



ASFA MAGAZINE

AQUATIC SCIENCES AND FISHERIES ABSTRACTS MAGAZINE

ISSUE #5 December 2020



1971-2021: Celebrating 50 years of ASFA

In this issue, we celebrate ASFA's upcoming 50th Anniversary. ASFA was first published as a monthly printed journal of fisheries and aquaculture abstracts in 1971 and in this issue, we look back over ASFA's past, as well as looking at some of the plans in store for ASFA's future, namely OpenASFA, one of the most exciting developments in ASFA's lifetime. We also hear from ASFA Partner Coffi Ferdinando Rock GBEDO on how his

institution (Benin Institute for Fishery and Oceanologic Research) has been affected by COVID-19. The ASFA Impact and Strategies Group reports on a survey they undertook to assess the impact of the pandemic on aquatic science libraries worldwide, finding that although libraries have had to deal with staff and budget cuts, many have found innovative ways to help their communities during this time of crisis. Lastly, we hear from long

standing ASFA Partner Ian Pettman (Freshwater Biological Association, United Kingdom of Great Britain and Northern Ireland) who reflects on the changes to fisheries his home town of Hull has seen over the past 50 years, and also provides an interim project report on his institution's work to cover more Grey Literature for ASFA.





ASFAMAGAZINE AQUATIC SCIENCES AND FISHERIES ABSTRACTS MAGAZINE

ISSUE #5 December 2020

Food and Agriculture Organization of the United Nations and WorldFish Rome, 2021

Required citation:

FAO and WorldFish. 2021. ASFA Magazine #5 December 2020. Rome, FAO.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

© FAO, 2021



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original [Language] edition shall be the authoritative edition."

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization http://www.wipo.int/amc/en/mediation/rules and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

Third-party materials. Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

Sales, rights and licensing. FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org. Requests for commercial use should be submitted via: www.fao.org/contact-us/licence-request. Queries regarding rights and licensing should be submitted to: copyright@fao.org.

Cover Main Photo: © Freshwater Biological Association

Content

ASFA Partners Opuales	'
OpenASFA to launch January 2021	2
ASFA Timeline	3
Fifty years of ASFA: as told by the people who ensured its success	7
ASFA survey shows aquatic science libraries, impacted by COVID-19, are still able to help in their communities.	13
Impact of COVID-19 on the smooth running of activities in the Benin Institute for Fishery and Oceanologic Research (IRHOB)	15
Reflections on the Water – personal observations on 50 years of fishing from the docks of Hull	16
Virtual ASFA Advisory Board Meeting 2020	18
New year, new look: ASFA reinvented for 2021	19
How to increase variety of Grey Literature (GL) in ASFA: interim project report from the FBA	21
The ASFA CECAF-PESCAO project is underway	24
VNIRO and ASFA host virtual orientation session	25



ASFA Partners Updates

We are pleased to start this issue with lots of positive news! Despite the global situation, ASFA Partners have been very productive since the last issue of the ASFA Magazine and we wanted to highlight some of their achievements.

Kaviphone Phouthavong has been appointed as Deputy Director General of the Department of Livestock and Fisheries, the Lao People's Democratic Republic. Kaviphone has been a popular member of the ASFA Advisory Board since 2006 when the Lao People's Democratic Republic joined the partnership. Kaviphone regularly attends ASFA Advisory Board Meetings and the FAO ASFA Secretariat was fortunate enough to meet him last year at the FAO International Symposium on Fisheries Sustainability in Rome - the benefit of meeting in person is something we have all missed this year. Kaviphone has confirmed that despite his new appointment he will continue his ASFA activities. Thank you Kaviphone for sharing your expertise with ASFA!

Another popular ASFA Advisory Board member is Nikita Gaibor, Instituto Nacional de Pesca, the Republic of Ecuador. Since switching to teleworking, Nikita has produced a prolific amount of work, from teaching his online classes to undergraduate students at Universidad del Pacifico, to writing scientific articles, Nikita has been working long days and now feels busier than before the pandemic started. We wanted to use this article to highlight two of Nikita's research outputs that deserve special attention. The first, "Small-scale fisheries in a warming ocean exploring adaptation to climate change" was published in September this year by World Wide Fund for Nature (WWF) Germany. The study notes that climate change is expected to "rapidly become the main driver of change, globally in the ocean and locally for ecosystems and fisher's resources." It is worth remembering that problems such as climate change do not disappear just because the media spotlight is focused on COVID-19. Based on a number of workshops that took place with fishers, the study finds that changes associated with climate change, such as decrease in fish abundance and

the need to fish further from shore, are being reported worldwide. The study calls for stakeholder knowledge to be included in policy making decisions and deciding research topics – this is something ASFA can learn from and hope to meet stakeholder needs by expanding its network and listening to the voices of all aquatic science, fisheries and aquaculture stakeholders.

We would also like to highlight the following study, where Nikita was the lead author: Composition,



abundance and sources of anthropogenic marine debris on the beaches from Ecuador - A volunteer-supported study. This study involved more than 400 volunteers who sampled Anthropogenic Marine Debris (AMD) on 26 beaches in Ecuador and the Galapagos Islands. The results showed that AMD was mainly composed of plastics (more than 60 percent) and that most litter on continental beaches from Ecuador has local sources. Education and highlighting the need to reduce single use plastics will therefore help reduce AMD. At a time when connecting with nature is more important than ever in maintaining health, we must make sure we protect our environments by limiting the negative impacts we have on them. We are happy to have added both records to the ASFA database. Thank you Nikita for all your hard work to support science during pandemic!

Finally, last but definitely not least we would like to give our congratulations to Saida Messaoudi who was elected as the next International



Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) president at the organisation's recent conference. As anybody who read the previous issue of the ASFA Magazine will know, Saida has exemplary organisational skills and has shown her professionalism and expertise in managing a network by coordinating African Association of Aquatic and Marine Science Libraries and Information Centers (AFRIAMSLIC) activities. Saida is the first IAMSLIC president to be elected from Africa and comes at a time when ASFA and IAMSLIC are planning a number of joint activities and initiatives, for instance ASFA will play a role in the new AquaDocs repository, a result of a merger between IAMSLIC's Aquatic Commons and International Oceanographic Data and Information Exchange of the Intergovernmental Oceanographic Commission's (IODE/ IOC) OceanDocs. We feel certain Saida will help foster collaboration between ASFA and IAMSLIC and look forward to seeing Saida apply her skills to IAMSLIC where she will take up the presidency in 2023.

Author: Tamsin Vicary, Food and Agriculture Organization of the United Nations, Rome, Italy.

Email: Tamsin.Vicary@fao.org



OpenASFA to launch January 2021



ASFA is very excited to be launching OpenASFA in 2021, in time to celebrate its 50th Anniversary. After delays in starting development, we were very lucky that Tiziano Di Condina and Luca Berloco joined the ASFA team in September. Together with Anton Ellenbroek and Milos Vojar (Fisheries Information and Statistics, FAO), they form the A-team and have worked incredibly quickly to produce a test version of OpenASFA which the ASFA Software Working Group is providing feedback on. On schedule to launch in January next year, this article explains what to expect from OpenASFA.

What is OpenASFA?

OpenASFA is a database of bibliographic records available to search freely. Records on OpenASFA will be created by ASFA partners, collaborating centres and associates, who at present produce more than 10 000 records per year. In addition to partner records, we will also set up harvesting feeds from key repositories such as AquaDocs, which will greatly increase the number of records we curate, as well as avoiding duplication of effort for partners who use both systems. We will also be using OpenASFA to produce specialised collections, such as for the research identified as part of ASFA's support to the CECAF-PESCAO project (see page 24).

Records from OpenASFA will be exported to the full ASFA database which is published on the ProQuest platform. This database contains 3.7 million records and is available to subscribers, although ASFA partners, collaborating centres and associates receive free access in return for their contributions. If you are interested in joining ASFA or contributing to OpenASFA, please get in touch: Tamsin.Vicary@fao.org

Author: Tamsin Vicary, Food and Agriculture Organization of the United Nations, Rome, Italy. Email: Tamsin.Vicary@fao.org





YEAR

1972

12 446

1974

1976

13 967

1978

22 292

1980

26 239

1982 22 535

13 390

Partners joining ASFA 1971 Food and Agriculture Organization of the 5 837 United Nations; France - Institut Français de Recherche pour Number l'Exploitation de la Mer (IFREMER); of records added to Germany - Johann Heinrich von Thünen database Institut. Bundesforschungsanstalt für Fisherei (Ceased ASFA activities in 2016). **Event** :::: ASFA is born! The first issue of ASFA is published in July 1971. At the time, ASFA was a monthly abstracts journal with contributions from its founding partners, published by Information Retrieval Ltd (London, UK). In its first year, 5 837 citations were added to ASFA. 1973 13 094 Partners joining ASFA United Kingdom of Great Britain and Northern Ireland - Centre for Coastal and Marine Sciences/Plymouth Marine Laboratory (CCMS/PML), replaced by Freshwater Biological Association in 2015; United States of America – National Oceanic and Atmospheric Administration (NOAA). 1975 Partners ioining ASFA 13 925 Canada - Fisheries and Oceans Canada. 1977 16 877 Partners joining ASFA Portugal - Instituto Português do Mar e da Atmosfera (IPMA). 1979 24 238 1981 26 430



Partners joining ASFA

 Russian Federation – Russian Federal Research Institute of Marine Fisheries and Oceanography.



Partners joining ASFA

- International Oceanographic Data and Information Exchange of the Intergovernmental Oceanographic Commission (IOC/IODE);
- Japan Japan Fisheries Resource, in 1983 replaced by Conservation Association (JFRCA) and in 2001 replaced by Fisheries Research Agency.



Event

United Nations Environment Programme (UNEP) provides funds to develop ASFA's subject thesaurus to cover oceanography and the physical environment. The ASFA thesaurus is still in use today and contains over 6 000 aquatic sciences and fisheries terms. Previously distributed in print format, it is available to browse and connect to here: http://agrovoc.uniroma2.it/skosmosAsfa/asfa/en/index



Partners joining ASFA

- United Nations Division for Ocean Affairs and the Law of the Sea (UN/DOALOS);
- Mexico Dirección General de Bibliotecas (DGB), later Universidad Nacional Autonóma de Mexico (UNAM).



