC 2020 to 2021. The conference was held online from 13 to 15 October 2020. The conference attracted 187 delegates in total; comprising 176 from Australia, 5 from New Zealand and 6 from the Northern Hemisphere. The focus was on providing an opportunity for postgraduate students to develop and stay in touch with ASFB networks and have a conference opportunity during the pandemic. The event was very successful, with the Society learning how to effectively engage with members through online platforms

The 8th World Fisheries Congress (WFC2021) was hosted from Adelaide, Australia from 20 to 24 September 2021, and ASFB members were strong contributors to the overall WFC Congress Steering committee, and Education and Communications committees. It was delivered as a fully virtual event allowing the international fisheries community to come together and exchange ideas at a time when travel was restricted due to the COVID-19 pandemic. In total, the Congress delivered over 800 presentations, covering a broad range of topics critical to the future of fisheries, and attracted 1,166 delegates from 60 countries. The Congress provided an opportunity to reflect on how much has changed since the first World Fisheries Congress was held almost 30 years ago, as was evident by the developments and thought-provoking work presented and discussed over the week of the Congress. ASFB members were highly active members of the WFC Congress Steering committee, Education and Communications committees. ASFB ran a student mentoring session, a student mixer, and organising and presenting both event specific WFC student awards, and ASFB student and Early career awards. Feedback from both events was very supportive and encouraging, with future WFC's now trying to continue student focussed activities.

The ASFB 2022 conference was held on the Gold Coast, Queensland from 6-10 November 2022. The conference's theme, *Reconnecting fish, fisheries and people*, had its genesis in the tough covid-induced challenges we experienced over 2020-2022. The conference was extremely well attended and received by the ASFB community, with over 270 delegates attending the event. The scientific program included broad, encompassing themes and talks covering current research on the effects of recent bushfires, growing impact of recreational fisheries, emerging innovations, and native fish recovery and creating fish-friendly infrastructure.

We celebrated ASFB's 50th anniversary at WFC 2021 as an online event, which was attended by over 100 members and enabled us to share memories and stories of our Society over the years. The Society developed a 50th Anniversary webpage on our website where members could post memories and stories. This page showcases some of the Society's significant achievements over the last 50 years and collectively provided members and the public with a great resource to reflect on and celebrate ASFB. It has given our Society a chance to reflect on our past, celebrate what we are now, and envision a future.

Keywords

Australian Society for Fish Biology, science conference, congress, World Fisheries Congress, networking, student awards, early career awards, international engagement.

Introduction

The Australian Society for Fish Biology (ASFB) was founded in 1971 and is a professional, independent, non-profit, non-commercial and non-aligned organisation. The Society's objectives are to promote research, education and management of fish and fisheries and to provide a forum for the exchange of information. The Society promotes an egalitarian and welcoming atmosphere; encourages participation by all members, particularly students; promotes the use of fish research (as defined in the broadest sense) and management of fisheries and aquatic systems; provides access to expertise on fish and fisheries; facilitates professional networks and assists with career development and promotes discussion and workshops on topics of relevance and interest.

The operations of the Society are supported by an Executive Council, with membership representing all States and Territories, New Zealand and student members, and a senior Executive team (President, Vice president, immediate Past President, Secretary, Treasurer). The Society also has a number of active Committees: Education, Alien fishes, Threatened Fishes, Fisheries Management, Future of the Society, and the newest committee on Fish Welfare. These committees report to the Executive and members (see website links for the Terms of Reference for each committee).

Annual conferences/workshops have been held each year since the Society's inception and provide a forum for scientists, managers, and industry from around Australia, New Zealand and elsewhere to meet and discuss the most recent developments in fish and fisheries science and management. The Society has also hosted a number of successful international conferences, including the 2nd World Fisheries Congress (1996), World Congress on Aquatic Protected Areas (2002) and 8th Indo Pacific Fish Conference (2009). The Society has also hosted a number of successful workshops, with the aim of focussing on a particular technical area or subject for discussion. The Society has a National Conference/Workshop coordinator, to assist future local organising committees and ensure corporate knowledge in this area is maintained.

Communication with our members and the broader community is important to the Society. We publish a yearly newsletter (December) and a mid-year news update (July) that contains information of interest to the Society membership, including notices and information on upcoming events and activities. We have a dedicated Newsletter Editor to maintain this function. The Society is also active on social media (Facebook, Twitter) and has an executive position of a Communications Manager to manage our communications. We have a [Social Media Policy](#) to underpin our communications.

The Society is a founding member of the World Council of Fisheries Societies, which has the primary goal of promoting international cooperation in fisheries science, conservation and management. The World Fisheries Congress, an international conference held every four years, was held during the life of this project in Adelaide in 2021, with the next WFC to be held in Seattle, USA in 2024. The 2021 World Fisheries Congress was heavily supported by ASFB (see further details in the report). In addition, ASFB has an active collaboration and partnership with the American Fisheries Society, promoting exchange of ideas and resources across the Societies. We also work collaboratively with other Australian aquatic societies (e.g. Australian Marine Sciences Association, Australian Freshwater Sciences Society) and through our membership of Science and Technology Australia to promote science in Australia.

The Society has an ongoing policy of actively supporting students and early career researchers, principally through awards that provide financial support to assist with travel or research costs. These include: conference awards - John Glover Travel Fund Bursaries (multiple up to \$600 each), Gilbert P. Whitley Memorial Student Award (\$600 senior and junior categories), and John Lake Poster Award (\$600 senior and junior categories); and research awards - Barry Jonassen Award (Freshwater: winner

\$2,000; runner-up \$1,000), Michael Hall Student Innovation Award (Marine: winner \$2,000; runner-up \$1,000) and International Travel Scholarship for an ECR and a postgraduate student (\$3,000 each).

The Society recognises outstanding career contributions in fish or fisheries science through the K. Radway Allen Award (a non-cash award), Hall of Fame and the early career research (ECR) Excellence award (a non-cash award).

The Society has enjoyed and benefited from a long association with FRDC through the provision of sponsorship support for the annual conferences, workshops and student awards. This final report presents project outcomes from FRDC funding as sponsorship support for the 2020, 2021 and 2022 ASFB conferences (including the 2021 World Fisheries Congress), student and ECR awards and travel subsidies, and promoting research excellence and mentoring. The project also included additional dedicated activities in 2021 to help celebrate ASFB's 50th year as a Society, and celebrate the growth and maintenance of fish science and management in Australia over the last 50 years.

Need

In the face of mounting pressure on Australia's marine and freshwater ecosystems, there is a continuing need for robust scientific information to support the sustainable development and management of our aquatic resources. The ASFB is Australasia's premier professional association for fish and fisheries researchers and managers. The annual conference makes an important and tangible contribution to skill development and networking of individuals involved in fish and fisheries research and management. In particular, offering students and early career researchers opportunities to present their work, interact with peers, and develop collaborative links across the sector. The ASFB has a strong commitment to promoting and communicating science, use of best available scientific evidence for sustainable management practices, encouraging excellence in fisheries research, and recognizing outstanding contributions of scientists and professionals through various awards and scholarships. Additionally, the ASFB has recognised the need for increased international engagement via increased active involvement with, in particular, World Council of Fisheries Societies and with the American Fisheries Society.

This project supported the annual science conference in 2020 (virtual conference due to COVID-19 restrictions), 2021 (WFS congress, Adelaide), 2022 (Joint congress with Indo-Pacific Conference, Auckland; noting that this conference was changed to an annual science conference Gold Coast due to restrictions from COVID-19 on international travel) and a series of conference associated awards that support student travel and recognise research excellence. The project also addressed three development program goals, namely:

- (i) to encourage knowledge transfer and R&D adoption (ASFB annual science conference)
- (ii) to recognise and promote achievements (ASFB awards), and
- (iii) to enhance industry leadership (bringing together a range of people for the annual conference).

