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Abstracting and indexing as an enabling interface between open science and grey literature: the approach of ASFA service

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ASFA PARTNERSHIP - OVERVIEW

- Over 100 institutions contribute to the ASFA A&I database
- The ASFA database has over 3.7 million records
- Partners contribute ~15,000 records per year, combination of grey and primary literature

ASFA users: 'recognize the importance of ASFA for its international coverage, particularly of grey literature about fisheries and aquatic sciences' Diana Castillo, 2019



But the ASFA Secretariat knows:

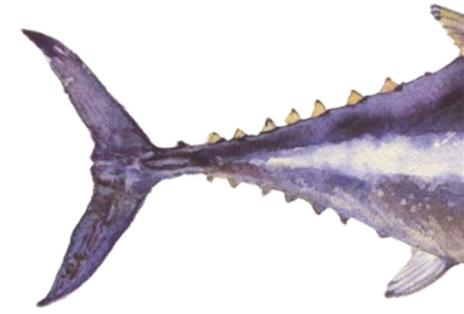
- Coverage and input to database has not evolved - new technologies present opportunity to capture more Grey Literature
- Monitoring and recording of Grey Literature on ASFA problematic and non-standardized
- As a commercial product, the ASFA database and partnership has not kept pace with the open science and OA movements

A strategy has been developed to improve coverage of Grey literature on ASFA, in line with move to FAO Open Access and Open Data policies.