Event

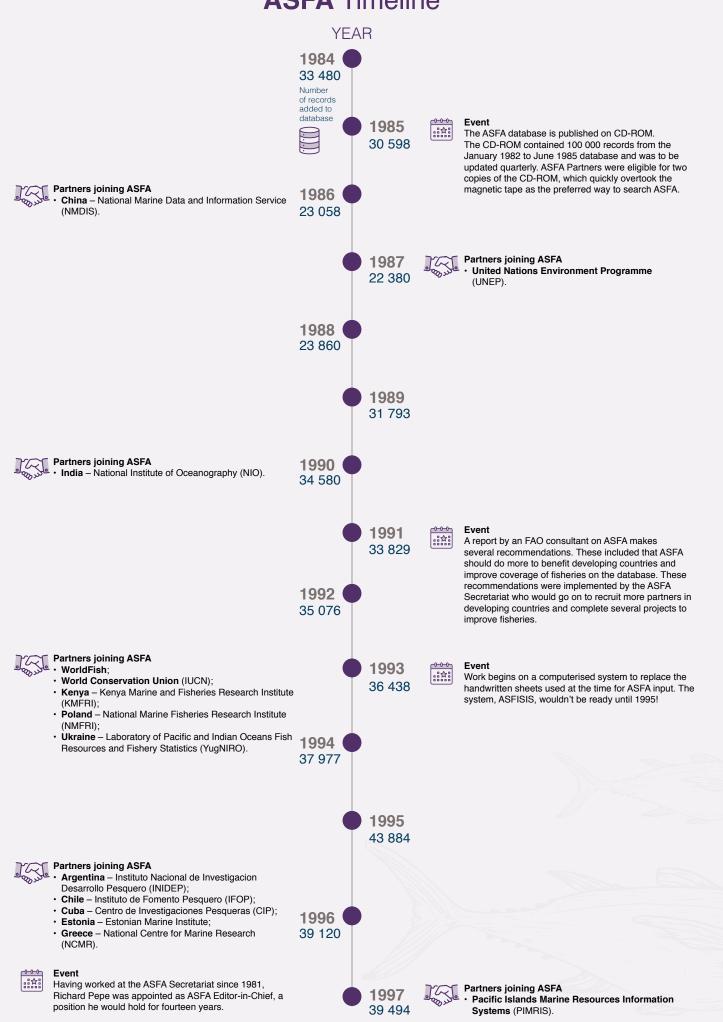
The ASFA Board agrees to produce the database in magnetic tape format — under contract with FAO, the publishers at the time (IRL) were to produce the database on tape format for use in computer systems around the world. A trial database had been produced in 1976 and successfully tested by Environment Canada on the QL online retrieval system and also by NOAA on the Lockheed DIALOG system in the USA. The possibility of worldwide online use of ASFA, via access to DAILOG, was a technological leap at the time and helped boost support for ASFA from FAO management.



Partners joining ASFA

· Norway - Institute of Marine Research (IMR).

1983 27 859







Fifty years of ASFA: as told by the people who ensured its success

As an international partnership best known for its abstracting and indexing database, ASFA owes its success to many people who have worked tirelessly to balance the interests of the network. Over the past fifty years, the ASFA Secretariat, partners and publishers have worked together to ensure ASFA's success. This article is based on interviews with Allen Varley, Richard Pepe, lan Pettman, Gajanan Sainekar and Helen Wibley who all played an influential role in ASFA's history. Much information has come from Allen's record of ASFA's first twenty years, we are grateful to have such a detailed document covering ASFA's origins. If you have any feedback or would like to share your own experience with ASFA, please email: Tamsin. Vicary@fao.org.

© Freshwater Biological Association CASTLE.127.

1970–1981: Establishing ASFA's role in disseminating aquatic science and fisheries information

ASFA was first printed as a monthly abstracts journal, a collection of abstracts from the world's aquatic science and fisheries research, indexed by subject, geographic and taxonomic keywords. To those who have grown up with instant access to information via the internet, the thought of scanning a monthly printed journal to obtain information must seem like a story from the distant past, although, there is still something to say about the serendipity (accidental discovery of information) that was inherent in manually scanning of abstracts and/or indexes. With the internet a long way from what we know today, the challenge of communicating scientific knowledge to a wide audience was something Abstracting and Indexing services such as ASFA hoped to achieve.

During the time of ASFA's emergence, abstracting journals and current awareness services run by librarians were the primary way of disseminating the world's research. Prior to ASFA, Allen Varley of Marine Biological Association (MBA), Plymouth, United Kingdom of Great Britain and Northern Ireland, was running a current awareness service distributing cards on new publications - this came to the attention of FAO who requested these cards. A dialogue ensued, with Allen offering FAO advice on how it could improve its own publication, Current Bibliography for Aquatic Sciences and Fisheries, which was often out of date and published late. Allen's willingness to help resolve these issues led to a

number of meetings between himself, Information Retrieval Ltd (IRL, United Kingdom of Great Britain and Northern Ireland), Bundesforschungsanstalt für Fischerei (BF, Germany) and FAO where improvements to information dissemination in fisheries and aquatic science were discussed. The private company IRL published Aquatic Biology Abstracts, so there were many shared interests between these organisations, as well as a desire to improve their own products and services. Ed Aküyz (FAO), described by Allen as "a driving force behind all development in information management" was instrumental in involving partners from France, Germany and the United Kingdom of Great Britain and Northern Ireland in these discussions.

Fisheries and aquatic science libraries have often sought to overcome geographic boundaries through meetings and communication, networks such as ASFA and the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) have played an integral role in ensuring information sharing across the world. That these networks can trace their histories back 50 years mean ties remain strong today, a model of worldwide collaboration not seen in other information sectors. Allen Varley played an active role in these networks, helpful not only in establishing ASFA, Allen was also a member of the Aquatic Sciences and Fisheries Information System (ASFIS) panel of experts and would also play an active role in building

other networks, such as the European Association of Aquatic Sciences Libraries and Information Centers (EURASLIC) and IAMSLIC, ensuring his expertise benefitted a wide number of institutions. ASFA and IAMSLIC today enjoy great cooperation and we look forward to working with them on their joint repository, AquaDocs, to be launched in 2021.

Returning to the origins of ASFA, in 1970 BF hosted what would be an historic meeting focused on cooperation on Aquatic Science Bibliography. Attendees from IRL, FAO and BF decided that rather than make changes to either Aquatic Biology Abstracts, an IRL product, or FAO's Current Bibliography for Aquatic Sciences and Fisheries, it would be better to produce an entirely new product - ASFA was born! The involvement of public and private organisations from the very start ensured that ASFA benefitted from a wide range of skills, perspectives and technologies. It also meant the conflicting interests of each partner had to be delicately balanced - a need that continues today but perhaps came to the fore in later years during numerous sparring matches between ASFA Editor-in-chief Richard Pepe and ProQuest representative Craig Emerson, all of which were good natured, fruitful and took place with ASFA's best interests in mind!

The following year, 1971, work began to produce the first issue of ASFA, with input provided by FAO, BF, Institut national de Recherche agronomique Station d'Hydrobiologie continentale

(INRA/SHC, France) and IRL. This was the beginning of the ASFA Advisory Board, a group of partners and organisations who maintain responsibility for the ASFA information service to this day.

Also happening in 1971, the world's first email was sent and Ian Pettman was beginning his career at the Freshwater Biological Association (FBA, United Kingdom of Great Britain and Northern Ireland). Library services at this point involved a large amount of manual work, from typing up bibliographies to hand writing library cards or circulating journals. In lan's first week as an Assistant Librarian at the FBA, a copy of the ASFA journal landed on his desk. This marked the beginning of a long and fruitful relationship with ASFA - little did Ian know that 50 years later he would still be participating in ASFA! ASFA's printed journal was indexed by author, geographic place, subject keyword and taxonomic name, meaning it could be searched far more efficiently than many library card catalogues which at the time were only organised by author name. How much had the FBA paid for ASFA? The subscription rates for Volume 2, 1972 were 50 pounds sterling per annum in Europe and 150 United States dollars for the United States of America and elsewhere. The benefits of cooperating with a system such as ASFA were obvious - and it was only a matter of time before Ian was attending meetings with the publisher and

Other partners who have played an important role in ASFA's history include Germany. Wulf P. Kirchner must be one of ASFA's longest standing Board Members, having been a member from 1971 to 2004. Wulf hosted the first ASFA meeting in 1971 at BF and was also part of the Thesaurus Committee and ASFISIS Technical Committee. Wulf was succeeded by Walther Kuhnhold in 2005, who would represent his institution at ASFA meetings until 2016 when, unfortunately, German involvement in ASFA ceased. Between 1987 and 2016, Germany provided more than 44 000 records to ASFA (we do not have records prior to 1987, so the grand total will be much higher). One of the distinguishing features of the German participation in ASFA, as recalled by Richard Pepe, was their insistence on maintaining

advocating for the FBA's involvement.

the quality of the database.

From July to December 1971, the ASFA journal was printed monthly with a total of 5 837 abstracts being published. This grew to 12 466 in 1972 and to over 26 000 by 1980. Expectations and time spent on ASFA has also changed throughout the years – initially ASFA partners were expected to commit one full time position to ASFA duties – a luxury very few libraries could afford today.

Ed Aküyz (FAO) was the first Editorin-chief of ASFA and the first ASFA Editorial Board meeting took place in Biarritz, France in November 1971. The Editorial Board has since been renamed the ASFA Advisory Board, and meetings have taken place annually with the exception only of 1985 and 2018 (this year's meeting took place virtually - see the report on page 18). Friendship and collaboration between members of the board has fostered strong relationships and is as much part of ASFA's success today as it was in these early years. Allen Varley described the ASFA partners as a "group of friends" who enjoyed each other's company and hospitality - they believed that ASFA was for the users and the producers of aquatic science information and as information professionals were all prepared to work hard to ensure the success of ASFA. Many libraries and information centres during the 1970's were well staffed and experienced less turnover of staff than we see today. This meant librarians had time to build up subject knowledge and also time to devote to partnerships, in ASFA's case the hard work of Partners in these early years laid the foundations for a strong and successful partnership for many years to come.

Seeking to expand coverage beyond France and Germany, Russian Federal Research Institute of Fisheries and Oceanography (VNIRO, Russia) was accepted as an ASFA member in 1972 and National Oceanic and Atmospheric Administration (NOAA, United States of America) and Marine Biological Association (MBA, United Kingdom of Great Britain and Northern Ireland) in 1973. Fisheries and Marine Service of the Canadian Department in 1975 and Japan Fisheries Resource in 1976. We are proud to report that these countries are still in ASFA today and thank them for their contributions over the years. To ensure communication between



Training program on ASFA Input Methodology held at National Institute of Oceanography (CSIR-NIO), Goa during 6-10 March 1995.

partners and the Secretariat, the ASFA newsletter was published from 1974 to 1986, edited by Allen Varley – we are pleased to have renewed his work, having revived the ASFA Newsletter in 2018

The hard work of partners from different countries during ASFA's early years is one of the reasons the ASFA database is unique today - it contains much "pre-internet" material that is not available on Google Scholar and would be in danger of being lost or forgotten if it wasn't for the efforts partners made in these early days to ensure the detailed cataloguing and indexing of research. With the decline of funding to many library and information centres, we see how easy it is to lose information which. once lost, is gone forever. Speaking of recent negative trends in library funding, Joan Varley commented that services were reduced and collections lost, books burnt and staff reduced. For this reason, ASFA is setting the promotion of libraries and information centres as one of its objectives and will focus on ensuring information at risk of being lost is secured. If you are an aquatic science or fisheries library with information at risk of being lost, please get in touch with ASFA and see what support is available.

The 1970's established many ASFA mechanisms that are still in place today - the obligation for National Partners to monitor literature published in their own country and for Collaborating Centres to support their work. In ASFA's first years, records were prepared manually by partners using paper input sheets which were sent to the ASFA Secretariat in Rome to be checked, before being sent to IRL in London for publication - no wonder a number of evaluations of ASFA mentioned timeliness as a problem! Despite this, ASFA was well received and used by the scientific community - subscriptions grew alongside the number of records and

partners contributing to the journal.