These activities encouraged participation and exchange of information and provided an opportunity to develop networks and collaborations with outside organisations. In addition, we also held an online event during the WFC in Adelaide to celebrate the Society's 50th year and promote the achievements of Australia and New Zealand's fish and fisheries science over the last 50 years.

Objectives

1. Provide a forum for researchers, managers and stakeholders to meet to discuss issues relevant to fish and fisheries science and management
2. Support, encourage and recognise achievements of early career researchers
3. Support and encourage student participation at ASFB's annual science conference and key international conferences
4. Support and promote the ASFB 50th anniversary at the WFC 2021
5. Increased international profile of ASFB via greater participation in activities of World Fisheries Council and planning for World Fisheries Congress

Due to COVID-19 associated disruptions to international travel, we postponed the planned joint ASFB-IPFC conference scheduled for Auckland in 2022 until November 2023 (Objective 3). In lieu of this event, we held an in-person, annual ASFB conference on the Gold Coast, Queensland in November 2022. Further description of this event can be found below.

Method

To address the project objectives, ASFB used FRDC sponsorship to:

1. support the staging of ASFB's annual (stand-alone and joint) science conferences in 2020, 2021 and 2022 (Objectives 1, 3 and 5);
2. fund student research awards (conference presentation) in 2020, 2021 and 2022 (Objectives 2 and 3);
3. fund travel support (or registration for virtual conference in 2020) for students to attend national and international conferences in 2020, 2021 and 2022 (Objective 3);
4. support and promote the ASFB 50th anniversary at the WFC 2021 (Objective 4); and

ASFB has a strong history of structured and transparent Governance and decision making regarding allocation of funds and operating decisions. All Society decisions are ultimately made by the Executive Council and are communicated to all members and FRDC through newsletters and Annual General Meetings. Awards are determined on merit via the Education Committee (for all student awards) or a subset of the Executive Council for all non-student awards. Award criteria and nomination processes for each award are located on the Society's website.

The structure of this report addresses Objectives 1-5 by providing a summary of key aspects of each annual conference (and associated meetings and workshops) in turn. Following this, objectives 2 and 3 are further addressed by providing details of ASFB research and travel award recipients each year for 2020, 2021 and 2022. A description of the 50th Anniversary of ASFB at the WFC 2021 is also provided (Objective 4).

Results & Discussion

Operation of ASFB

The ASFB has been, and continues to be, a vibrant and dynamic Society that provides a forum for researchers, managers and stakeholders to meet and discuss issues relevant to fish and fisheries science and management in Australasia. Our membership as of 17th May 2023 is 446. This includes 13 Life Members, 123 Ordinary Members (1 year), 173 Ordinary Members (3 year), 16 Retired Members (1 year), 104 Student Members (1 year). This is an increase from 2021/2022 (432), and trending upwards. Over the period of this project, the Executive Council and operating committees were able to effectively and efficiently pivot to hold modified conference-style and networking events during the COVID-19 pandemic. This demonstrated both the need and the broader support of the Societies activities throughout its membership and in fish and fisheries science and management in Australia.

The Society's Executive Council has been actively managing all activities of the Society during the project period. Key items addressed during this period included:

- assisted in development and was a signatory on the need to take urgent action against human-caused Climate change (Statement can be found on ASFB website)
- resolution to run and manage an ASFB virtual conference in 2020 (after postponement of WFC in 2020)
- input into operations and management of WFC 2021
- ASFB 50th celebrations
- retention and attraction of members, including a survey of member needs
- consideration (and approval) of ethical banking changeover
- establishment of Google drive set up for ASFB operations
- revamp of ASFB website
- consideration and establishment of a new Fish Welfare Committee
- consideration of Diversity, Equity and Inclusion across ASFB business
- review of non-student award criteria
- increase in social media profile through Facebook and Twitter posts
- active member of STA and World Council of Fisheries Societies

Where possible during this Covid-19 dominated period, ASFB continued to hold State and Territory-based events (e.g. Tasmania fish in the pub, WA lawn bowls and presentation evenings, Qld online catch-up and Christmas gatherings). Many of our members are also actively engaged in the operation and meetings of our committees (fisheries management, education, threatened species, fish welfare and alien fishes).

The Executive Council conducted a survey of members in 2022. When asked what was your primary reason for being a member, the answer was clear—"Our valuable conferences!", with "Keeping my network active" and "Establishing or expanding my network" rounding out the top three choices.

We also asked members about how we can improve ASFB services with the top ranked responses being :

- 1) increase collaboration pathways to contribute samples and answer question (67%),
- 2) increase networking opportunities, including local social events (60%).

Other options supported were:

1. future in-person workshops/events like writing retreats or to work on special skills (57%),
2. a contact directory with skills & expertise in the Members Only section of the website (57%), and
3. sharing more job opportunities (54%).

Our ASFB Executive also reflects the diversity of our Society and specifically includes student representative roles. Our Future of the Society Committee has provision for 2-3 early career or student members to ensure this cohort's opinions and perspectives are properly considered in discussions. In the recent member survey, over 50% of respondents considered themselves student or at the early career researcher or manager stage.

The Executive Council will consider these outcomes and continue to develop these ideas into the future. More information about the survey can be found in the July 2022 issue of *Lateral Lines*, the newsletter of ASFB.

Student and early career awards: Early career researchers are supported, encouraged and their achievements recognised through the many awards and other Society support geared towards students and ECRs. The conference student awards scheme (John Lake and Gilbert Whitley) that recognises excellence in oral and poster presentations at the annual conference. ASFB's Education Committee administers the awards; at each conference a panel of judges is appointed, and presentations are graded against a series of criteria. Presentations are made at the annual conference and awards are in the form of a cash prize (currently four awards, each valued at \$600). The Society also supports two dedicated ECR awards (Early Career International Travel Scholarship, value up to \$3000; and ASFB Early Career Excellence Award, no monetary award) and four research support awards ([see website](#)).

Student and ECR awards are actively promoted by the Society though its membership and interest is high. These are prestigious and highly competitive awards. Award winners are acknowledged at the annual meeting, on the Society's webpage and in the ASFB newsletter.

Furthermore, providing opportunities for students and early career researchers to present research, exposure to other research activity and interaction with peers represent important aspects of career development. Tangible outcomes include constructive feedback on research, building of networks and developing science collaborations.

2020 - 2022 ASFB Conferences

The annual ASFB conference provides an important forum for researchers, managers and stakeholders to meet and discuss issues relevant to fish/fisheries science and management. Between 150 and 300 delegates generally attend these events, which focus on the latest research and management findings. In addition to providing opportunities for information exchange and feedback from peers, networking and building partnerships are seen as benefits of the conference and any associated workshops.

The postponement of WFC 2020 due to the COVID-19 pandemic resulted in ASFB moving quickly to plan a virtual conference geared towards students, in place of a full conference, which was held in October 2020. The 2021 conference was held in conjunction with the World Fisheries Congress in Adelaide, again this event was held virtually and ASFB had significant input into the development and operations of the Congress. The 50th year anniversary celebration for the Society was also held at the WFC in 2021, with activities to both promote our Society and the fantastic achievements in fish and fisheries in Australia and New Zealand over this period. The 2022 conference, initially planned as a

joint conference with Indo-Pacific Fish Conference in Auckland, New Zealand, was postponed to 2023 due to the lingering international travel restrictions of COVID-19. The ASFB Executive decided to support a face-to-face ASFB conference, which was held on the Gold Coast, Queensland from 6-10 November 2022.