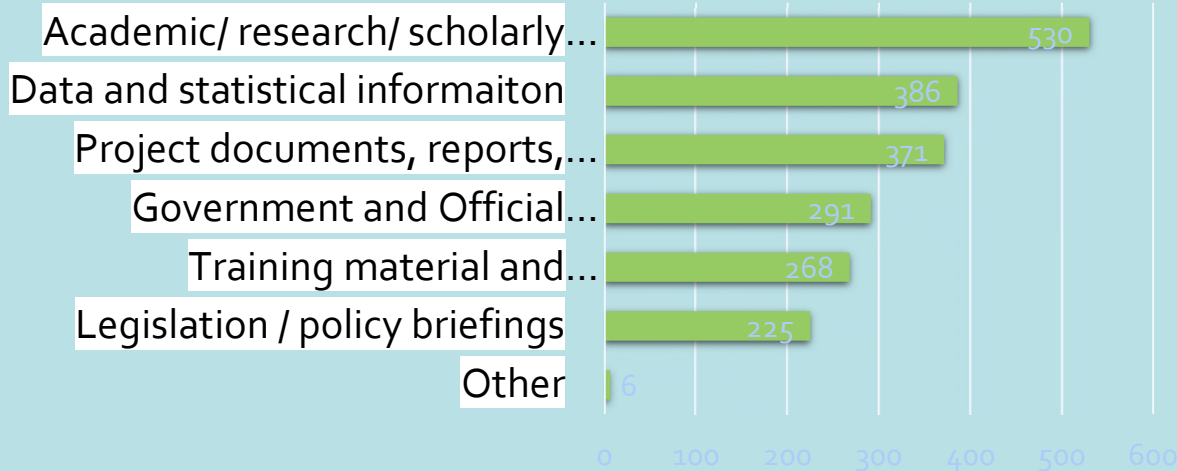


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ASSESSING USER NEEDS

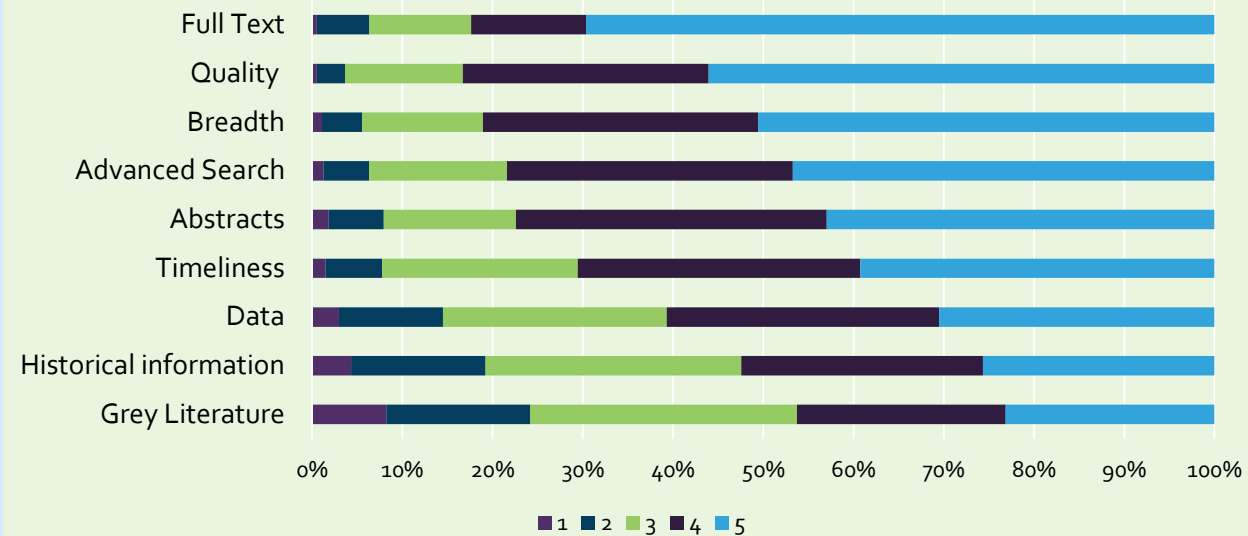


What sort of information do you need
to support your daily activities?



VS.

How do you rate below database features?



- User survey completed December 2018 by 568 respondents.
- Project documents, reports and conference proceedings 3rd most needed information type – but GL least likely to be rated highly. ASFA conclusion: Education needed!



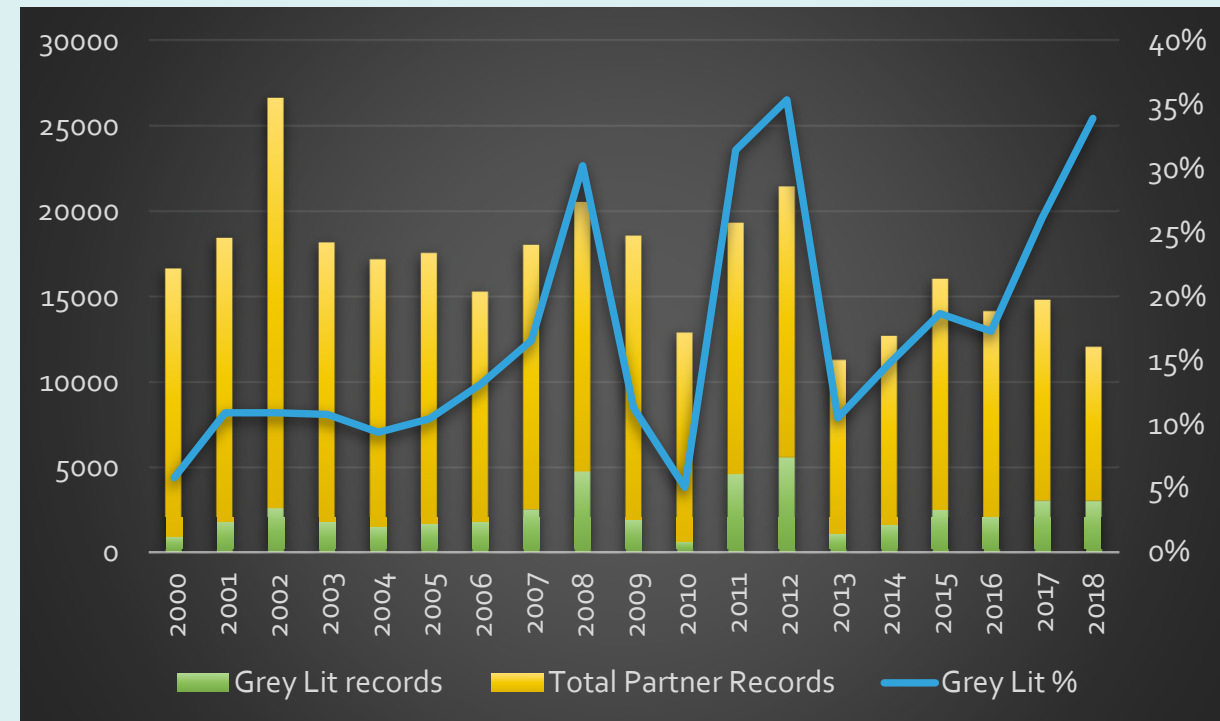
ASFA PARTNERS' GL COVERAGE

Do you cover Grey Literature for ASFA?



