A Small Library That Could

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Abstract

The scientific library of A. O. Kovalevsky Institute of Biology of the Southern Seas of RAS has a very interesting history, like the Institute itself. Formed in 1871, The library went through a number of ups and down but always recovered. Today it is flourishing and has plans for even more innovations.

Keywords: Libraries, Institute of Biology of the Southern Seas of RAS, marine biology, publishing, aquatic sciences research, repositories.

The scientific library of A. O. Kovalevsky Institute of Biology of the Southern Seas of RAS has a very interesting history, like the Institute itself. Formed in 1871, even before the Sevastopol Biological Station was organized, the library went through a number of ups and downs but always recovered. In 2007, the scientific library was one of the first in Ukraine to create a repository. All the content was lost in 2015, but the repository was re-created. Now it includes more than 7,000 publications scanned and described (the archive covers articles since 1870). The scientific library is involved in Marine Biological Journal publishing, publication activity indicators estimation, data on Institute expeditionary research processing. We plan to create a Scientific Information Center to unite the aquatic sciences libraries and information centers, to make a joint directory and a repository, and to organize a training center.

When choosing the title we were inspired by the article released by NASA "Six Things to Know About NASA's Opportunity Rover" (https://mars.nasa.gov/news/8414/six-things-to-know-about-nasas-opportunity-rover/). Our title is a kind of tribute to a small rover that spent 15 years on the Red Planet on a great mission.

Until the 1870s, there were no marine biological stations not only in Russia, but in the world. Meanwhile, the need was already felt. A naturalist arriving to study marine animals lost a lot of time looking for an apartment appropriate for his work and a lot of money buying both equipment for research and laboratory glassware.

In 1869, at the Second Congress of Russian Naturalists and Physicians in Moscow, Nicholai Miklouho-Maclay put forward an idea of creating a zoological station on the Black Sea and emphasized that its existence would be impossible without a special library filled by researchers. So, when the Station was officially established in the spring of 1871, it already had a library, because hydrobiologists left books and reprints of their publications. Five years after the Station was opened, the library had 678 volumes.

For the first decades, the Sevastopol Biological Station rented different premises. In 1892, the Station was transferred to the Imperial Academy of Sciences, and the academicians allocated funds for the construction of a building with a marine aquarium. Since autumn of 1897, the beautiful building in the style of a classic renaissance is a real pearl of the Sevastopol Bay (Figure 1).



Fig. 1. Sevastopol Biological Station.

By 1941, the library fund included an extensive collection of literature on sea biology, oceanology, and other related sciences. The small scientific library in Sevastopol has become the best in the country and one of the best in the world in its subject matter.

During the Second World War, our city was severely bombed. A direct hit destroyed the southern wing of the Station where the library was located. The fund was lost in fire. After liberation in 1944, Sevastopol was in ruins. The Station building was destroyed. The whole country was in a difficult situation, and yet funds for the Station and library restoration were allocated.

The outstanding hydrobiologist Vladimir Vodyanitsky became a director of the Sevastopol Biological Station in 1944. He took an active part in library's recovery. There was hope of finding some books in basements (in ruins), but it was not justified. Vodyanitsky appealed to the USSR Academy of Sciences, to domestic and foreign scientists, to scientific organizations and societies asking for help in restoring the Station's library. As a result, the library received duplicate publications from the funds of the Academy of Sciences system and from the reserve fund of the main library in Leningrad. So the first fall was overcome, and a rise began.

The next important stage was in the 1990s – in the period when Ukraine gained independence. It was difficult to work in the old, traditional manner:

- Our financial capabilities were sufficient only for subscriptions to Ukrainian publications
- We had no money to pay for the books of Russian publishing houses;

- We received foreign publications from the Vernadsky National Library of Ukraine due to international book exchange, but there were practically no rated journals;
- The work of interlibrary loan stopped.

Our colleagues didn't give up. They asked the director to buy computers and server and to pay for the Internet. The library staff digitized the card catalog and organized the electronic one.

The most acute question was about publications acquisition. Lack of money prompted us to start mutual book exchanges with 30 scientific organizations of the corresponding profile of Ukraine and Russia.

In the 1990s, Olga Akimova, the head of the scientific library, began communication with foreign colleagues. In 1994, the library of the Institute of Biology of the Southern Seas became an EURASLIC member. So, for many years we have been able to ask our European colleagues for article copies on interlibrary loan, for duplicate publications, and for short run literature. Our scientists are delighted with the opportunity to read and to cite rare and recent publications of foreign researchers.

Since 1995, the scientific library has had the status of an ASFIS collaborating center. We have access to the ASFA database, and it really helps us in serving scientists.