Details of all three conferences can be found below.

ASFB VIRTUAL CONFERENCE 2020: Conquering Challenges: Risks and Rewards



The 2020 conference was ASFB's first ever virtual conference, born of the flames of COVID-19 and due to the postponement of the WFC 2020 to 2021. ASFB Executive Council recognised the need for ASFB to hold some form of conference for its members in 2020; and although the risks were high, the rewards were unforeseen and continue to be seen.

The conference was held online from 13 to 15 October 2020. The conference attracted 187 delegates in total; comprising 176 from Australia, 5 from New Zealand and 6 from the Northern Hemisphere. The focus was on providing an opportunity for postgraduate students to develop and stay in touch with ASFB networks and have a conference opportunity during the pandemic. A combination of short format (3 minutes) and traditional presentations were delivered, with the focus on student and ECR presentations. The program also included three outstanding plenary speakers, with the online platform enabling us to link in overseas and Australian presenters of an exceptional quality. (see below for program details)

The program was delivered across the three half-days, being placed in the middle of the day around the eastern Australian seaboard working day and also to enable convenient access to New Zealand and Western Australian members, due to time differences. The organising committee for this event did an absolutely outstanding job delivering this event in extremely challenging and novel circumstances.

Registration for the event was free to all members; with the costs of the event born by ASFB. The event proved to be a resounding success, with the Society learning how to engage in online platforms, particularly chat functions and plenary session delivery that are key learnings for future events.

Conference Organising Committee

Brenden Ebner (Chair)

CSIRO Atherton & James Cook University

Alison King (President)	La Trobe University
Jason Thiem	NSW DPI
Stacy Bierwagen	James Cook University
Steve Beatty	Murdoch University
Charles Todd	Arthur Rylah Institute
Chris Bice	PIRSA-SARDI
Leanne Currey-Randall	AIMS
Josh Fielding	FRDC
Ruby Hatfield	ASN Events
Lieve Belsack	ASN Events

Sponsorship

The major sponsor of the event was the FRDC, with additional sponsorship from the Murray-Darling Basin Authority, NSW Department of Primary Industries (Fisheries), TropWATER. Centre for Sustainable Aquatic Ecosystems, James Cook University and the Harry Butler Institute, Murdoch University also generously contributed to student prizes.

Event Program

The event [program](#) and [abstracts](#) are available on the ASFB website and in Appendix 2.

Event Report

The conference was formally opened by ASFB President Dr Alison King.

The focus of the event was on providing an opportunity for students to stay in touch with networks and have a conference experience during the limited time frame of their studies. Attendance of the event was free for all ASFB members. Over 50 early career presentations were given using both short format (3 minutes) and traditional presentations (15 minutes), and this created excellent continuity across the three half-days. Graphical abstracts were presented instead of posters. The student presentations were of a high standard with many relating to climate change and fisheries. The chat function allowed for a flow of questions and positive feedback from the floor.

The virtual environment also enabled us to attract high profile keynote speakers, such as Dr Beth Fulton, Prof Emma Johnson and Prof Karin Limberg, and early career presentations from Dr David Harasti and Dr Rohan Booker. All keynotes were inspirational and highly praised by participants.

The cost of the ASFB Virtual Conference came mostly from general ASFB funds, as there were no registration fees, with some support received (\$6000 total) from last minute sponsors.

All student and Early career awards were presented at the 2020 Annual General Meeting on 20th October 2020 (see Research & Travel Awards section below).

Key Indicators

- 187 delegates attending conference

- Plenary speakers
 - Prof Emma Johnson: Science for policy and places: how to ensure our research has an impact.
 - Dr Beth Fulton: Why Australian Marine Science is critical
 - Prof Karin Limburg: Through the Heads of Fishes: Anthropogenic Impacts on Fishes Revealed by Otolith Chemistry
- 54 presentations

2021 WORLD FISHERIES CONGRESS



The 8th World Fisheries Congress was hosted from Adelaide, Australia from 20 to 24 September 2021. It was delivered as a fully virtual event allowing the international fisheries community to come together and exchange ideas at a time when travel was restricted due to the COVID-19 pandemic.

The World Fisheries Congress 2021 (WFC2021) was led by the South Australian Government (Department of Primary Industries and Regions – PIRSA, including the South Australian Research and Development Institute – SARDI) in partnership with the Adelaide Convention Bureau and the Adelaide Convention Centre, and with support from the ASFB, FRDC, and industry and government agencies from other jurisdictions in Australia and New Zealand. ASFB members were highly active members of the overall Congress Steering committee, and Education and Communications committees associated with the successful WFC 2021.

In total, the Congress delivered over 800 presentations, covering a broad range of topics critical to the future of fisheries, and attracted 1,166 delegates from 60 countries. The Congress provided an opportunity to reflect on how much has changed since the first World Fisheries Congress was held almost 30 years ago, as was evident by the developments and thought-provoking work presented and discussed over the week of the Congress. The Congress also highlighted the many issues that remained, as well as identified new issues that have emerged. Importantly, discussions and presentations indicated that despite the persistence of some issues, we have advanced our thinking and actions and are moving forward in the right direction. Every session and presentation were recorded and will remain available on the WFC2021 virtual portal for six months post congress. Plenary presentations and presentations of student award winners have been made publicly available on the WFC2021 website.

Conference Organising Committee

Specifically for ASFB members and Broadly for the WFC organising committee:

WFC Conveners in Adelaide, Australia:

Gavin Begg (Chair of organising Committee)	PIRSA
Jane Ham (Chief organiser)	PIRSA

Steering Committee and International Program Committee (Australia) (ASFB members):

Alison King (President)	La Trobe University
Stephen Balcombe (Past President)	Australian Rivers Institute
Stephen Beatty	Murdoch University
Bronwyn Gillanders (Past President)	The University of Adelaide
Alistair Hobday CSIRO Hobart	
Chris Izzo	FRDC
Tim Ward	PIRSA-SARDI
Keith Rowling	PIRSAI
Ann Preece	CSIRO
David Smith	CSIRO
Peter Thompson	CSIRO

Communications (Australia):

Andrew Katsis (ASFB Communications Manager)	ASFB
---------------------------------------------	------

Education Committee (Australia):

Steve Beatty (Chair)	Murdoch University
Stacy Bierwagen	James Cook University
Jason Thiem	NSW DPI
Victoria Camilieri-Asch	Queensland University of Technology
Laura Smith	The University of Queensland
Brendan Ebner	CSIRO Atherton & James Cook University
Leanne Currey-Randall	Australian Institute of Marine Science
Lachlan Fetterplace	University of Wollongong,
Chris Hallett	Murdoch University,
John Morrongiello	University of Melbourne,
Katie Ryan	Murray-Darling Basin Authority

Numerous ASFB members also volunteered as session chairs.