ASFA's Subject Thesaurus was produced in 1976 by FAO in collaboration with BF, with United Nations Environment Programme (UNEP) later providing funds to improve the coverage of oceanography and physical environment. Together with Ian Pettman, D.W. "Dick" Privett (Institution of Oceanographic Services, United Kingdom of Great Britain and Northern Ireland) provided a lot of work to ensure the development of the subject thesaurus and other innovative search tools used by ASFA at the time. David Moulder, working at MBA, gave considerable work to ASFA's Geographic List, used for indexing places and aquatic features in ASFA records. David also worked on guidelines and manuals for ASFA input, of vital importance to ASFA Partners! Ian Pettman continues his work on the Subject Thesaurus today, which is maintained by a Working Group chaired by Gabi Silvoni (Instituto Nacional de Investigación y Desarrollo Pesquero, Argentina) and Daryl Superio (The Southeast Asian Fisheries Development Center, Philippines). The thesaurus was (and still is) distributed to libraries around the world. Delivered in print format in its early years, the Thesaurus is now available to browse and use online here: http://agrovoc.uniroma2. it/skosmosAsfa/asfa/en/index.

In 1978 it was agreed that IRL would produce magnetic tapes of the ASFA database. A trial version of these tapes had been produced in 1975 and shown to work in computer systems. Ed Akyüz had demonstrated the possibility of worldwide online use in 1976 when he was able to access the ASFA database from FAO headquarters in Rome by connecting to DIALOG in California (USA). This was cutting edge technology that encouraged FAO to support ASFA's development. A contract was duly signed which recompensed the publisher IRL for producing the tapes and, importantly, established FAO and the ASFA Advisory Board as the legal owners of the ASFA database.

Also in 1978 it was agreed that ASFA would be published as two separate journals, a reflection of the growth of records it was now covering.
ASFA-1 Biological Sciences and Living Resources and ASFA-2 Ocean Technology, Policy and Non-living

Resources were both published from 1978 onwards, with sales likewise rising, from 589 subscribers in 1971, to 1 603 subscribers to ASFA-1 and ASFA-2 jointly in 1980.

Nineteen seventy-eight saw further geographic expansion with an ASFIS survey team visiting Mexico, Jamaica, Costa Rica, Colombia, Venezuela and Trinidad and Tobago. Models for regional cooperation for the exchange of documentation and bibliographies were provided, with Centro de Información Científica y Humanística (CICH, Mexico) being selected to undertake regional responsibilities. Armando Sandoval of CICH is another example of the expertise ASFA partners have provided throughout the years. As was written in a profile of him: "he showed a great passion for the dissemination of knowledge and, in this sense, he made great contributions to librarianship, to the visibility of the Latin American scientific production and the organization and dissemination of scientific information" (Escoto, 2014). ASFA today has a strong network of partners in Latin America and the Caribbean, with partners in Argentina, Brazil, Colombia, Chile, Ecuador, Mexico, Peru and Uruguay all continuing Sandoval's work to disseminate knowledge.

The 1970's, a time of growing awareness of the importance of managing aquatic environments, was when ASFA established the basis for its partnership. From a small group of founding partners, ASFA was growing into a geographically diverse group of experts from different backgrounds, all working together to disseminate the world's aquatic science research. Technologies, such as magnetic tape and electronic communication were used to ensure communication between partners and that the database reached a wide audience. however ASFA's focus remained on the people providing the information who were essential for ensuring ASFA's success.

1981–1991: Adopting new technologies to improve dissemination

Whilst the 1970's established ASFA as a major provider of aquatic science and fisheries information, 1981–1985 was called "Years of change" by Allen Varley in his history of ASFA's first 20 years. An FAO Management Report was issued in 1981 informing

ASFA Partners that a new publisher, Cambridge Scientific Abstracts (CSA), would be responsible for ASFA, replacing IRL. Helen Wibley, who worked at IRL 1977-1981, moved from London to Rome and was recruited by Ed Aküyz in 1982 on a temporary contract to prepare ASFA records. Jon Sears, who was the editor of ASFA at IRL, moved to Washington. D.C. and continued to be the editor of ASFA for CSA until 1984, when he was replaced by Craig Emerson. Based in North America, CSA stated their commitment to the ASFA's philosophy and improved some of the technical aspects of the database whilst maintaining established international standards. At this time, FAO was reimbursing the publisher for their efforts in publishing the printed journal. FAO bore the bulk of these costs, however Intergovernmental Oceanographic Commission (IOC) also contributed in 1989 and 1990. The financial burden of covering publisher costs was becoming unsustainable and Richard Pepe would later come to reverse the flow of payments through his contributions to the drafting the Publishing Agreement between FAO and the Publisher.

Economically, the 1980s was a time of budget cuts for many organisations, and the reduction of available staff time for ASFA combined with fast paced technological developments meant ASFA, not for the last time, asked questions of the future of its products and services. The need to meet developing countries needs was highlighted and ASFA was fortunate in recruiting Richard Pepe to the Secretariat in 1981, who would devote a considerable part of his career to this objective.

With declining subscriptions to the ASFA printed journals, some partners feared the publisher was exerting too much control on ASFA standards, for example the publisher had limited abstracts to 150 words. This led to one partner fearing that ASFA was in danger of "becoming just another commercial product".

However, the expertise of CSA greatly benefited ASFA in this time. In 1984 CSA provided partners with the newly-developed MicroCAMBRIDGE software which permitted IBM PC users to access ASFA and other CSA databases online on DIALOG, to search and to download files of records. Ian Pettman remembers using the service to perform searches and being very aware of the cost of telephoning America to do so - it was vital to ensure you had the correct search criteria prior to making the call! The software was aimed at individual scientists as well as information professionals, marking the beginning of a shift in information-seeking behaviour which had previously been the sole domain of information professionals. Another major step was achieved the following year when CSA issued the ASFA database on CD-ROM, it contained 100 000 records and was to be updated quarterly. ASFA was one of the first databases to be distributed in this format, to the satisfaction of its partners and users. CD-ROMs of the ASFA database have been issued up until 2019 and have been distributed to institutions who lack reliable Internet connectivity to use the online database.

ASFA continued its geographic expansion with training in ASFA input delivered in Cuba by CICH (Mexico) and also in Portuguese speaking African countries by Instituto Nacional de Inspecção do Pescado (INIP, Mozambique) - including in Angola which was experiencing civil war. Institute of Marine Scientific and Technological Information, State Oceanic Administration (IMSTI, China); National Institute of Oceanography (NIO, India) and UNEP joined the partnership in 1986. China quickly established a regional network of input centres and contributed a significant number of records to the database. this remains the case today with National Marine Data and Information Service (NMIDS, China) one of the biggest contributors to ASFA – thank you for all the support over the years!

The ASFA database on CD-ROM was also used in the South Pacific and

Kenya to deliver information retrieval services. With International Centre for Ocean Development (ICOD) funding, a workshop in New Caledonia was organised whose main components were information services based on the ASFA CD-ROM, document delivery and a regional marine resources bibliographic database using Unesco CDS/ISIS software. Belgium provided funding for IOC to establish a regional centre in 1989 based in the Kenya Marine and Fisheries Research Institute (KMFRI), Mombasa. From this centre, IOC coordinated the Regional Cooperation in Scientific Information Exchange - Western Indian Ocean (RECOSCIX-WIO) project. Activities inaugurated by Peter Pissierssens, the IOC Associate Expert in Mombasa, included a regional database and a regional directory of institutions and scientists, information services from the ASFA CD-ROM document delivery, and training. In his current role as head of IOC Project Office for IODE, Peter plays an instrumental role in ASFA today, offering his expertise to ensure ASFA adapts in line with user needs. We look forward to working with Peter in 2021, with the start of the UN Decade of Ocean Science and launch of AquaDocs and OpenASFA, there are many synergies between ASFA and IOC/IODE which we hope to collaborate on.

Though the method for creating input in the 1980's was arguably more time consuming than today, expectations of ASFA partners were high. In ASFA: the first twenty years, it is reported that each input centre was expected to produce 1 000 records annually, a figure few partners today would meet. During the 1980's, total annual input was in excess of 30 000 records. In 1986, ASFA looked into using CDS/ISIS software – this was eventually adopted and remarkably has been in use until 2020 – we are

therefore very excited to be moving to OpenASFA as the system to create ASFA records in 2021.

With subscribers in 81 countries in 1990, access to the ASFA database for users was increasingly via the CD-ROM, which was popular with partners and subscribers alike. Not only used for retrieving research, partners reported using the database to find author contact details, verify taxonomic names and identify reviewers for journals. Online access to ASFA via DIALOG continued, with over 800 hours of connect time recorded in 1990.

In 1990 the ASFA Trust Fund was transferred to IOC, having previously been held by CSA when its trustees had included Allen Varley and Wulf Kirchner who were entrusted to ensure that the money was spent in ASFA's best interests. The move to IOC was done to encourage more contributions as ASFA hoped to move away from the commercial-only model. At this time, ASFA fully deserved its reputation as the premier reference in the field of fisheries, aquatic and marine sciences. The 1990 Advisory Board Meeting (Bergen, Norway) celebrated twenty years of ASFA, Dr Ulf Lie, Chairman of the IOC and Professor at the University of Bergen, spoke at the celebration, saving "It is well known to all of us that the average marine scientist is less than convinced that international organisations are engaged in useful activities. I think that ASFA is a shining exception from this general rule. I have heard nothing but praise for ASFA from my scientist friends."

1991-2010: ASFA expansion

Despite the positive end to 1990, there was trouble ahead. In 1991, FAO hired a consultant to evaluate ASFA from FAO's point of view. The report recommended that in order to justify FAO support, ASFA should: involve



more developing countries; increase non-English records on ASFA, and; focus on the fisheries content of the database. In summary, the difficulty of balancing the commercial interests of the ASFA publisher with the interests intergovernmental organisations such as FAO had not gone away. With ASFA's publisher based in North America, ASFA and its partners worked hard to ensure non-English records were included on the database - something that was essential in ensuring ASFA remained relevant to its international partners. When the ASFA Publisher eventually agreed to accept non-English abstracts they reported that it was a huge success. With the help of the growing number of ASFA Partners, training courses were also delivered in French and Spanish, with associated training materials in these languages being made available. To this end particular thanks goes to Luciana Lombardi (FAO), Helen Wibley (FAO) and on occasion to various ASFA partners: Marco Montes (Mexico), Jacqueline ProdHomme (France), Andrea Cristiani (Uruguay) who carried out training courses on behalf or together with the Secretariat.

Richard Pepe had been hired by ASFA on a one month contract in 1981 to contribute records to the ASFA database, ten years later Richard was still working for the Secretariat and would go on to become Editorin-chief in 1996. Richard had carried out a number of tasks related to input to the database (e.g. assigned subject categories to all of the 18 000 scientists listed in the "International Directory of Marine Scientists" - the predecessor of IOC/IODE OceanExpert Directory; coordinated the work on the first major update of the ASFA Thesaurus, etc.) and therefore had good knowledge of the many facets and components of the ASFA information system, making him ideally placed to answer questions raised in the 1991 consultant's report.

The number of developing countries active in ASFA improved dramatically following the report. In 1991 there were only 11 National ASFA Partners, of which only three were in developing countries. Through consistent effort to involve more partners, there was a total of 60 National Partners by the time Richard Pepe retired, of which around 30 were located in developing countries.