Since 2006, the scientific library has been an IAMSLIC member, so we use IAMSLIC Z39.50 Distributed Library.

At the beginning of the 21st century, scientific and educational organizations understood the importance of creating scientific archives containing articles, books, manuals, and other publications of their researchers and lecturers. In 2007, our scientific library was one of the first in Ukraine to create a repository.

The 1990s and 2000s were years of close and invaluable cooperation with foreign aquatic sciences libraries and information centers. Their participation in the fate of our library helped to develop many ideas and provided opportunities for recovery. EURASLIC and IAMSLIC membership, staff internships, participation in conferences, international programs, projects, and trainings made the staff more qualified and stimulated our development. The experience and knowledge gained from colleagues all over the world helped to unite Ukrainian aquatic sciences libraries and to attract them to cooperation, raised the importance of libraries for scientists, and made researchers understand the irreplaceability of the library staff. By 2014, our scientific library worked as a modern information center, well known in the country and even outside.

Since 2014, Crimea lives in a new reality. In 2015, our Institute was reorganized. We had to adapt quickly to Russian laws, rules, and instructions, brand new for us.

Blackout on November 21, 2015 was a huge shake-up in the work of the library. The server was totally down. All the content (web sites, programs) was unrecoverable. The data was lost.

The scientific library did not give up. A new stage, a new rise began, though in 2014–2015, when we lost the repository and the groundwork of Ukrainian period, participation in many international projects almost stopped. We got an opportunity to communicate with colleagues from Russian

libraries, to attend conferences. We expanded the field of our activity and began the transformation of a small scientific library into a scientific center.

It all started with the journal. Our scientific journal had to be substantially reorganized. Firstly, we had no legal grounds to issue a Marine Ecological Journal; therefore we created the Marine Biological Journal (Fig. 2). Secondly, we stopped the practice when the editor worked with articles single-handedly in Microsoft Word. We decided to typeset articles in the free document preparation system LaTeX and made an original layout. We staffed the team with a proofreader, translator, and a programmer to form an editorial and publishing group.



Fig. 2. Marine Biological Journal Cover

For the journal site, we chose the Open Journal Systems platform. OJS is open source software with the functionality necessary for the publishing process. Now we use OJS 3.1.2: it includes developments implementing a full multilingualism. It is really important for our journal, striving to be included in the international scientific databases but still having most publications in Russian.

In 2015, when we were just discussing the journal creation, our director set us a task: the journal should be included in Russian and international bibliographic databases. Their requirements for journal content and for web sites are very different, and the journal has to meet them all. We put a lot of effort into it, and now we have:

- Fully bilingual web site https://mbj.marine-research.org/ containing archive, guidelines for authors, personal pages of editorial board members, publication ethics, etc.;
- Growing number of articles in English;
- Editorial board consisting of prominent scientists;
- Double-blind peer review for submitted articles;
- Bilingual basic article information;
- Registration in the CrossRef system, DOI assignment;
- Articles published under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License;
- Inclusion in ROAD and DOAJ, indexation in ASFA and RSCI databases;
- Filed application for inclusion in the Web of Science database;

• Inclusion in Scopus database.

The journal is fully funded by the Institute and charges no publication fee to authors. Payment of royalties is not provided, either.

In 2016, we asked for our own server. Our needs about server use were convincing, and the administration agreed to buy it. Now we have a powerful tool providing opportunities for further progress, so we can organize our work competently. Since 2018, we are not just a scientific library, but a Scientific Information Department with librarians, engineers, programmers, and a server administrator.

Managing the server independently, we can implement our projects (Figure 3).



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Fig. 3. https://marine-research.org/interface.

First of all, we re-created a repository of our scientists publications, and now we have about 7,000 items scanned and described on https://repository.marine-research.org/. The archive covers articles since 1870.

Then we created the database https://sci-info.marine-research.org/ with publication activity indicators. The system is absolutely transparent. Every scientist can evaluate his publication activity, as well as another's. Moreover, our economists receive automatically generated reports when it is time to calculate incentive payments.

The server hosts several scientific databases. One of them is really interesting. Step by step we fill the database https://rv-cruises.marine-research.org/ on Institute expeditionary research. Colleagues digitize and systematize the data about hundreds of cruises. You can use interactive maps and even download information on many expeditions (their number is growing month by month).

Our plans are huge. They include the creation of a Scientific Information Center that will unite the aquatic sciences libraries and information centers. We plan to launch a single information resource. It is important to create a joint directory and a repository for scientists, graduate students, students, officials, etc. The Center will collect information about all the available resources in the field of aquatic sciences and provide access to them. We discuss the use of Service Discovery for the search. We plan

to create a training center for the graduate students, young sea and ocean researchers, for like and information specialist from aquatic science institutions.	rarians