Sponsorship

Foundation sponsor

- Government of South Australia (PIRSA, SARDI)
- Adelaide Convention Bureau
- Adelaide Convention Centre
- Fisheries Research & Development Corporation (FRDC)

Premium Congress Sponsor

- Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- National Oceanic and Atmospheric Administration (NOAA)

Major Congress Sponsor

- Austral Fisheries

Premium Congress Support Sponsor

- Victorian Fisheries Authority

Welcome Reception Sponsor

- Australian Government – Australian Fisheries Management Authority

Student Mixer Sponsor

- Australian Society for Fish Biology (ASFB)

Congress Sponsor

- International Council for the Exploration of the Sea (ICES)
- Minderoo Foundation
- Queensland Government - Department of Agriculture & Fisheries QLD

Congress Support Sponsor

- BDO Adelaide
- The Government of New South Wales - Department of Primary Industries
- The University of Adelaide – Environment Institute
- US Geological Survey, National Climate Adaptation Science Center
- Victoria Fisheries
- Western Australian Government - Department of Primary Industries and Regional Development (DPIRD)

Session Sponsor

- Fisheries New Zealand (sponsored four sessions)
- John Wiley & Sons Ltd
- Minderoo Foundation
- National Institute of Water & Atmospheric Research Ltd (NIWA)
- Northern Territory Government – Northern Territory Department of Industry, Tourism & Trade
- Queens University Belfast / Fisheries Society for the British Isles (FSBI)
- Seafood New Zealand
- Victorian Fisheries Authority

Student Competitions Award Sponsor

- Australian Society for Fish Biology (ASFB)
- Fisheries Research and Development Corporation (FRDC)
- Harry Butler Institute, Murdoch University

Event Program

Theme 1 - Sustainable fisheries (assessment, regulation, enforcement)

1. Coastal fisheries
2. COVID – impact on fisheries
3. Data poor fisheries
4. Fisheries monitoring in support of sustainable fisheries
5. Illegal fishing
6. Indigenous fisheries
7. Monitoring and management of freshwater-dependent fish and fisheries
8. Management strategy evaluation and harvest strategies
9. Recreational fisheries
10. Resource allocation and co-management
11. Small Scale Fisheries – basket case or benefit basket'
12. Stock assessment and modelling
13. Sustainable Development Goals
14. Sustainable fisheries – recovering and overfished stocks

Theme 2 - Fish and aquatic ecosystems (biodiversity, conservation, ecosystem function, integrated management)

15. Biology and ecology
16. By-catch, habitat and depredation
17. Climate change
18. Conservation

19. Ecosystem-based fisheries management
20. Ecosystem-based and integrated ocean management
21. Anguillid eels
22. Environment and fisheries
23. Non-native species – impacts and management
24. Sharks and rays

Theme 3 - Fisheries and society (contributions to sustainable development)

25. Communications
26. Feeding the world – food nutrition, safety and waste
27. Global challenges – social licence, pollution, and international fisheries
28. People - women in fisheries, workforce, investment, safety and building capacity

Theme 4 - Future of fish and fisheries (innovations in fisheries)

29. Advances in fishing vessels and fishing gear
30. Biomarkers in calcified structures
31. Emerging technologies, machine learning and big data
32. Future of fisheries
33. Integration of genomics in fisheries management and aquaculture
34. Supply chains, traceability and marketing

The program included:

Welcome to Country – a traditional Aboriginal ceremony undertaken by the Kaurna people – the traditional owners and custodians of Adelaide and the Adelaide Plains.

Welcome – Official welcome from Chair of the WFC2021; President of the WCFS; and representatives of the Australian and South Australian Government.

Opening Address – 30-minute presentation during the opening session.

Plenary presentations – two 40-minute presentations (including time for Q&A) scheduled each day.

Live streamed sessions (3 concurrent sessions) – 1.5-to-2-hour sessions, each focused on one of ~30 key topics that featured 3-5 (12 minute) presentations followed by a 30–60-minute Q&A panel discussion (~6-8 panellist). The audience submitted questions to panellists via the Q&A forum on the WFC2021 virtual portal, which were relayed to the panel via a session Chair. Three concurrent live streamed sessions were scheduled to start early in the morning and run late into the evening (Australian Central Standard Time) to overcome some of the time zones issues associated with an international congress.

Virtual sessions (4 concurrent sessions) – pre-recorded presentations followed by a live Q&A discussion involving all presenters from the session. The audience submitted questions to panellists via the Q&A forum on the WFC2021 virtual portal that were relayed to the panel via a session Chair. This component of the program was initially scheduled to be face-to-face when the Congress was running as a hybrid event and expanded to include as many presenters participating online as possible when the Congress moved to fully virtual.

Presentation Gallery – pre-recorded presentations housed in the WFC2021 virtual portal that could be viewed at any time. A discussion forum attached to each presentation allowed delegates to submit questions and presenters to respond. Questions and answers could be viewed by all delegates.

Workshops – virtual workshops were included in the program.

Plenary presentations were delivered by:

- Prof Toyoji Kaneko (University of Tokyo), presenting on behalf of the winner of the International Fisheries Science Prize, Prof Katsumi Tsukamoto (University of Tokyo),

‘Searching for answer in rivers, estuaries and the sea: the research career of Prof Katsumi Tsukamoto’.

- Prof Manuel Barange, Director of the Fisheries and Aquaculture Policy and Resources Division at the Food and Agriculture Organisation in Rome, Italy, ‘Blue transformation: safeguarding the contribution of fisheries and aquaculture to the food and nutrition security of 10 billion people’.
- Dr Meryl Williams, over 40 years’ experience in fisheries, aquaculture, conservation and human development having been the Director General of Worldfish, Director of the Australian Institute of Marine Science and Executive Director of Rural Sciences (Australia), ‘What happened to women as fisheries boomed?’.
- Dr Beth Fulton, Principal Research Scientist with CSIRO Ocean and Atmosphere, Australia, ‘Managing for status does not deliver structure’.
- Prof Nicholas Mandrak, Director of a professional Master’s program in Conservation and Biodiversity at the University of Toronto, presenting join research on behalf of Prof Olaf Weyl who was a Chair and Chief Scientist at the South African Institute for Aquatic Biodiversity, ‘Ten research questions to support fisheries management in South Africa’.
- Prof Ratana Chuenpagdee, Memorial University of Newfoundland, St John’s Canada, ‘Small-scale fisheries sustainability: progress and challenges’.
- Ms Kerstin Forsberg, Founder and Director of Planeta Océano, a Peruvian non-profit organisation empowering coastal communities in marine conservation through research, education, policy and sustainable development efforts, ‘Participatory and multidisciplinary strategies for sustainable fisheries and marine conservation’.
- Mr Martin Exel, Austral Fisheries and Managing Director of SeaBOS, a collaborative venture between 10 of the world’s largest seafood businesses, and the Stockholm Resilience Centre in Sweden, ‘Innovative approaches for sustainable seafood production – why do things differently?’
- Mr Matt Osborne is a Kurna and Narungga man and has extensive experience in Indigenous fisheries. Program Leader, Aquaculture and Regional Development in Northern Territory Fisheries ‘How indigenous fishing can enrich the national image of the fishing industry’.

Event Report

A summary conference program is provided above and a full conference report is available on the [WCFS website](#) and on the [ASFB website](#).

Report on ASFB led activities during the congress

ASFB members were active in the organisation and delivery of WFC 2021. The Congress attracted 1,200 registrations from over 60 countries. More than 800 presentations were given, covering a broad range of topics critical to the future of fish and fisheries. A highlight of the WFC2021 virtual platform were the live Q&A and discussion sessions after the presentations.

ASFB Education sub-committee led and ran the WFC Education committee for the WFC 2021 event, this included running a student mentoring session, a student mixer, and organising and presenting both event specific WFC student awards, and ASFB student and Early career awards.