National Institute of Oceanography (NIO), Dona Paula Goa (India) had joined ASFA in the previous decade however did not provide input to the database until 1990. At that time, Murari Tapaswi represented NIO at ASFA Advisory Board meetings. Murari was well regarded by the ASFA Partnership, all of whom appreciated the efforts he took in 2000 when NIO hosted the Advisory Board Meeting. Gajanan Sainekar, who had been working at the institute since 1982, succeeded Murai Tapaswi in 2000 when he was given full responsibility of ASFA activities and was nominated as India's representative on the Advisory Board, a position he held until his retirement in 2011. Gajanan had been entrusted with the work of monitoring literature for ASFA since 1990 when NIO began their ASFA activities. These activities, as carried out by all ASFA Partners, involved identifying relevant literature in their own country, indexing (assigning keywords), and the preparation of input sheets. This started as a handwritten process but switched to a computer system during the mid-1990s. Development work initiated in 1993 and, following two years of intense work by the ASFA Secretariat and the system programmer, the first version of the computer program for ASFA input, ASFISIS, had been released in 1995.

The growing number of ASFA partners also increased demand for access to the database and the FAO ASFA Secretariat insisted that all partners receive free access, even if their input was low. This free access extended to collaborating centres in developing countries, further improving access. Another initiative was implemented to improve access in developing countries, through the Low Income Food Deficit Countries (LIFDC) project free access was provided to institutions in these countries.

As regards increasing the amount of fisheries related records in ASFA, the number of fisheries records increased from 20 percent to about 30 percent thanks to hard work by ASFA Partners and the Secretariat. Initiatives funded by the ASFA Trust Fund further increased the fisheries content, these included scanning and digitizing the ASFA printed journals from 1971 to 1976 (thanks to NIO/India, KMFRI/Kenya, IMSTI/China), and also the ASFA predecessor journal, Current Bibliography for

Fisheries from 1957 to 1971.

All of these changes demonstrated that ASFA was capable of adapting to user needs and had a strong network to deliver change when necessary. Its international network remained committed to contributing records to the database, making ASFA a unique source of fisheries and aquatic science information from around the world. As Richard Pepe said, "No scientist, worthy of the name, would begin a research project without consulting ASFA to see if the research had already been carried out or for further information to support his/ her research."

Further changes took place during this time, with ProQuest replacing CSA as the ASFA publisher. One of Richard's most important achievements was participating in the negotiating of a new Publishing Agreement with ProQuest, which reversed the flow of payments between FAO and the ASFA publisher. Before 1996, payments were from FAO to the publisher (in excess of USD 100 000/year) for such things as keyboarding records and mailing printed ASFA journals to ASFA partners, etc. After 1996, the flow of funds was reversed and considerable funds flowed from the publisher to the ASFA Trust Fund. Not only did this meet some of the questions raised in the 1991 report, this reversal is also the reason why ASFA remains in a financially sustainable place today. Though royalties have decreased, the funds built up during Richard's tenure mean ASFA is in a strong place to continue its work.

The increasing numbers of ASFA Partners also led to a more informal atmosphere at meetings, with Richard ensuring all participants felt able to ask questions and voice any concerns. Together with adaptations made during the time, in terms of its scope, user needs and technologies, these changes ensured ASFA stayed relevant and accessible to its many stakeholders. Having answered all of the questions raised by the Consultant's report in 1991, Richard retired as ASFA Editor-in-chief, though he would continue to be involved in ASFA as a consultant, providing his expertise and experience to the new Editor-in-chief. Richard was replaced by Helen Wibley, who had continued to work for the FAO ASFA Secretariat since her initial temporary recruitment

in 1982. Helen became a full time staff member in 2000 and regularly attended the annual ASFA Board Meetings together with Richard in the years that followed, which gave her the opportunity to meet in person "the happy family" of ASFA partners.

2011–2020: the ASFA Partnership delivers new products and services

In 2011, the ASFA Advisory Board Meeting took place in Ecuador, hosted by Instituto Nacional de Pesca (INP). Nikita Gaibor is the popular representative of this institution today, read about his recent research on page 1. The meeting marked Helen Wibley's first as ASFA Editor-in-chief, a position she held until 2017 when she was succeeded by current acting Editor-in-chief Maria Kalentsits. Thanks to the expansion of the partnership, there were now 67 ASFA partners in 58 countries around the world. Though an active and growing partnership, ASFA needed to ensure it was still a relevant information product and service and so an Impact Evaluation Working Group was set up. Its members were: Craig Emerson (ProQuest), Hardy Schwamm (FBA), Linda Noble (National Marine Biological Library), Marco Montes (Universidad Nacional Autónoma de México, Mexico) and Helen Wibley (FAO). Today the group has evolved to be the Impact and Strategies Working Group and is now focused on short-term projects and goals to ensure ASFA's direction remains relevant to its various stakeholders. The only original member left, Marco Montes is now chair of the group and we thank him for his dedicated work over the years. We would also like to thank Linda Noble who gave her expertise to ASFA over the years, contributing to the development of its thesaurus and other areas of work.

Advisory Board meetings followed in Ireland (2012), Peru (2013) and in 2014 China hosted the meeting. This was the first ASFA Board Meeting I attended, as an observer from the Freshwater Biological Association (United Kingdom of Great Britain and Northern Ireland), which was approved as the National Partner that year when MBA decided to cease their involvement. Five years later I am working for the ASFA Secretariat and feel incredibly fortunate to work with such a large group of committed partners, collaborating centres and associates. Together with Maria Kalentsits and Milos Vojar, the ASFA Secretariat is continuing its work to support partners and disseminate the world's aquatic science, fisheries and aquaculture research. There are uncertain times ahead for many people in the world today and ASFA is seeking to play its part in ensuring fisheries and aquaculture contribute to zero hunger. How ASFA is adapting to achieve this is discussed on page 19 as a summary of the ASFA White Paper. Despite the uncertainty, 2021 will begin with the launch of OpenASFA - a new system to create, store and search for ASFA partner records. We are also looking to furthering our relationship with AGROVOC to improve the subject vocabulary, working with IAMSLIC on their joint repository AquaDocs and providing our support to the CECAF-PESCAO project by building an inventory of marine fisheries research.

As this article as demonstrated, throughout its fifty year history, ASFA has adapted to ensure its place as the premier reference for fisheries and aquatic science research, making use of new technologies and forming new collaborations to improve its products and services.



ASFA Board Meeting 2009.

However, what lies at the heart of ASFA's success over the fifty years is the commitment of all members of its network to the common goal of sharing the world's knowledge. This article was based on interviews with Allen Varley, Richard Pepe, Ian Pettman, Gajan Sainekar and Helen Wibley, as well as Allen's extensive account of ASFA's first twenty years. There are many more people, not mentioned in this article, who have contributed to ASFA's success: ASFA partners, FAO ASFA Secretariat staff throughout the years and collaborators who have all helped to improve the ASFA information service. In particular, Luciana Lombardi worked for the ASFA Secretariat for many years overseeing the quality of partners' input to the database, we have her to thank for the detailed records we find on the database today. Richard Grainger, FAO, also provided much support and insight to ASFA during his time as Chief of the FAO Fisheries Information and Statistics Branch, as did his predecessor, Bob Freeman. In more recent years, Marc Taconet, current Head of FAO Fisheries Information and Statistics branch, has overseen a number of changes to ASFA and has been instrumental in many of the developments we are updating on in this issue - including support to OpenASFA and revised Partnership structure. As this article shows, FAO and all ASFA Partners have contributed much time and expertise over the last fifty years to ensure ASFA's success, it is now the responsibility of current Partners to build on their work and ensure a successful future for the partnership.

If you would like to share your experience with ASFA over the years, please email: tamsin.vicary@fao.org. There is material enough on ASFA's Fifty Years to make a more detailed monograph than space in this newsletter allows for, should sufficient interest be found.

Author: Tamsin Vicary, Food and Agriculture Organization of the United Nations, Rome, Italy. Email: Tamsin.Vicary@fao.org

Bibliography

Varley, A. 1995. ASFA: the first twenty years, an outline history of Aquatic Sciences and Fisheries Abstracts, 1971-1990. Paris, IOC. 70 pp. (also available at http://hdl.handle.net/1834/2656).

Varley, A. 2005. The European Association of Aquatic Sciences Libraries and Information Centres (EURASLIC) - an outline history 1988-2004 [online]. Plymouth [Cited 16 December 2020]. http://www.euraslic.org/sites/euraslic.org/files/public/images/stories/EuraslicHistory.pdf

Díaz Escoto, A.S., Boulouf de la Torre, F., & Zetter Leal, J. 2014. Armando Sandoval Caldera: una vida dedicada a la información científica. *Biblioteca Universitaria*, 16(1): 3–19. (also available at https://doi.org/10.22201/dob.0187750xp.2013.1.16).

ASFA survey shows aquatic science libraries, impacted by COVID-19, are still able to help in their communities.

Between August and October 2020, ASFA ran a survey to assess the impact of COVID-19 on aquatic science libraries around the world. With restrictions in many places library staff and patrons were unable to access buildings, we were interested to find out what impact this was having on staff and learn whether libraries were helping their communities respond to the virus. This article presents a summary of the survey results, further analysis will be undertaken by the ASFA Impact and Strategies Working Group, looking particularly at ways in which libraries can mitigate the impact of the pandemic. Librarians have many transferable skills which can be of use to local and global communities during these difficult times and it is vital we let communities know what we can offer. For questions or comments, please email tamsin.vicary@fao.org

Summary of responses

A total of 63 responses were received from libraries in 26 different countries, libraries from the United States of America were most represented (15) followed by Philippines (10). Libraries were divided almost equally between academic (21) and research (20), with ten being government libraries and a further ten a combination of the three types.

Access to library buildings and services

Respondents were asked about the status of their library buildings. A third said the number of patrons who could access the library was limited and over a quarter (27 percent) said their premises were fully closed. Less than ten percent said their library was fully open – these responses came from libraries in Australia, India, Nigeria, Russia, Sri Lanka and Viet Nam.

Libraries that were closed due to COVID-19 restrictions were asked how they were catering to their patrons' information needs. Of the 58 who responded, 32 said they were providing patrons with document delivery services, 38 were providing access to databases the library subscribed to, and 21 said a skeleton library staff were providing scans and/ or access to requested documents.

When asked about their plans to reopen, over a third (22 out of 63) said the date for re-opening was unknown and 15 percent said it would be two months or more before libraries reopened. Only 37 percent said the library planned to reopen in the next

two months.

Libraries around the world are implementing many procedures and policies to ensure the safety of their staff and patrons. When asked what type of in-person access they would be arranging over the next three to six months, over 60 percent said their library would arrange access with social distancing policies implemented with 40 percent also arranging delivery of materials to patrons.

The survey asked what crisis related procedures would be or are currently in place at libraries. The most popular procedures were health and safety protocols for staff (87 percent) and social distancing requirements for patrons (79 percent). 60 percent said materials would be sanitised or deep cleaned and 55 percent said interior spaces would undergo deep clean.

Patron and Community Needs during pandemic

The survey asked five questions on how libraries were responding to patron and community needs during pandemic:

What do you anticipate will be patrons' top three most urgent needs in the next six months?

The most popular answers to this question were: Access to physical collections (81 percent); Faculty/ teacher/ research support (65 percent; and addressing patron health and safety (34 percent). That access to physical collections was clearly viewed as the most urgent need shows that the information accessible

online does not yet meet all user needs. Prohibitive subscription costs of eBooks versus print mean the cost of purchasing electronic materials is beyond many libraries budget and one study estimated that only ten percent of academic titles were available to universities in electronic format. In the United Kingdom of Great Britain and Northern Ireland and Ireland, campaigns to investigate the academic ebook market are underway which we hope will lead to improved pricing for libraries.