- Just over half monitor their own institution's Grey Literature
- Less than a third monitor other institutions' Grey Literature
- Less than half monitor non-serial publications

ASFA Partners' GL Coverage



Around 34% of Partners' Records are GL – has steadily increased since 2013. ProQuest take more responsibility for primary journals.



FORMULATING A GREY LITERATURE STRATEGY

ASFA Advisory Board Meeting discussed importance of increasing accessibility of Grey Literature

A quiz revealed lack of awareness and understanding of GL among Partners:

GL?	Technical Guidelines	Video – online course	Infographic	Dissertation / Theses
Yes	11	13	21	18
No	6	11	2	1
Maybe	1	1	2	0

ASFA therefore agreed a working definition of Grey Literature, based on Prague definition:

Grey literature is information presented in any number of physical or digital formats, under the subject scope of aquatic sciences, fisheries or aquaculture, of sufficient quality to be preserved and of public good.

- *Updated technologies are required in order to implement strategy.*



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UPDATING ASFA TECHNOLOGIES

From closed CDS-ISIS software to an open Virtual Research Environment provided by D4Science.

A Virtual Research Environment (VRE) is a **“system”** with the following distinguishing features: it is a **Web-based** working environment, it is **tailored to serve the needs of a Community of Practice**, it is **expected to provide a community of practice** with the whole array of commodities needed to accomplish the community’s goals, (including services, data and computational facilities), it is **open and flexible** with respect to the overall service offering and lifetime and it **promotes fine-grained controlled sharing** of both intermediate and final research results by guaranteeing ownership, provenance, and attribution.

Connect bibliographic information to other data products, for instance a registry of Aquatic Genetic Resources

Harvest from key OAI-PMH compliant repositories, such as OceanDocs and Aquatic Commons.

Provide an open platform for its records which can connect via APIs to institutional websites



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VRE AS AN INTERFACE BETWEEN OPEN SCIENCE AND ASFA

VRE is an open platform for ASFA

- VRE makes records openly searchable
- In line with FAO Open Data and Open Access policies
- Enables participation in wider range of projects – OpenAIRE– open system attractive to wider range of Partners

Benefits from other open systems

- Move to qualified DC to improves interoperability
- Harvest from 10 repositories – avoid duplication of efforts.
- Uses existing taxonomic and geo lists for indexing
- Imports metadata from Partner repositories to VRE