Student awards at the WFC aimed to encourage students to present their work to an international audience and to consider different ways of presenting their science:

- ASFB Graphical Abstract Award Junior and Senior (Sponsored by ASFB and FRDC)

- World Fisheries Congress Video Competition Award (Sponsored by Harry Butler Institute, Murdoch University)
- ASFB Video Competition Award (Sponsored by ASFB and FRDC)
- World Fisheries Congress Speed Talk Presentation Award (Sponsored by Harry Butler Institute, Murdoch University)
- ASFB Speed Talk Presentation Award (Sponsored by ASFB and FRDC)
- World Fisheries Congress Oral Presentation Award (Sponsored by Harry Butler Institute, Murdoch University)
- ASFB Oral Presentation Junior and Senior (Sponsored by ASFB and FRDC)

Winners of ASFB awards are listed in Research & Travel Awards (section below).

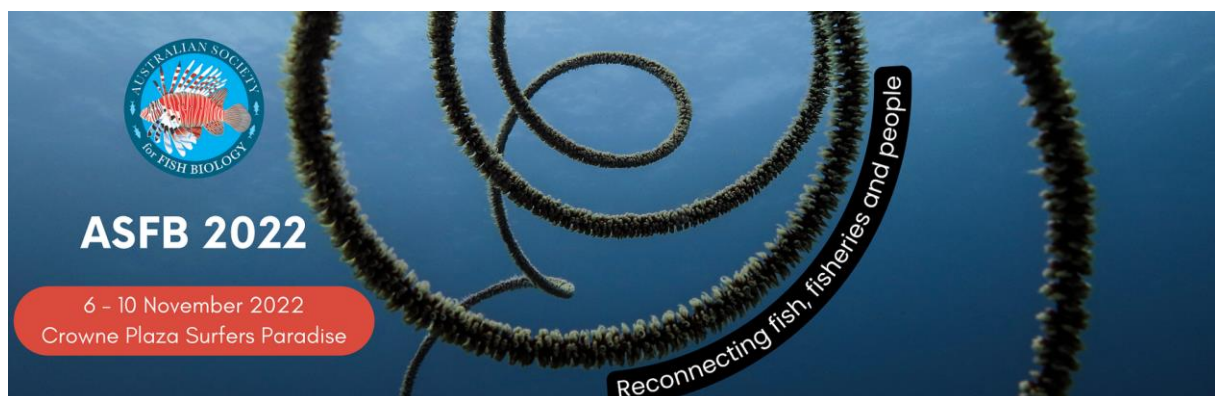
ASFB hosted a mentoring program and Student Mixer at the WFC. The Mentoring Program aimed to connect students with mentors in the early stages of the Congress to foster a valuable mentoring relationship and increase networking opportunities throughout the Congress. The student mentoring program was an opt in program, with mentors and students opting to be involved at the time they registered.

The Student mixer, held on day 1 of the WFC program, aimed to encourage students from all over the globe to connect and network with each other. Feedback from both events was very supportive and encouraging and future WFC's will now be trying to continue this activity.

Key Indicators

- 1166 delegates from over 60 countries attended conference
- Nine plenary speakers (see above for names and presentation titles)
- Over 800 presentations

ASFB CONFERENCE 2022: Reconnecting Fish, Fisheries and People



The ASFB Executive and the IPFC-ASFB organising committee decided in mid-2021 to postpone the planned 2022 conference until 2023. This decision was based on travel restrictions due to COVID-19 into New Zealand (and out of other countries), uncertainty about future travel and funding restrictions, and general unwillingness of people to undertake extensive air travel. This was reported to FRDC at the time of the decision.

The joint IPFC-ASFB conference will now be held in Auckland, New Zealand from 20-24 November 2023. The IPFC-ASFB organising committee, led by Prof. Gerry Closs reconvened in September 2022 to continue conference planning. The conference website is available at <https://www.ipfc11-asfb.ac.nz/>.

The ASFB 2022 conference was held on the Gold Coast, Queensland from 6-10 November 2022 (<https://www.asfb.org.au/asfb-2022>). The conference's theme, *Reconnecting fish, fisheries and people*, had its genesis in the tough covid-induced challenges we experienced over 2020-2022.

The conference was extremely well attended and received by the ASFB community, with over 270 delegates attending the event.

The scientific program included broad, encompassing themes such as Community; Change; Extreme events; Techniques, technology and tools; Physiology, cell processes and health; Helping hands; Species and Populations; Scales; Connectivity and movement; and Sensory ecology and behaviour. Talks covered important timely research on the effects of recent bushfires, understanding the growing impact of recreational fisheries, how we can make the most of emerging innovations, and aiding native fish recovery and creating fish-friendly infrastructure, to name a few topics.

Conference Organising Committee

Leanne Currey-Randall (Chair)	Australian Institute of Marine Science
Mischa Turschwell (Chair)	Griffith University
Samuel Williams	Department of Agriculture and Fisheries, Qld
Alexandre Siqueira	James Cook University
Robert Streit	James Cook University
Jennifer Donelson	James Cook University
Nesa Nur Un	James Cook University
Bonnie Holmes	University of the Sunshine Coast
Johan Gustafson	Griffith University
Adam Downie	University of Queensland
Tiffany Sih	ASFB Secretary
Kaitlin O'Mara	Griffith University
Joel Williams	University of Tasmania
Brendan Ebner	NSW Dept of Planning and Environment - ASFB Workshop Coordinator
Ryan Keightley	Department of Agriculture and Fisheries, Qld - ASFB Fisheries Management Committee representative
Laura Smith	University of Queensland
Marta Panero	James Cook University
Jon Aquino	James Cook University
Jason Theim	NSW DPI - ASFB Education Committee Representative
Stacy Bierwagen	Australian Institute of Marine Science - ASFB Education Committee Representative

Sponsorship

Platinum sponsorship by Queensland Government (Fisheries Queensland), Silver sponsorship from Griffith University with Workshop sponsorship by IMOS Integrated Marine Observing System and Innovasea. CSIRO sponsored the plenary sessions. NSW Department of Primary Industries sponsored the Recreational Fisheries session. The Reef-Off was sponsored by the Australian Institute of Marine Science. SpotX sponsored the Techniques, Technology and Tools session. Exhibitor sponsors included:

CLS Oceania, InfoFish Australia, Global Wetlands Project, E-fish Fish Survey Solutions, the Victorian Fisheries Authority, Wildlife Computers and Austral Research and Consulting.

Event Program

See conference program in Appendix 4 and on the [ASFB website](#).

Event Report

The conference was formally opened by Leanne Currey-Randall and Mischa Turschwell (Conference Chairs) with a Welcome to Country by Uncle John Graham, followed by a welcome address from ASFB President Dr Gretchen Grammer. Uncle John Graham, a Kombumerri man and a saltwater man of the Gold Coast part of the wider Yugambeh Language Group and traditional custodian of the Gold Coast region, spoke about the tales of sea mullet migrations that went as far as the eye could see and so densely packed with mullet you could just about walk on them.

The conference program included a diverse selection of plenary speakers from all career levels and also highlighted ASFB award winners from previous years 2020 and 2021. Plenary speakers included Rod Connolly, Gretta Pecl, Marian Wong, Gavin Butler, Katherine Cheshire, Michael Hammer, David Shoeman, ECR Award winners Curtis Champion and Zeb Tonkin, and Student International Travel Award winner Charlotte Birkmanis. The plenaries covered a diversity of topics relevant to the marine and freshwater space, followed by informative paired Q&A sessions. Ten plenaries presented on: social structure and behaviour; (musical) advancements in AI with fish surveys; what are the consequences of tropicalisation; sharks and outreach; connections; adventurous career paths; without taxonomy there is total chaos; freshwater fish ecology; predicting climate change effects on distributions; and trying to find where all the large fish have gone.