What steps have library staff taken or are planning to take to address student needs?

The three most popular steps were: Developing new "how to" resources for accessing virtual resources (54 percent); Virtual reference (via email, phone or chat) 54 percent; Digitizing materials for student remote use (52.4 percent). Again, the high number of libraries digitizing materials show librarians have much work to do to ensure access to physical collections during library closures and restrictions. Just under half (46 percent) had assisted students with distance learning.

What steps have library staff taken or are planning to take to address researcher/ teacher/ faculty/ academic staff needs?

Similar to the previous question but focusing on supporting staff at a library's institution, the three most popular answers were: Virtual reference (via email, phone or chat) 84 percent; Developing how to resources

percent), and; Purchasing/ curating additional materials (44 percent).

How is the library supporting the crisis response in the community? Libraries are part of the communities they serve and this extends far beyond an institution's staff or students. With many transferable skills, librarians can assist communities during pandemic in a number of ways, for example by being a trustworthy source of information or organising direct help dress health, safety or food security needs. The diversity of responses we received to this question shows that libraries are willing to adapt to different needs of their communities. 44 percent of respondents had disseminated information on COVID-19 from authoritative sources - with the spread of misinformation and conspiracy theories, often via social media, libraries have an important role to play in ensuring access to authoritative sources. In the case of a pandemic such as COVID-19, the impact of misinformation or lack of information can cost lives, so it is very encouraging to see libraries play an active role in ensuring access to authoritative information.

Eleven respondents (17 percent) indicated they had relocated staff to help in other departments and 13 percent had provided family friendly services, essential to many families who faced difficult working conditions and needed childcare. Eleven percent had provided Personal Protective Equipment (PPE), with the head of one library using a 3D printer to produce face shields that were needed by local health clinics. Other libraries also helped with addressing housing needs, food relief efforts and contact tracing. Library staff have many skills, and library buildings and facilities can be put to alternative uses during crises in order to provide assistance. Librarians should be active in responding to community needs, though the reputation of librarians as timid is thankfully a thing of the past, we must work hard to let other departments, organisations or networks know that libraries are available to help with the response to COVID-19. The ASFA Impact and Strategies Working Group will be following up with respondents who have provided their communities with

assistance in order to help other libraries provide similar services where possible.

Library usage and challenges during pandemic

The final section of the survey asked what challenges caused by COVID-19 libraries were facing and how these were impacting library usage.

Respondents were asked whether the pandemic had changed the financial situation of various aspects of library services and staffing, including collections budget, salaries and planned hires. Thankfully, the majority reported no significant change in these aspects. However, 25 out of 58 respondents reported some level of reduction of planned hiring of new staff, with nine respondents saying budget for this had been completely eliminated.

The survey then asked whether changes were planned to library finances in the next 12 months. The situation here was more worrying. with more respondents reporting a planned reduction in certain categories of services and staffing. Planned hire of new staff was most likely to reportedly facing budget cuts, however print and digital collection budgets were both facing reductions - 27 respondents saying their print budget facing reduction and 18 saying their digital collection budget did. For collections, 23 said their digital collection budget was likely to increase and 10 that their print collection would increase. Nine survey respondents indicated that some full-time staff had been laid off and 8 indicated part-time staff had been laid off. When it came to being furloughed, 11 reported full-time staff had been furloughed and 9 that part-time staff had been furloughed. On the length of furlough, 50 percent said this would depend on the governing authority/local government.

Authors:

Daryl Superio, SEAFDEC Aquaculture Department, Iloilo, Philippines.

Gabi Silvoni, Instituto Nacional de Investigación y Desarrollo Pesquero, Mar del Plata, Argentina.

Tamsin Vicary, Food and Agriculture Organization of the United Nations, Rome, Italy.



Impact of COVID-19 on the smooth running of activities in the Benin Institute for Fishery and Oceanologic Research (IRHOB)

Appearing in the last quarter of the year 2019 in Wuhan – China, the Coronavirus (COVID-19) has spread in the twinkle of an eye, all over the world with unfortunate consequences. Habits in every life dimension have been disrupted. People have stayed home for a long time, businesses and transportations were disrupted, whether closed or restricted, and many activities are performed remotely. Besides populations, this sanitary situation has negatively affected many organizations functioning worldwide. How does this unprecedented pandemic affect IRHOB's activities?

The Benin Institute for Fishery and Oceanologic Research (IRHOB) is a research institute under the tutelage of Benin Center for Scientific Research and Innovation (CBRSI). Its objective is to contribute, through scientific research, to the efficient management of living and non—living aquatic resources. It carries out many activities at national level and collaborates with number of research centers on global projects. For the year 2020, the following activities have been scheduled:

- Global Environment Monitoring for Security in Africa (GMES and Africa);
- WP7 Alignment and Convergence of Research and Innovation infrastructures initiatives. "Atlantic marine research infrastructure and networks" Joint Action (AA-MARINET);
- Partnership for Observation of the Global Ocean (POGO) project;
- analysis of hydrodynamic and morphodynamic processes for monitoring and forecasting of marine and coastal risks (coastal erosion and sea level rise):
- coastal segment dynamics monitoring in Grand – Popo with a video camera system;
- modeling the hydrodynamic exchanges between Atlantic Ocean and Lake Nokoué;
- developing a methodology for a spatio – temporal series acquisition of the Beninese marine and coastal environment;
- marine mammals monitoring in Benin.

Unlike many countries that have experienced lockdown, the Benin Government has instituted a sanitary cordon from 30 March to 27 April 2020. The rational of this decision is to

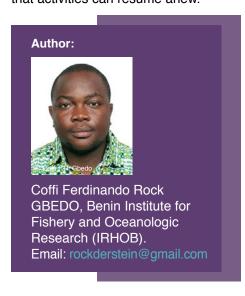
restrict the population's movement, as this could spread the virus within the country. The second reason of such a decision lies in the fact that lockdown could affect populations economic activities. Apart from that, all schools, restaurants and bars were closed and gathering of more than 20 individuals was banned. But administrations, businesses, etc. remained open to avoid economic crisis.

Despite all these measures, the prevalence of COVID-19 in Benin does affect IRHOB's ability to smoothly run its activities. For instance, the library remained open but information requests significantly waned, as all the academic institutions were closed and restrictions on movements refrained patrons from coming to the library. At least, three fourths (3/4) of the users ceased to attend the library during the aforementioned period.

The activities of the organization were also influenced by COVID-19. In fact, one of the measures taken by the government to face off the pandemic in both private and public administrations is to mostly avoid physical contacts. In this regard, activities are performed in rotation. This simply means that not all the staff should be present at office at the same time. Just very few of them should. Meetings and other urgencies are dealt with online. With this new way of functioning, the activities scheduled at the beginning of the year have not totally been completed, which was not the case during previous years.

For the Global Environment Monitoring for Security in Africa (GMES and Africa), the execution rate in October 2020 was ten percent. As for the WP7 – Alignment and Convergence of Research and Innovation infrastructures initiatives. "Atlantic marine research infrastructure and networks" Joint Action (AA-MARINET), only five percent of the work has been performed. Regarding the Partnership for Observation of the Global Ocean (POGO) project, the execution rate is ten percent whereas that of the analysis of hydrodynamic and morphodynamic processes for monitoring and forecasting of marine and coastal risks (coastal erosion and sea level rise) is zero percent. The execution rate for the activities, the coastal segment dynamics monitoring in Grand - Popo and marine mammals monitoring in Benin is five percent. Just to name a few of them. In general, the average rate of the activities execution is 20 percent.

At international level, all physical meetings have been cancelled and held entirely online. That is the case for example of the POGO annual meeting that was to be held in January 2021 in Mexico. In a nutshell, all the projects are negatively impacted like in many organizations on the planet. We do hope that this singular moment in the history of the entire world won't last anymore, so that activities can resume anew.



Reflections on the Water – personal observations on 50 years of fishing from the docks of Hull

In this article, ASFA partner Ian Pettman (Freshwater Biological Association, United Kingdom of Great Britain and Northern Ireland) writes of his experience growing up in Hull, a city that has seen a number of changes to its fishing activities over the years.

I was reflecting on having been part of the ASFA family for 50 years. Memories of those years and how much things have changed with ASFA were reawakened with Tamsin's questions when she interviewed me about that period.

Following that interview, I also started thinking about how much my personal life revolved around the changes in fisheries, aquaculture and the aquatic sciences over that same time period. Although my final choice of career led me to information work and the ASFA family, my actual family history is such that I might easily have had a career in the fishing industry based in my home city.

Fisheries - Hull from the crest to the trough

I was born In Hull (or to give the city it's correct title Kingston upon Hull) a port city on the Humber Estuary. Northeast coast of England. Growing up in the city, there were many docks in two main clusters - the merchant ships docked in the East Docks and the fishing vessels in the West Docks. My father was a ship's rigger for both the merchant vessels and the fishing vessels. My grandfather had been a fisherman on coastal fishing vessels. One of my uncles was a deep-water trawler skipper, the other a dock worker handling cargo on the merchant ships. There were 6 000 men lost in 150 years of trawling out of Hull. Nine hundred ships didn't come back. An industry that had a mortality rate 17 times higher than coal mining - no wonder my mother was determined that neither of her sons would follow the fish. I like to think that the family would have approved of my involvement with ASFA, but what would have been my fate if I had gone down to the docks to seek work?

Before the 1970s, the East wharves of Hull would have been crowded with ships and dockers, some kneedeep in the vessels' holds, shovelling, hauling and rolling British imports ashore and her exports aboard. Hull was at one time the British

third largest merchant port.

Hull also built its wealth on the fishing industry, and whaling before that. In the late 1960s (my early twenties) up to 150 trawlers could be seen unloading in St. Andrews Dock. These were mainly deep-water trawlers.

By 1976 most of the deep-water trawling from Hull was finished (see next section) although a small fleet of anchor seiners continued to operate until around 1980.

Also, during the late 1970s, automation (in the form of shipping containers etc.) dealt a blow to the dock workers in the merchant shipping docks. This double blow to Hull's maritime industries caused high unemployment in the city. It has often been said that for every one fisher employed there were

seven people employed ashore in fish associated work. Hence, a long decline began that left Hull, by many measures, the poorest city in the United Kingdom of Great Britain and Northern Ireland.

Why this decline in deep-water fishing? – the depth of the trough

After the Second World War, fishing the Arctic waters off the coasts of Norway, Iceland, Russia, Bear Island, Greenland, Labrador and Newfoundland was prolific and, for the most part a lucrative business. The grounds around those coastlines had, due to wartime hostilities been closed to commercial fishing operations resulting in a massive natural increase in fish stocks. The area around Bear Island was an example when vessels from Hull were regularly returning to port with capacity catches.

Over the years a number of factors



St. Andrews Dock 1966 https://www.hullfishingheritage.org.uk/educational-hub/



Anchor Seine fishing vessels in St. Andrews Dock 1970s https://fishingnews.co.uk/wp-content/uploads/2015/09/Hull-3.jpg

resulted in fish stocks being depleted to such an extent that the nations controlling the Arctic grounds took action to conserve their commercial interests. This action included the extension of Territorial Fishing Limits around their coastlines. For the Humber ports of Hull and Grimsby, who were both extensively distant water operators, these actions were a disaster, particularly the Cod Wars with Iceland.