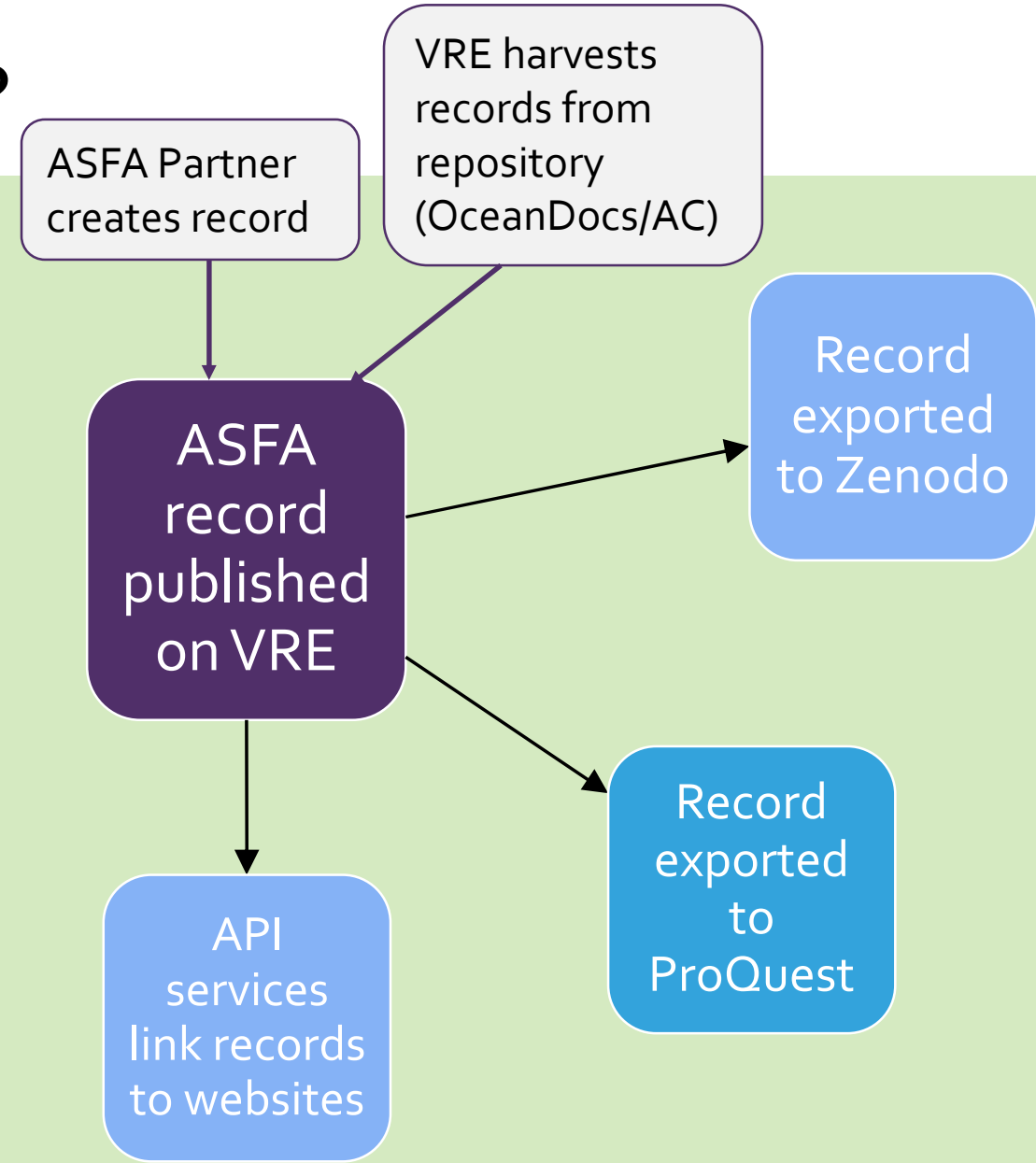
Enhances other open systems

- Collaborate with Aquatic Genetic Resources Registry to monitor research on strains of species used for aquaculture in different countries.
- Use of APIs to display ASFA records on websites
- Open platform for FAO projects - PESCAO



ASFA AS OPENAIRE PROVIDER?

- Extension to ASFA data entry catalogue on VRE to enable records to be sent to Zenodo/OpenAIRE.
- Ensures compliance with FAO and EU Open policies whilst increasing reach of and access to Partners' Grey Literature
- Pilot study involving data sets from Partners in Uganda and UK to be set up.
- Access to OpenAIRE resources- grid references for map services and taxonomic for species listing





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CONTROLLED VOCABULARY - VOCBENCH

ASFA's controlled vocabulary contributes to Open Science by ensuring aquatic sciences, fisheries and aquaculture information is openly searchable and discoverable.

- ASFA's Subject Thesaurus is now managed using open source software VocBench
- Multilingual to assist indexing and search of non-English GL
- Shares services with FAO's AGROVOC although available as a separate SKOS-XL concept scheme.
- Also published as a Linked Open Data set, work ongoing to align to open datasets
- Licensed under CC-BY IGO 3.0 – available for use by fisheries, aquaculture and aquatic science institutions worldwide.

Technology provides infrastructure and services but promotion and education needed to ensure it's used!