The conference activities included the first hybrid (in-person and online) ASFB Annual General Meeting, associated Executive Council meetings, a popular Student Trivia event hosted at the Broadbeach Surf Club, poster event, well attended student poster session, the engaging “Great Reef-Off debate” with Team Great Barrier Reef vs. Team Great Southern Reef and “Older” and “newer” freshwater fish research debate. There were pre-conference workshops on otolith techniques, animal tracking and animal welfare, with plenty of engagement and exchange of information. The Special session on Recreational Fisheries and the science communication session were a highlight. Several auxiliary meetings were held during the conference including ASFB sub-committees (Fish Welfare, Fisheries Management, Threatened Species, Alien Fishes) and other fisheries organisations. The Education committee coordinated the judging of posters and student presentations. The program included a free afternoon for beach activities where ASFB2022 one-of-a-kind beach towels were on show, before culminating in the Conference dinner with “Outrageous Aquatic” theme complete with costumes and a lively band.

Key Indicators

- 272 of delegates attended the conference from all Australian states plus New Zealand and 8 other countries
- Ten plenary speakers presented:
 - Invited Plenary 1: Rod Connolly, Fish-n-Chips: supercharging fisheries science with computer vision

- K Radway Penary: Gretta Pecl, Connections over scales and disciplines to support transformation of marine socioecological systems
- ECR Excellence Award Plenary (2021): Curtis Champion, Aspects of seafood vulnerability to climate change
- ECR Excellence Award Plenary (2020): Zeb Tonkin, Linking processes to populations to understand the drivers and dynamics of freshwater fish populations in south-eastern Australia
- Invited Plenary 2: Marian Wong, Environmental disturbances and their dynamic impacts on the social behaviour of marine and freshwater fishes
- Invited Plenary 3: Gavin Butler, Reproductive behaviour of the Murray cod (*Maccullochella peelii*) in the wild
- Invited Plenary 4: Katherine Cheshire, Charting recovery during extreme and uncertain times - the role of science, leadership and a diversity of voices
- Invited Plenary 5: Michael Hammer, Taxonomy as the foundation and synapses for fish biology
- Invited Plenary 6: Charlotte Birkmanis, Sharks and where to find them
- Invited Plenary 7: David Schoeman, Tropicalisation and the homogenisation of global marine biodiversity: observations, projections and implications
- 192 talks, 21 posters and four concurrent sessions

50TH ANNIVERSARY OF ASFB

ASFB is turning 50!



We joyfully celebrated ASFB's 50th anniversary at WFC 2021, even through the challenges of COVID. The event was attended by over 100 members and enabled us to share memories and stories of our Society over the years. The Society developed a [special 50th Anniversary page](#) on our website where members could post memories and stories. This page showcased some of the Society's significant achievements over the last 50 years and collectively provided members and the public with a great resource to reflect on and celebrate ASFB.

Prior to the online event to celebrate the Society's 50th Anniversary, the Executive Council of ASFB formed a small working group to develop and promote events and activities to help celebrate and promote ASFB's 50th Anniversary. Activities include:

- feature article in FRDC Fish Magazine (June Vol 29 (2)),
- establishment of a website to collate and share stories, images and successes of ASFB (<https://www.asfb.org.au/asfb-50th-anniversary>),
- design and establishment of 50th anniversary merchandise for purchase (<https://www.asfb.org.au/50th-anniversary-merchandise>)
- planning for an ASFB 50th celebration event at the WFC

The 50th celebration working group included: Brendan Ebner (Chair), Jonah Yick, Charles Todd, James Shelley, Andrew Katsis, Martin Gomon, Tiffany Sih, Maggie Watson, Karissa Lear, Gretchen Grammer, Alison King.

The legacy of this event is evident on the ASFB website. It gave our Society a chance to reflect on our past, celebrate what we are now, and envision a future.

RESEARCH & TRAVEL AWARDS

ASFB 2020 Student award recipients and sponsors

All student and Early career awards were presented at the 2020 Annual General Meeting on 20th October 2020 (see table below).

Award	Winner (Title) [award value]	Sponsored By
Early Career Excellence Award	Dr. Zeb Tonkin (Arthur Rylah Institute) for contributions to understanding the role of climate and hydrology on key population processes of freshwater fish, especially in the Murray-Darling Basin.	ASFB
Early Career international Travel Award	Dr. Vincent Raoult (The University of Newcastle) [\$3,000]	ASFB
John Lake Graphical abstracts **Runner-ups were offered as additional awards during the 2020 conference to maximise support for members, while John Glover travel awards could not be distributed due to the 2020 COVID-19 pandemic [Awarded at Annual conference for presentation]	Senior: Yi-Yang (Alex) Chen (PhD - Australian National University). Invertivorous fishes and their foraging microhabitat preferences can influence macroalgal epifaunal productivity in tropical marine ecosystem. [\$1,200] Senior Runner-Up: Paula Sgarlatta (PhD - University of NSW). From temperate to tropical: what are the impacts of tropicalisation on shallow reef fish communities and their dietary sources? [\$600] Junior: Alysha Chan (MSc - Macquarie University). Sighting trends, environmental influences and feeding ecology of Australian cownose rays (<i>Rhinoptera neglecta</i>) in temperate waters. [\$1,200]	FRDC

	Junior Runner-Up: Tristan Guillemin (MSc - Macquarie University). Deciphering the trophic ecology of marlin using stable isotopes in eastern Australia. [\$600]	
<p>Gilbert P. Whitley Memorial Student Award</p> <p>** Runner-ups were offered as additional awards during the 2020 conference to maximise support for members, while John Glover travel awards could not be distributed due to the 2020 COVID-19 pandemic</p> <p>[Awarded at Annual conference for presentation]</p>	<p>Senior: Alexandre Siqueira (PhD - James Cook University). Trophic innovations fuel reef fish diversification. [\$1,200]</p> <p>Senior Runner-Up: Matthew Holland (PhD - University of NSW). Dynamic distributions of temperate forage fish at multiple spatio-temporal scales. [\$600]</p> <p>Junior: Clement Mg (Hons - University of Melbourne). Drivers of latitudinal variation in snapper growth along the east and west coasts of Australia. [\$1,200]</p> <p>Junior Runner-Up: Sophie Dolling (Hons - University of Adelaide). Quantification of plastic-associated chemicals in commercial Australian fish. [\$600]</p>	FRDC
<p>Barry Jonassen Award</p> <p>[Awarded to support research on freshwater fish biology or fisheries]</p>	<p>Winner: Monique Parisi (University of Queensland). Causes and consequences of hypoxia as a barrier to fish movement in the northern Murray-Darling Basin. [\$2,000]</p> <p>Runner-up: Hung Tan (Monash University). Effects of the pervasive chemical pollutant caffeine on freshwater fish. [\$1,000]</p>	ASFB
<p>Michael Hall Student Innovation Award</p> <p>[Awarded to support innovative research in marine fish biology]</p>	<p>Winner: Jessica Bolin (University of the Sunshine Coast). Forecasting body condition of swordfish in a hotspot of marine climate change: a tool for dynamic industry adaption. [\$2,000]</p> <p>Runner Up: Carolyn Wheeler (James Cook University). A novel approach to investigate reproduction in a model shark species threatened by ocean warming. [\$1,000]</p>	ASFB
<p>Video Competition in Science Communication</p> <p>[Awarded at Annual conference for video presentation]</p>	<p>CiSC Senior. Nur Un Nesa (James Cook University). Redclaw Fertility. [\$2,000]</p> <p>Members Choice. Marta Panero (James Cook University). Gorgonian and ecological interactions with fish assemblages, and responses to their decline in health in Orpheus Island, Australia and in Kimbe Bay, Papua New Guinea. [\$2,000]</p>	Harry Butler Institute
<p>Student International Travel Scholarship</p> <p>[awarded to support a student to present an oral</p>	Charlotte Birkmanis. (University of Western Australia). "Shark conservation hindered by lack of habitat protection" published in the journal Global Ecology and Conservation [\$3,000]	ASFB