The three "Cod Wars" between the United Kingdom of Great Britain and Northern Ireland and Iceland were the consequence of Iceland's declaration of exclusion zones to protect their fisheries. In 1958 the Icelandic government declared a 12 mile fishing limit replacing the existing 4 mile limit. The United Kingdom of Great Britain and Northern Ireland did not recognise the Icelandic declaration and continued to fish within the new limit. This led to the first Cod War. in which Iceland's Navy harassed British trawlers. There was some violence, and Royal Navy ships were deployed to protect the Hull trawlers. Following the United Nations Conference on the Law of the Sea between 1960 and 1961, the United Kingdom of Great Britain and Northern Ireland agreed to the 12 mile limit.

However, in September 1972 Iceland declared a 50 mile limit. The outcome was the second Cod War. In October 1973, British and Icelandic representatives agreed that a limited number of British trawlers would be allowed to operate within the 50-mile limit for the following two years.

In May 1975, Iceland declared a 200 mile limit. The British government refused to recognise this, which led to the third Cod War. By the end of 1976, the British conceded the limit. The closure of the Icelandic grounds effectively ended Hull's long-distance fishing. These would have been "interesting times" for me if I had pursued a career in deep water trawling!

The next three decades saw several attempts to refloat Hull's economy. A new marina for recreation was opened in 1983 on the site of the former Railway Dock and Humber Dock. This now has berths for 270 pleasure vessels and a boatyard. It has helped the economy but not the fishing industry. A new GBP 5 million state-of-the-art fish market, "Fishqate",

was opened in Hull in 2001, but it was heavily reliant on Icelandic fish. In 2011, Icelandic agent Atlantic Fresh decided to rationalise its Humber operations and send all Icelandic fish to the Grimsby market instead of Hull. Fishgate was closed. So, what of Hull's future – can the city put its faith back in the sea?

Maritime future – the climb out of the trough

From about 2014 onwards, there seems to be a new sense of optimism in and about the city, a feeling that the bottom of the decline may have been hit and the indicators can only move up.

The hope is centred on Alexandra Dock. By 2016, this expanse of silt-filled water and concrete was transformed into "Green Port Hull", a service hub for the giant wind farms being built in the North Sea. Siemens and Associated British Ports have embarked on a large investment on a wind turbine facility in the city that will build and service the British massive offshore wind programme. By the end of 2016 the first turbine blade was manufactured on the site. This work continues to expand.

On the merchant and maritime front, continued investment in infrastructure, equipment and systems, means that the Port of Hull now handles approximately ten million tonnes of cargo, amounting to around GBP 12 billion in trade each year. As well as containers, Roll-On-Roll-Off ferries to mainland Europe, Hull specialises in handling forest products and a range of bulk commodities. Hull is also home to the British first fullyenclosed cargo-handling facility for weather-sensitive cargoes such as steel and bagged products.

On the fishing front, in 2015 a new distant-water freezer stern trawler "Kirkella H 7" was commissioned and by 2018 was the first Hull-based distant-water trawler to land fish in Hull for over ten years. This stateof-the-art fishing vessel brings a regular supply of 1.2 tons of fish fillets to market approximately every eight to ten weeks. This product is processed onboard and landed ready for distribution to sales outlets locally and throughout the Country. The management of the product and fish stocks is rigorous and second to none in product quality and



sustainability of the fishing grounds.

The vessel design and specifications are first class, with working and leisure facilities making the crews environment both safe and enjoyable as one could wish for. The off-duty activities include a gymnasium, sauna, cinema and berths that are fitted with telephones, television and internet. The owners basically employ two crews who operate one trip on and one trip off. Their daily work shift is eight hours on and eight hours off, a very different arrangement from the days of the side trawlers when the deck crew worked eighteen hours on and six hours off during the period the vessel was fishing.

"I am taking the liberty of sharing my thoughts with you on how the fishing industry has changed the city I grew up in. For many people in the United Kingdom of Great Britain and Northern Ireland, Hull is thought as a deprived city with little to offer, however initiatives such as the 2017 UK City of Culture have helped the city take pride in its fishing history, and new industries such as off shore renewable energy and new fishing vessel show the city, like ASFA, is adapting to the needs of the future. Hull has a special role in ASFA history, not only is it my birth city, but Linda Noble (former British ASFA Partner and consultant) and Tamsin Vicary (ASFA Secretriat) were born in Hull, and Kaviphone (Lao partner) studied at the university. Thank you for taking the time to read this, I hope it inspires you to share your experiences of how fisheries or other sectors of the aquatic sciences have changed in your country and cultures."

Author: Ian Pettman, Freshwater Biological Association, the United Kingdom of Great Britain and Northern Ireland

Email: IPettman@fba.org.uk

Virtual ASFA Advisory Board Meeting 2020

In this article, Maria Kalentsits, FAO ASFA Secretariat, presents a summary of the recent ASFA Advisory Board Meeting. The ASFA Advisory Board is responsible for overseeing the ASFA network and is made up of ASFA partners, though collaborating centres and associates are welcome to participate as observers.

For the first time in its history, ASFA had an extraordinary virtual Advisory Board Meeting, organized by the FAO ASFA Secretariat. The meeting was divided into one to two hour daily sessions over five days in August and attended by over 40 ASFA partners, associates and invited speakers. We are very pleased to note an interest towards the meeting by the ASFA collaborating centres and newly recruited ASFA associates who are keen and willing to play more active role in ASFA. Although not as comprehensive as previous ASFA meetings, which have lasted five full days of meetings, this virtual meeting covered all the major developments for ASFA. Lively discussions were held on the new ASFA Partnership Agreement, preparations for the ASFA's 50th anniversary year and, on the future directions for ASFA, such as regional networks, OpenASFA and collaboration with the AquaDocs merged repository. The FAO ASFA Secretariat reported on the Trust Fund Status presenting expenditure and income figures for 2019 - June 2020 and revised figures of the ASFA budget.

A total of 30 ASFA Partners submitted their annual reports (response rate of 44 percent). The FAO ASFA Secretariat presented a summary of these reports with the following figures: 10 408 records were sent to ProQuest by partners in 2019; only 17.2 percent of partners experienced difficulties accessing the database; 19 out of the 39 partners who submitted reports said they monitor their institution's grey literature.







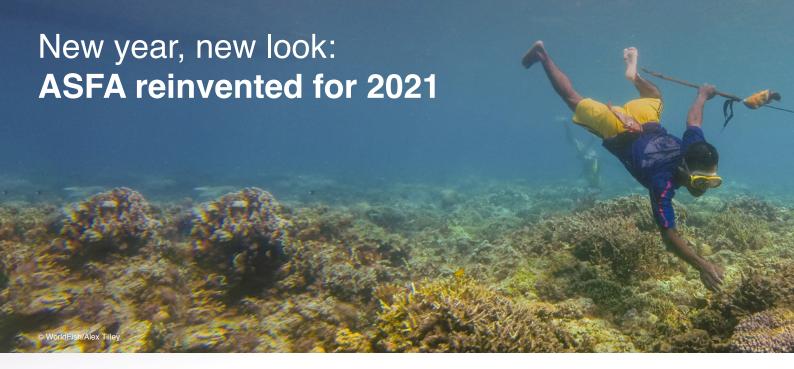
© ASFA

A separate session included presentations on the information management and science communication during COVID-19 pandemics, as well as on FAO's controlled vocabulary AGROVOC and its' relation to the ASFA Subject Thesaurus. This session was attended by 50 registrants and has since been viewed 29 times, if you would like to view the recording, please email: Tamsin.Vicary@fao.org.

A total of 14 action items were agreed at the meeting. These include edits to the Partnership Agreement; enhancing collaboration with the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) and the International Oceanographic Data and Information Exchange of the Intergovernmental Oceanographic Commission (IOC/IODE) in support of promoting ASFA; recruiting new partners; proposing joint activities for UN decade for ocean sciences. A number of action items concern preparations for celebrating ASFA 50th anniversary year which we hope to share progress with you shortly!

To conclude, it was a very useful experience for both organizers and participants and an opportunity for the ASFA partners to communicate and say a "virtual" hello to each other in this uneasy time of pandemic. Accommodating different zones remains a problem for this kind of virtual meetings, although an attempt has been made by delivering the introductory session twice on the same day and also making recordings available following the meeting.

Author: Maria Kalentsits, Acting ASFA Editor-in-chief, Food and Agrigulture Organization of the United Nations, Rome, Italy. Email: Maria.Kalentsits@fao.org



Whilst much of this issue is dedicated to celebrating the last fifty years, this article looks to the future. ASFA's vision and objectives for the coming years are presented in full in the forthcoming ASFA White Paper. This article presents a summary of the White Paper, showing how ASFA will update its services, partnership structure and foster new collaborations to increase access to the world's aquatic science, fisheries and aquaculture research.

Why reinvent ASFA? ASFA has had fifty years of successfully building its partnership and products, so why reinvent it? Whilst it is true that ASFA has many reasons to be proud of its history, its future will not be so bright without adapting to the information needs of today's users and producers of aquatic science, fisheries and aquaculture research. To ensure a financially sustainable future, where ASFA can continue its activities, ASFA must work with a wider range of partners and funders, meaning it must meet a wider range of interests. ASFA is fully capable of doing so its network of over 100 institutions around the world are experts in aquatic science information management and recent projects have shown how the expertise of our partners can be used to enhance and support a variety of projects and programmes. To publicise the services and ways ASFA can offer its expertise, the ASFA Secretariat has produced a White Paper which outlines how ASFA will transform to a modern information network with a financially sustainable future. The below details the major areas of change for ASFA, however the full

paper provides more detail on how these will be achieved, including a roadmap and timescales for delivering work.

New services launched for 2021 In the past fifty years, the most visible product of the ASFA information network has been the database, published in partnership with a commercial publisher. In 2021, the ASFA Secretariat is hoping to challenge this, with the launch of OpenASFA – a free to search database of bibliographic records compiled by ASFA's network of more than 100 aquatic science, fisheries and aquaculture institutions. You can read more about OpenASFA on page 2. In addition to OpenASFA, we will also be updating the subject thesaurus, ASFA's controlled vocabulary of over 6 000 fisheries and aquaculture terms used in various repositories around the world. Focusing on updating the subject coverage and multilingual aspect will ensure the thesaurus can be used by a greater number of libraries, repositories and information searchers around the world. Whilst the ASFA Controlled Vocabulary Working Group is

responsible for developing and maintaining the thesaurus, we also welcome input from interested parties on improvements - if you are an expert in a particular aquatic science, fisheries or aquaculture field and would like to suggest an improvement, we would love to hear from you. Finally, ASFA will be updating its communication products. This magazine is already a product of ASFA's improved communications strategy - being achieved in collaboration with the talented and professional design team at WorldFish. We look forward to developing further guidelines, training materials and infographics next year to meet the needs of ASFA partners and users alike.