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Vocabularies About Feedback Help

ASFA Content language English Search

Alphabetical Hierarchy Groups

A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z

AAS → Absorption spectroscopy
Abalone culture
Abalone fisheries → Gastropod fisheries
Abdomen
Abiotic diseases → Environmental diseases
Abiotic factors
Ablation
Abnormal organisms → Abnormalities
Abnormalities
Aboriginal fishing → Indigenous fishing
Absolute age
Absolute food deficiency → Starvation
Absolute humidity
Absolute velocity → Velocity
Absolute vorticity
Absorbance
Absorption (chemistry) → Sorption
Absorption (food) → Food absorption
Absorption (light) → Light absorption
Absorption (physics)
Absorption (sound) → Sound absorption
Absorption coefficient
Absorption loss → Transmission loss
Absorption spectra
Absorption spectrometry → Absorption spectroscopy
Absorption spectroscopy
Absorptivity → Absorption coefficient
Abstracts
Abundance
Abundance (chemical) → Chemical composition

Vocabulary information

TITLE ASFA

TYPE <http://www.w3.org/2004/02/skos/core#ConceptScheme>

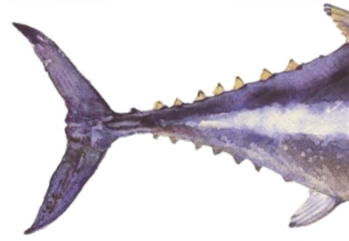
URI <http://aims.fao.org/aos/asfa>

Resource counts by type

Type	Count
Concept	6551

Term counts by language

Language	Preferred terms	Alternate terms	Hidden terms
English	6551	4065	0



ASFA KNOWLEDGE SHARING ACTIVITIES

ASFA Newsletter and Conference have recommended ways in which ASFA can resolve regional issues to storage and access of Grey Literature:

Africa

- ASFA essential to ensuring visibility of African GL – “...reducing publication bias and protecting scientific community from monopoly of publishers.”
- Financial resources, unwillingness of scientists, lack of awareness of benefits are barriers to publishing GL
- ASFA to increase support to OA repositories

Asia

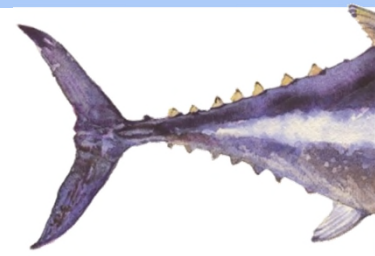
- Higher number of GL citations when first author is Filipino and/ or when journal is published in the Philippines
- Analysis shows only 25% of GL publishers included on ASFA
- Websites emerged as one of most cited sources
- ASFA to replicate study in other regions and implement recommendations on VRE

Latin America

- Much historical fisheries literature remains print only – only accessible in one library in Argentina
- FAO projects not only most recent but often only research on fishery/ species
- Librarians as custodians of GL – should be moved online?
- ASFA to offer support for digitization projects.



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PROMOTING GL SUPPORTS OPEN SCIENCE



ASFA is participating in FAO project PESCAO to make an inventory of primary and GL in CECAF countries:

The **PESCAO-CECAF** Project is to improve regional governance of marine resources in the CECAF area using knowledge-based advice by strengthening management processes to contribute to sustainable fisheries, food security, and sustainable livelihoods.

The inventory will:

- be openly accessible on the VRE
- contribute to identifying research strengths and weaknesses
- result identification of printed materials and subsequent digitization projects
- Provide training and skills across region

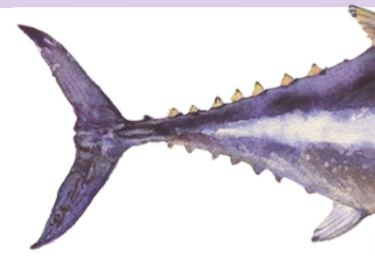
Aquatic Genetic Resources registry (AqGR)

ASFA records on the VRE can contribute to AqGR – subject, geographic and taxonomic used to link to appropriate AqGR record.

For example, when an ASFA Partner creates a record on the biological observations genetic of *Clarias gariepinus* used for aquaculture in Nigeria, this can be linked to the appropriate record in the AqGR registry.



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HOW ASFA WILL IMPLEMENT ITS STRATEGY



- **ASFA Working Groups** enable collaborative ownership of ASFA technologies, products and policies
- **ASFA Associates** increases participation in the partnership, focus on developing countries
- **Improved reporting** to measure progress
- **Work to culminate in ASFA's 50th Year Anniversary in 2021** – where we hope to hold another conference updating on the success of ASFA's Grey Literature strategy and how it has helped increase accessibility of GL around the world.



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ANY QUESTIONS?