paper at an international conference]		
Speed talk awards were included to maximise the number of awards available to students in the absence of travel support being required.	<p>Senior: Jennifer Smith (PhD - UTAS). Lose Home or Eat More: can lobsters help conquer the challenge of range expanding, barren-forming sea urchins in Tasmania? [\$1,200]</p> <p>Senior Runner-Up: Mariah Millington (PhD – Griffith University). Fishing in the dark: Lack of eco-labelling leaves consumers unaware. [\$600]</p> <p>Junior: Jack Orford (Hons - Monash University). How fish become the top dog an investigation into the causes of dominance in the humpback limia. [\$1,200]</p> <p>Junior Runner-Up: Ashlen Campbell (Hons – University of Melbourne). Hot and Cold: A meta-analysis comparing impacts of thermal pollution on freshwater fish life history. [\$600]</p>	FRDC
John Glover Travel Fund Bursaries	*** The value for John Glover in 2020 was distributed into the other awards to boost their value as no conference travel took place.	

Value of student awards (FRDC contribution)

GP Whitley awards	\$3,600
JS Lake awards	\$3,600
John Glover awards (modified as above)	\$3,600
Total	\$10,800

WFC2021: ASFB Student award recipients and sponsors

All student and Early career awards were presented at the 2021 Annual General Meeting on 23rd September 2021 (see table below).

Award	Winner (Title) [award value]	Sponsored By
Early Career Excellence Award	Dr Curtis Champion (NSW DPI Fisheries) for research that has resulted in tangible on-ground actions and policy initiatives to improve the management of fish and fisheries, particularly centred on the challenges of climate change.	ASFB

Early Career international Travel Award	not awarded in 2021	-
John Lake Graphical abstracts [Awarded at Annual conference for presentation]	Senior: Jessica Bolin (University of the Sunshine Coast). Forecasting swordfish quality in a climate-change hotspot: a tool for dynamic industry adaptation [\$600] Junior: Clement Ng (University of Melbourne). Contrasting drivers of snapper growth along the east and west coasts of Australia. [\$600]	FRDC
Gilbert P. Whitley Memorial Student Award [Awarded at Annual conference for presentation]	Senior: Kynan Hartog-Burnett (James Cook University). Ecology of reef based Clupeiforms affect stock structure. [\$600] Junior: Adrienne Gooden (Flinders University). Cagey behaviour: Using animal-borne video and machine learning to assess the effects of a non-lethal consumptive industry [\$600] Speed Presentation Senior: Mary Grace Sedanza (Nagasaki University). The sticky story of oysters. [\$600]	FRDC
Barry Jonassen Award [Awarded to support research on freshwater fish biology or fisheries]	Winner: Nur Un Nesa (James Cook University). Induction of gonadal maturation and egg release using hormones in redclaw crayfish (<i>Cherax quadricarinatus</i>) to facilitate intensive breeding for commercial juvenile production. [\$2,000] Runner-up: Patricia Koh (University of Melbourne). Environmental drivers of growth and local adaptation in non-native freshwater fish. [\$1,000]	ASFB
Michael Hall Student Innovation Award [Awarded to support innovative research in marine fish biology]	Winner: Molly Moustaka (University of Western Australia). Understanding how seascape configuration influences secondary productivity in coastal ecosystems. [\$2,000] Runner Up: Elliott Schmidt (James Cook University). Incorporating evolutionary perspectives into conservation: An assessment of local adaptation across the range of a coral reef fish. [\$1,000]	ASFB
Video Competition in Science Communication [Awarded at Annual conference for video presentation]	ASFB Video Competition Senior Award: Qiaz Hua (University of Adelaide). Krakening the Case of Climate Change [\$1,000]	Harry Butler Institute
Student International Travel Scholarship	not awarded in 2021	

[awarded to support a student to present an oral paper at an international conference]		
John Glover Travel Fund Bursaries	*** The amount allocated for the John Glover Bursaries in 2021 was distributed among 26 student to pay for registration to virtually attend the WFC 2021 [Total: \$7,800]	FRDC

Value of student awards (FRDC contribution)

GP Whitley awards	\$1,800
JS Lake awards	\$1,200
<u>John Glover awards</u>	<u>\$7,800</u>
Total	\$10,800

ASFB 2022 Student award recipients and sponsors

All student and Early career awards were presented at the 2022 Conference Dinner on 10th November 2022 (see table below).

Award	Winner (Title) [award value]	Sponsored By
Early Career Excellence Award	not awarded in 2022	ASFB
Early Career international Travel Award	Dr Emily Lester (AIMS) and Dr Curtis Champion (NSW DPI Fisheries) [\$3,000 each]	ASFB
Student International Travel Scholarship	Nina Wootton (The University of Adelaide) [\$3,000]	ASFB
John Lake Poster Award [Awarded at Annual conference for presentation]	Senior: Jessica Bolin (University of the Sunshine Coast). Forecasting swordfish quality for dynamic industry adaptation [\$600] Junior: Adrienne Gooden (Flinders University). Accelerometers and animal-borne cameras reveal behavioural plasticity in white shark predatory strategy. [\$600]	FRDC

<p>Gilbert P. Whitley Memorial Student Award</p> <p>[Awarded at Annual conference for presentation]</p>	<p>Senior: Hannah Calich (University of Western Australia). Investigating animal movement and behaviour with statistical physics methods: A primer for ecologists. [\$600]</p> <p>Junior: Zoë Ross (University of Queensland). Chronic hypoxia in the Murray-Darling basin: Can fish acclimate through physiological and behavioural plasticity? [\$600]</p>	FRDC
<p>Barry Jonassen Award</p> <p>[Awarded to support research on freshwater fish biology or fisheries]</p>	<p>Winner: Max Mallett (Griffith University). Hydro-ecological determinants of fish health. [\$2,000]</p> <p>Runner-up: Barbara Nuic Vidigal (University of Queensland). Improving Tasmanian Atlantic salmon production by enhancing antioxidant capacity with glutamine supplementation. [\$1,000]</p>	ASFB
<p>Michael Hall Student Innovation Award</p> <p>[Awarded to support innovative research in marine fish biology]</p>	<p>Winner: Juan Wang (University of Melbourne). Spawning in the rapidly changing ocean: developing an otolith-based tool to assess skipped spawning in wild fishes. [\$1,000]</p> <p>Runner Up: Jaelen Myers (James Cook University). Evaluating spatio-temporal distributions and behaviours of Estuary stingrays (<i>Hemitrygon fluviorum</i>) to understand fine-scale habitat use in intertidal estuaries. [\$2,000]</p>	ASFB
<p>John Glover Travel Fund Bursaries</p>	<p>Casey Bowden (QLD), Jasmine Cane (QLD), William Collins (QLD), Kynan Hartogg-Burnett (QLD), Pooventhuran Muruga (QLD), Nur un Nesa (QLD), Elliot Schmidt (QLD), Jaelen Meyers (QLD), Isabelle Ng (QLD), Megan Porter (NSW), Adrienne Gooden (SA), Irwan Jatmiko (TAS), Jennifer Smith (TAS), Katherine Ollerhead (TAS), Sam Armini (ACT), Patricia Koh (VIC), Alysha Chan (NSW), Gemma Walker (VIC) and Jessica Randall (VIC). [Total: \$8,970]</p>	FRDC
<p>One-off outstanding presentation on freshwater fish and fisheries</p>	<p>Patrick McSweeney (University of Technology Sydney). How much screen time is too much for baby golden perch?</p>	ASFB and Mark Lintermans

Value of student awards (FRDC contribution)

GP Whitley awards	\$1,200
JS Lake awards	\$1,200
John Glover awards	\$8,970
Total	\$11,370

Implications

The financial support ASFB receives from FRDC sponsorship is invaluable in its contribution to supporting networking opportunities within the fish and fisheries sector and recognition and enhancement of early career scientists and students.