Revised Partnership Structure ASFA's Partnership Agreement Working Group has worked hard this year to propose changes to ASFA's partnership structure, which has been in place unchanged for most of ASFA's fifty years. Whilst ASFA will retain its national and international partners, a major change is being introduced to its co-sponsoring partners. Originally, ASFA cosponsoring partners contributed financially or with benefit in kind to the running of ASFA however in recent years FAO has been the only co-sponsoring partner to provide significant support (by hosting the ASFA Secretariat). To ensure that co-sponsoring partners return to an active role in ASFA, we will be working with existing and prospective partners to agree workplans and associated budget for an agreed



period of time. Not only will this improve the sustainability of ASFA, it will also ensure that ASFA works to benefit its partners and to understand and meet their needs. With only FAO playing an active role, ASFA could easily become overly focused on fisheries and aquaculture, whereas its network has the capacity to contribute to all facets of aquatic science.

In addition to a revised structure and agreement, we will also be launching a recruitment drive to encourage more institutions to join the ASFA network. So, if you are an aquatic science, fisheries or aquaculture organization not currently active in ASFA, be warned – we will be coming for you in 2021!

Fostering new collaborations ASFA has already agreed three new collaborations which we are excited to build on in 2021. These are: AGROVOC-ASFA is sharing services with Agrovoc to manage its controlled vocabulary; CECAF-PESCAO-ASFA is providing support to this project by compiling a marine fisheries research inventory covering West Africa, and; AquaDocs - this is the new joint repository between the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) and the International Oceanographic Data and Information Exchange of the Intergovernmental Oceanographic Commission (IOC/IODE) which AFSA is providing small financial support to as well as playing an active role on the steering committee. Together, these three new collaborations show

ASFA is capable of working in partnership to deliver results, that ASFA can enhance projects by providing support and services to programmes and projects whose subject scope falls within ASFA's. We hope these three collaborations will be the first of many more to come as ASFA seeks to align itself with the needs of the wider aquatic science information world.

Next steps

As you can see, 2021 will be a busy year! The ASFA Secretariat will work hard to ensure the partnership is active and expanding, that services meet users needs and that collaborations are formed with users' best interests in mind. At the end of 2021, an interim project report will be written to assess progress. The abstracting and indexing service ASFA has provided for the past fifty years has been well received by users and we believe it still has a future, however in a world that changes so quickly from one day to the next, we must all be adaptable. If by the end of next vear, further changes are needed to ensure ASFA's success, then we will be prepared to make them. We look forward to hearing from ASFA users and partners about their experience of our new services, collaborations and partnership structure – by working together we hope to ensure a successful future no matter what challenges lie ahead.

Author: Tamsin Vicary, Food and Agriculture Organization of the United Nations, Rome, Italy. Email: Tamsin. Vicary@fao.org

How to increase variety of Grey Literature (GL) in ASFA: **interim project report from the FBA**

ASFA partners are eligible to bid for funding to complete special projects which are of benefit to ASFA and their institution. This year, three projects were selected, from Freshwater Biological Association (FBA), United Kingdom of Great Britain and Northern Ireland; Kenya Marine and Fisheries Research Institute (KMFRI), and; WorldFish. This article, by Ian Pettman of the FBA, reports on the progress of his project and recommends ways to improve the variety of grey literature – policy briefs, guidance manuals, research reports – on ASFA.

Introduction

This year, the FBA submitted a project proposal entitled: "Preparation and submission of ASFA ProQuest records and URI links for 400 British open access freshwater and marine datasets plus 800 grey literature publications (Policy briefs, guidance manuals, project evaluations and research/investigation reports) produced by British aid and environmental organizations including reporting on issues arising". The project was approved by ASFA partners in July and work commenced in September. This article is an interim report at the half way point of the project and presents: the objectives of the project; main issues arising from work to date; recommendations for increasing access to GL, and; ways ASFA partners can increase GL coverage from their region.

How ASFA can contribute to wider goals

As stated in our proposal and contract, the project's objective is to contribute to the FAO's Strategic Objective 2:

Objective

The Services will contribute to the Organizational Strategic Objective 2 (SO2): Statistics, information and communication products, services and information system frameworks in support to global fisheries and aquaculture policy and decision making (including support to ASFA).

By increasing access to British marine and freshwater datasets and grey literature publications, the project will support policy and decision making in these areas, ensuring the research is available to all. In addition to supporting SO2, the work covered by the grey literature records produced contributed to all of the 17 UN Sustainable Development Goals (SDGs) by ensuring access to information to sustainably manage aquatic environments to ensure a food secure world. https://www.un.org/sustainabledevelopment/sustainable-development-goals/

As ASFA moves into its 50th anniversary year, its ability to contribute to common goals, such as the SDGs, will be key way in which to measure its success. By playing an active role in increasing access to information, and possibly data, ASFA will indirectly contribute to the SDGs, ensuring its findings and lessons learnt along the way are share with its

partners and interested parties.

During the 1990's, ASFA sought to improve its database by increasing the amount of fisheries research. This targeted approach saw a large increase in the number of fisheries added to the database – 74 848 fisheries records were added to ASFA in 1990, up from 52 051 the previous decade. This shows ASFA has the capability to meet specific demands, but how does a global partnership of diverse aquatic science, fisheries and aquaculture organisations agree those demands? One initiative for Partners in ASFA's 50th and ensuing years might be to focus on contributing to the UN SDGs by further promoting the contents of such records.

This project will have a number of outcomes, one of which is to increase access to a variety of Open Access (OA) grey literature documents, including policy briefs, project evaluations and research/investigation reports. These are often only available on governmental/organisational websites and their inclusion in databases such as ASFA is an important part of ensuring the information is available to researchers now and in years to come. The project also aims to: produce a representative sample of datasets useful to a range of user groups (policy makers. fishery managers and researchers) and to report any new metadata/software fields that may be useful in system design for the future. Doing this project now, means OpenASFA will be able to contain records for datasets. ensuring they are discoverable to a wide range of users. The project will run from September 2020 to February, 2021 thereby overlapping with the launch of OpenASFA in January 2021 and ensuring lessons learned can be applied to OpenASFA before and during development.

Interim project results

Increasing the number of Policy briefs, guidance manuals, project evaluations and research/investigation reports on ASFA

The United Kingdom of Great Britain and Northern Ireland has been contributing records to ASFA for 50 years. Although grey literature has always formed part of the British input, this has been mainly in the form of technical reports. Very few of the other types of grey literature were considered for inclusion until the advent of Open Access repositories. These repositories exposed the variety and extent of the relevant aquatic grey literature information, which we in the United Kingdom of Great Britain and Northern Ireland were not including on ASFA. This may be the case for many other ASFA partners.

When exploring the possibilities for this project, an obvious UK source for relevant grey literature was the British Department for International Development (DFID). This proved to be the case with over 500 relevant open source full text documents between 1999 and 2014. However, this source has highlighted some of the issues relating to awareness and retrieval of these documents, issues which ASFA can help overcome:

- Between 1994 and 2014, there are 500 relevant documents to ASFA (fisheries and aquaculture) on the DFID website, less than 2 percent of the total number of documents.
- From 2014 onwards the percentage of relevant documents falls even further to approximately 1 percent.
- The searching options available on the site are extremely limited and those available give questionable results (e.g. no results for fisheries when there are in fact 500 results).
- There seem to be only two ways to find a document:

 i) by knowing the title or; ii) by knowing the year of publication and then browsing through 1,000 or more results for that year.
- This ASFA Trust Fund project will make these documents more readily available and reusable for the aquatic sciences and fisheries community.

Other points of interest:

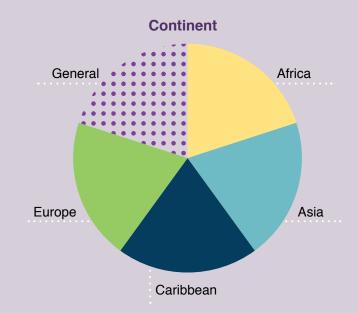
- As a British Government open access site, an assumption can be made that it is a sustainable long term site. Not all sites are so sustainable long term e.g. many consultants web sites remove documents after a period of time.
- Automated harvesting of records (e.g. by web crawler or similar systems) would be dificult on the DFID site.
- There are often bibliographic errors on the DFID "landing pages" for the documents which would mean any results should be checked and edited.
- Not all of DFID's landing pages link to their own document repository. Those that link to a consultant's or other organization's web site often have broken or lost links.
- Two important types of grey literature seem to be the most likely to "disappear" quite quickly through lost links. These are "Training materials" and "Case studies".
- The DFID documents have lead me to four useful open source full text repositories in the United Kingdom of Great Britain and Northern Ireland that I was not previously aware of. The FBA will be monitoring these in future years for relevant ASFA records.

The first 600 records produced have revealed 35 different subject terms for these documents, there may be more terms yet to be discovered. At the end of the project these terms will be listed with some suggestions for how they may be handled in the ASFA subject thesaurus.

So far, six Web Collection Pages have been included. These pages list the URLs of many documents on one specific topic (e.g. River Management Plans) and hence are an efficient way of leading users to a comprehensive range of documents with a single record. Otherwise, Web pages have been excluded from this project.

Since the project is concerned with literature types, video formats have been excluded, however this may be a relevant source for future projects.

The geographical coverage has been fairly event between the below regions, with each constituting roughly 20 percent of records. Australasia, North America and South America have not yet featured in this British based work.



Data sets

This will be the major focus of the second half of the project. The proposal is to include 400 aquatic data sets in order to form a working sample for further consideration on policy for the future. There would seem to be many datasets to choose from which have a global and development relevance even though the repositories are based in the United Kingdom of Great Britain and Northern Ireland. This will be considered further in the final report of this project.

Metadata fields

The 600 grey literature records produced so far have not highlighted any new metadata issues, as ASFA already covers this comprehensively. The records are all entered as "ASFA Monographs" in order for them to be uploaded to the ProQuest platform. There are some document types that may benefit from thesaurus entries so that they can be searched or filtered for if required (e.g. Briefing papers). There have been opportunities to link various records which are related to the same project e.g. the briefing papers can be "linked" to the Final Project Report or similar documents. This has been done using the "Notes" field but there may be a better way of doing this in the new software.

Only two records for *datasets* have been entered during this first half of the project. There were initial trials to ensure that it would be possible to ingest these in to the ProQuest platform – again using the "ASFA Monograph" approach. They were successfully loaded. However, a couple of issues for improvement are outlined below.

There may be further issues arising from datasets over the second half of the project. These will also be considered further in the final report.

Discussion and lessons learnt so far

Grey Literature

Several points relating to the future harvesting and indexing of records have been raised by work on this project to date. Firstly, there are many terms and phrases for document type that ASFA could define and rationalise to aid searching. These terms could be added to the ASFA Subject thesaurus to enable ASFA partners to index their records using more detailed document types. This could benefit searchers who can use the terms to filter their searches, however it would also help ASFA to quantify the amount of GL added to its database by partners.

As mentioned above, "Training Materials" and "Case Studies" did not appear to be stored sustainably on the DFID website. If these materials are important to users, a more sustainable repository should be sought to ensure the materials are not lost to users. The unstable storage of these, and other document types, creates broken links which is frustrating for users to encounter. In the age of online learning and training, we believe that sharing training materials can benefit a number of user groups and ASFA could lead the way in promoting these materials.

Lastly, user feedback on the cross-referencing of related documents within ASFA records would be useful in determining whether and how ASFA can achieve this.

Datasets

At time of writing, work has only just begun on creating ASFA records for data sets. There will be a range of additional information pertinent to this type of resource but it is probable that metadata which does not need to be searchable can be incorporated in the "Notes" field. This will probably necessitate some "guidance notes" being agreed for ASFA input personnel.

However, for the new software being produced now, this Trust Fund (TF) project would support consideration being given to one new searchable field "PeriodOfTime" as was suggested in the 2015 report on "Utility of Metadata Fields:"

This field is defined in both the Dublin Core and Data Cataloguing Vocabulary (DCAT) standards. This TF project recommends that the ASFA Software Working Group give consideration to this field being added to the new software.

Recommendations to ASFA Partners

There are now many open source full text services for grey literature – from government through to academic, consultancy and private sector sites. ASFA can serve its community by bringing the relevant records of these aquatic materials together in one easily searched source. Just during the first two months of this project, four new sources of aquatic grey literature and one new source for datasets have been "found" in England alone. In the second phase of the project we hope others will surface in Wales, Scotland and Northern Ireland. The FBA would encourage other ASFA partners to explore similar resources in their nations and regions.

Acknowledgements

This work would not be possible without the support of the ASFA Advisory Board, the ASFA Secretariat and with the financial backing of the ASFA Trust Fund and the Freshwater Biological Association. I would like to take this opportunity of thanking everyone involved.

Author: Ian Pettman, Freshwater Biological Association, Ambleside. UK.

Email: IPettman@fba.org

Dataset: Period Of Time: This field is necessary to represent the time period during which the data was collected. This is of interest to the user ... We feel that dataset time period is concise and sufficient for ASFA.



The ASFA CECAF-PESCAO project is underway

The CECAF-PESCAO project is focused on improving regional governance of marine fisheries resources in the CECAF region (Eastern Central Atlantic). ASFA is committed to supporting this project by compiling an inventory of marine fisheries research from the area. ASFA partner Daryl Superio has been recruited to assist activities and has performed an initial gathering of publications by authors affiliated with institutions in CECAF-PESCAO countries which are indexed in online resources. Daryl will perform a bibliometric analysis on the results, identifying research strengths and gaps to help plan marine fisheries research in the future, and ensure that research already undertaken is made available to as wide an audience as possible.

ASFA partner institutions in Benin, Côte d'Ivoire, Guinea, Mauritania, Morocco, Nigeria, Senegal and Spain, as well as an identified institution in Ghana, have been recruited to help with the project. Library and information professionals from these institutions are participating in a series of training workshops organized by the ASFA Secretariat, aiming to identify and record relevant research available in their countries. The weekly workshops are designed to provide a methodological support and create a platform for participants to share their experiences and to report on the progress. All the project participants have worked diligently, despite the impacts of COVID-19 and their inventories already include a great number of hard-to-reach documents, such as theses, conference proceedings, project reports, working papers, etc. These are materials that were not identified by searching online

databases. It took the expertise and knowledge of library and information professionals based in these countries to know what institutions would hold relevant research, and how their holdings could be searched. In many cases, catalogues are not available to search online so consultants have visited institutions in person to search for research.

Once the inventory is complete, the metadata will undergo a bibliometric analysis. It is hoped that the recommendations based on the results of the analysis will help to inform research policy in the region and provide member countries with a better representation of national fisheries research across the CECAF area.

Depending on the funding available, the project activities might be extended into 2021 and would include a digitization of the documents identified by the participants and preparation of OpenASFA records. If proved to be successful, the methodology developed for this project could also be applied to other CECAF countries as well as to other regions in the future.

The activities are jointly funded by ASFA and Regional Office for Africa (RAF) Technical Cooperation Programme (TCP) under the CECAF-PESCAO project.

Author: Maria Kalentsits, Food and Agriculture Organization of the United Nations, Rome, Italy. Email: Maria.Kalentsits@fao.org

Zoom Meeting

Richard

Rough Rack GB...

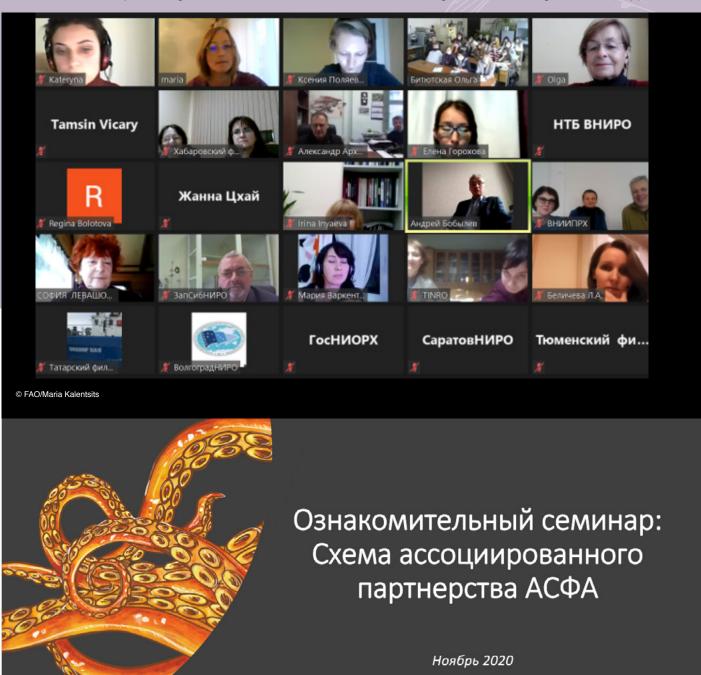
BOUCHRA BAZI

VNIRO and ASFA host virtual orientation session

The ASFA Secretariat in collaboration with Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), the national ASFA partner in the Russian Federation, hosted a webinar for the Russian ASFA network in November 2020. The network includes ten Collaborating Centres and six institutions (Kerch State MaritimeTechnological University, The Altai Institute of Fisheries and Oceanography, The Atlantic Branch of VNIRO, The Baikal Branch of VNIRO, The Branch on Freshwater Fisheries of VNIRO (FSBSI), The Krasnoyarsk branch of VNIRO (NIIERV), who joined the partnership as new ASFA Associates earlier this year. A total of 24 institutions (55 participants), including those who are considering joining ASFA, were

Author: Maria Kalentsits, Food and Agriculture Organization of the United Nations, Rome, Italy. Email: Maria.Kalentsits@fao.org

present. Maria Kalentsits (FAO ASFA Secretariat) presented an orientation session introducing ASFA and detailing the Associates' Scheme. Sofia Levashova (VNIRO) provided information on the documents indexed for ASFA in Russia and Katerina Kulakova (AzNIRO) introduced a merged repository AquaDocs, being jointly developed by the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) and the International Oceanographic Data and Information Exchange of the Intergovernmental Oceanographic Commission (IOC/IODE), with support provided from ASFA. We hope to get more ASFA associates and AquaDoc depositors in Russia in 2021! Many thanks go to Sofia Levashova and the VNIRO management for making this event happen.



© ASFA

The **ASFA** Partners are:

National Marine Data and Information Institut de Recherches Halieutiques et Russian Federal Research Institute of Institut National des Sciences et Service (NMDIS), China Océanologiques du Bénin (IRHOB) Fisheries and Oceanography (VNIRO), Technologies de la Mer (INSTM) - Tunisia Benin Russian Federation WorldFish ProQuest Universiti Malaysia Terengganu (UMT), Direction des Pêches Maritimes, Senegal Malavsia Food and Agriculture Organization of the United Nations Division for Ocean Affairs Intergovernmental Oceanographic UN Environment Programme (UNEP) and the Law of the Sea (UN/DOALOS) United Nations (FAO) Commission (IOC), Belgium FAO-AdriaMed Project International Commission for the Indian Ocean Tuna Commission (IOTC) The World Conservation Union (IUCN) Conservation of Atlantic Tunas (ICCAT) Secretariat of the Pacific Community (SPC) Northwest Atlantic Fisheries Pacific Islands Marine Resources Southeast Asian Fisheries Development Information System (PIMRIS) Center/Secretariat (SEAFDEC) Organization (NAFO) Western and Central Pacific Fisheries Chittagong Veterinary and Animal Sciences University (CVASU) -Instituto Nacional de Investigación y Okavango Research Institute, Botswana Commission (WCPFC) Desarrollo Pesquero (INIDEP), Argentina Bangladesh Universidade de São Paulo Fisheries and Oceans Canada (DFO) / Instituto de Fomento Pesquero (IFOP), Marine and Coastal Research Institute "Jose Benito Vives de Andreis" Instituto Oceanografico (IO/USP), Pêches et Océans Canada, Canada Chile (INVEMAR), Colombia Centre de Recherches Centro de Investigaciones Pesqueras Instituto Nacional de Pesca (INP), Egyptian National Oceanographic Data Center National Institute of Oceanography and Fisheries (NIOF), Egypt Océanologiques (CRO), Côte d'Ivoire (CIP), Cuba Institut Français de Recherche pour Hellenic Centre for Marine Research Marine Research Institute (MRI), Iceland National Institute of Oceanography (CSIRl'Exploitation de la Mer (IFREMER), (HCMR), Greece France Centre for Scientific Documentation Iranian Fisheries Science Research Societá Italiana di Biologia Marina S.I.B.M. Marine Institute, Ireland and Information Indonesian Institute of Sciences (PDII-LIPI), Indonesia Institute (IFSRI), Iran (Islamic Republic of) ONLUS, Italy National Research Institute of Living Aquatic Resources Research Kenya Marine and Fisheries Research Korean Institute of Ocean Science and Center (LARReC), Fisheries Science (Fisheries Research Institute (KMFRI), Kenya Technology (KIOST), Republic of Korea Agency, FRA), Japan Lao People's Democratic Republic Universidad Nacional Autónoma de Institut National de Recherche Halieutique INAHINA - Instituto Nacional de National Marine Information and Research México (UNAM), Mexico Centre (NatMIRC), Namibia (INRH), Morocco Hidrografia e Navegação, Mozambique National Institute for Freshwater Institute of Marine Research (IMR), Instituto del Mar del Perú (IMARPE), Peru University of the Philippines Visayas, Fisheries Research (NIFFR), Nigeria Instituto Portugués do Mar e da Atmosfera (IPMA), Portugal National Marine Fisheries Research Instituto Español de Oceanografía (IEO), Institute of Marine Sciences (IMS), Institute (NMFRI), Portugal Spain United Republic of Tanzania Chulalongkorn University, Thailand Central Fisheries Research Institute -National Fisheries Resources Research Budgetary Establishment "Methodological Institute (NaFIRRI), Uganda and Technological Centre of Aquaculture",

OUT AND ABOUT WITH THE **ASFA SECRETARIAT**

(AKA ASFA PINGUINI)

Freshwater Biological Association, United Kingdom of Great Britain and

Northern Ireland

The FAO-ASFA secretariat have nicknamed themselves the ASFA pinguini - why?

Because, just like real penguins, ASFA is always in pole position!

GET IN TOUCH

ASFA Secretariat

Email: ASFA-Secretariat@fao.org

National Oceanic and Atmospheric

Administration (NOAA)

United States of America

Tweet: #FAOASFA

Website: http://www.fao.org/fishery/asfa

Ukraine

Ministry of Agriculture and Rural

Development of Viet Nam, Viet Nam

Food and Agriculture Organization of the United Nations Rome, Italy



Trabzon, Turkey

(IIP), Uruguay

Universidad de la Republica, Fac. Vet.

Instituto de Investigaciones Pesqueras