FRDC sponsorship supports:

- ASFB awards and financial support for attendance,
- operations of the annual conferences that promote research excellence, extension of research findings (many projects funded by FRDC), enabling future research collaborations via delegates expanding their professional networks and training and mentoring of early career researchers, and
- increasing the international profile of our world-class Australasian fisheries science and management.

More broadly, stakeholder groups, resource managers, industry and the general community accrue benefit from the transfer of knowledge and technology that supports the health and sustainability of aquatic ecosystems and fishing industries.

Recommendations

This project successfully achieved all of its objectives. This is despite the impacts of the COVID-19 pandemic, with many objectives being focussed on conferences and networking events that had to be reimagined and operationalised during the pandemic years. ASFB has continued to grow and retain its role in promoting the science of fish and fisheries, and to provide a unique forum for the exchange of information and networking within our sector.

FRDC's continued support of ASFB is critical for the Society's survival and development into the future. Future goals of the Society include:

- Maintaining and enhancing membership across the fish and fisheries research and management sector
- Supporting our committees, particularly the newly developed Fish Welfare and Fisheries Management Committees
- Consideration and promotion of Diversity, Equity and Inclusion issues within ASFB and more broadly in our sector
- Expansion of First Nations inclusion in ASFB

Further development

There is no further development required for this project, all project activities for the period were completed. However, the ongoing support ASFB receives from FRDC is crucial to the functioning of ASFB, particularly in early career and student development, running of annual conferences and workshops, and capacity building.

Extension and Adoption

Communication & Extension Methods

Effective communication links are already established through the ASFB website, Facebook, Twitter, blog posts, membership mailing list and twice-yearly newsletter *Lateral Lines*. The *Lateral Lines* magazine is sent to members, as well as libraries, key research providers and sponsors of the Society. Our social media presence continues to grow, and we are currently one of the most 'liked' ecological/marine societies in the Australasian region.

Apart from promoting the annual conferences, including conference alert websites, the program of abstracts is made freely available as a downloadable document on the ASFB website. Promotion of conference events also occurs via print and digital media, highlighting workshop or symposium themes that have a high level of public interest. Student and non-student awards are actively promoted on the ASFB website, social media, newsletter and through the membership mailing list.

Communications activities occurred with:

- All ASFB members (newsletter, emails, website, social media)
- State and Federal Fisheries related Government Departments
- World Fisheries Society (ASFB one of founding members, regular meetings)
- Science and Technology Australia (including with CEO and Aquatic Cluster lead)
- American Fisheries Society (including with President and International chapter)
- National Research Providers Network
- NSW Fisheries Scientific Committee

ASFB's effective communication avenues have continued during this period through the ASFB website, Facebook, Twitter, blog posts, membership mailing list, twice-yearly newsletter, and through promotion through Executive Council members.

ASFB is actively promoting the 2023 annual conference and the 2024 World Fisheries Congress (Seattle, USA) across all communication avenues available to it.

Project materials developed

"Fish science 'incubator' celebrates 50 years" FRDC Fish Magazine, June 2021, Vol 29, Issue 2, P16-19. Article written by Melissa Marino. Contributions from ASFB members.

(<https://www.frdc.com.au/fish-vol-29-2/fish-science-incubator-celebrates-50-years>)

ASFB Newsletter “Lateral Lines”, Vol 51 (2) December 2021. 164 pages. Feature articles included: Breakthrough in spawning of sea cucumbers, Student spotlight, Arts and Science, ASFB Committee Reports

ASFB Newsletter “Lateral Lines”, Vol 52 (1) June 2022. 72 pages. Features included: Pedder galaxias population monitoring, ASFB member survey results, ASFB update on the National Research Providers Network for Fisheries and Aquaculture, Student spotlights, In memoriam (Richard Tilzey), ASFB Committee reports.

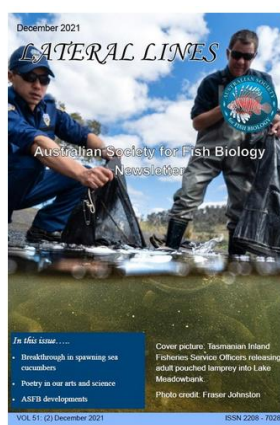
ASFB Newsletter “Lateral Lines”, Vol 52 (2) December 2022. 208 pages. Features included: A Tale of Boom and Bust in a Murray-Darling Basin wetland; The Great Reef Off: Great Southern Reef v Great Barrier Reef; ASFB conference write-up; State reports and committee reports.



December 2022



June 2022



December 2021



June 2021

ASFB Newsletter “Lateral Lines”, Vol 53 (1) June 2023. to be completed.

Program books were developed for all conferences. Programs are included as appendices and full booklets can be found on the ASFB website.

Appendices

APPENDIX 1: STAFF

Australian Society for Fish Biology Executive Council

Role	Name (organisation)	Term
President, Past President	Alison King (La Trobe University, CSIRO)	2019-2021 2021-2023
Vice President, President	Gretchen Grammer (SARDI)	2019-2021 2021-2023
Vice President	John Morrongiello	2021-2023
Treasurer	Lenore Litherland	2017-2021
Treasurer	Genevieve Phillips	2021-2023
Secretary	Charles Todd	2008-2021
Secretary	Tiffany Sih	2021-2023
Conference Coordinator	Brendan Ebner	2013-2023
Communications Manager	Isobel Lerpiniere Andrew Katsis	2023 2015-2023
Newsletter Editor	Nick Boucher	2020-2023
ACT representatives	Ben Broadhurst Hugh Allan	2008-2023 2021-2023
NSW representatives	Hayden Schilling Katherine Cheshire	2020-2023 2020-2023
NT representatives	Blake Taylor Joanne Randall Eliza Kimlin	2020-2022 2021-2023 2022-2023
NZ representatives	Nicholas Ling Gerry Close	2020-2023 2011-2023
QLD representatives	Mischa Turschwell Leanne Currey-Randall	2020-2022 2010-2023
SA representatives	Owen Burnell Erica Durante Troy Rogers	2020-2022 2021-2023 2022-2023
Student representatives	Laura Smith Marta Panero Nicki Duncan	2020-2022 2021-2023 2022-2023

TAS representatives	Jonah Yick Joel Williams	2020-2023 2021-2023
VIC representatives	Tiffany Sih James Shelley Emily Fobert Henry Wootton	2020-2021 2020-2022 2021-2023 2022-2023
WA representatives	Katherine Cure Daniel Yeoh	2020-2023 2021-2023

Appendix 2: 2020 ASFB Conference Program

See attached

Appendix 3: 2021 WFC Conference Program

The full conference report is available on the [WCFS website](#) and on the [ASFB website](#).

Appendix 4: 2022 ASFB Conference Program

See attached

FRDC FINAL REPORT CHECKLIST

The final report checklist can now be filled in when submitting your final report deliverable in [FishNet](#).