

THE ELECTRONIC DATABASE: HISTORY OF INTERNATIONAL COLLABORATION IN BIBLIOGRAPHY OF ATLANTNIRO (1958-2008)

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Abstract: This paper continues the theme of our previous contribution devoted to the bibliography of the AtlantNIRO. In the year of 60th anniversary of the AtlantNIRO and 200th anniversary of Ch.Darwin we would like to show the evolution of possibilities of Library on example of one of its functions – monitoring of publications of our scientist and specialists. Over the past few years we have been striving to move from a paper based information to an electronic one. At first stage of the monitoring the bibliography compiled in lists in paper format, then since 2000 lists of bibliography have been converted in electronic format and at last in format electronic database. Generally speaking, we would like to give more information for our reader on base traditional bibliography and show the evolution of international activity of AtlantNIRO on this bibliography base.

Keywords: bibliographies, fishery institutions, data collections, marine biology, international cooperation

Since its creation, AtlantNIRO has undertaken actions to accomplish its mission in accordance with the objectives to study the resources faced with the difficulties generated by the increasing demand for products from the sea and the increase in fishing effort exerted on the stocks of many species. AtlantNIRO and its library have been in existence 60 years, and they have survived many disturbances, and generation changes.

This year has one of the hardest. Staff in the different divisions has been reduced and the budget was also cut to survival level. Our near-term challenge is to invent the book's stock and electronic catalogs. One of the library's catalogs is catalog of publications of AtlantNIRO in foreign languages. The main task is to convert the catalogs in databases.

This contribution continues the theme of bibliography of AtlantNIRO. For this database we used the bibliography of the AtlantNIRO (1950-2005) which described the contribution for 12th Conference of EURASLIC - Small special thematic database (Koval L.2007) and new publications in foreign languages issued in 2006-2008.

To make database we need to add new fields. But which fields? It depends on what information we want to receive. If we want to have information on history of international cooperation of AtlantNIRO, we include the field where the scientific material were represented (proceedings of international organizations, national research centres of foreign states, proceedings of international conferences, foreign journals etc.).

If we follow for historical aspects of international cooperation we add a field with chronological index (data of issue and decade). There are fields with subject index (UDC) and geographical index. By July 2009 the database of publications in foreign languages included 1247 documents.

First of all we try to answer the question where were publications represented. For many years the main form of collaboration was the participation in work of the international organizations. During the last 20 years, participation in international conferences became more active.

Some of these conferences took place in our region, among them the VIIth International Congress on the History of Oceanography in 2003 that had been held at the Museum of the World Ocean.

Participation of AtlantNIRO in international fishery organizations began in 1958. Since that time AtlantNIRO has presented the results of scientific research and participated in the international scientific projects of the International Council for the Exploration of the Sea (ICES), the International Commission for the Northwest Atlantic Fisheries (ICNAF), the Northwest Atlantic Fisheries Organization (NAFO), the International Commission for the South-East Atlantic Fisheries (ICSEAF), the International Commission for Conservation of the Atlantic Tunas (ICCAT), the Commission for Conservation of the Antarctic Marine Living Resources (CCAMLR).

From 1968 within the framework of bilateral intergovernmental agreements of Russia (USSR) with coastal states, AtlantNIRO pursued research on biological resources and processes of formation of water biological and fishery productivity in economic zones of Canada, USA, Argentina, Cuba, Nicaragua, Peru, Chile, Morocco, Mauritania, Angola. In general AtlantNIRO organized more than 300 marine scientific expeditions into economic zones of the coastal states to assess biomass of commercial hydrobionts, population parameters, to study distribution, behavior and reproduction of fishes and invertebrates in relationship to seasonal and interannual fluctuation of environment and the ocean hydroclimate. These allow us to reveal and describe the basic features of water biological and fishery productivity formation and to develop recommendations for rational fishery at the international level.

The last 20 years decreased number of publications devoted to research in the waters of Africa and increased the number of investigations in Baltic Sea and South Ocean (Antarctic).

The USSR has fished in the Atlantic Sector of the Antarctic (the ASA) for three living marine resources: whale, fish and krill.

The first scientific and fishery cruise of the AtlantNIRO (the BaltNIRO that time) was undertaken in 1961-1962. From 1961 to 1989, 55 scientific research and fishery voyages to the ASA were undertaken. That time the large-scale complex researches were commenced in order to substantiate an approach to krill resources management from ecosystem positions, as it was provided by Convention for the Conservation of the

Antarctic Marine Living Resources (the CCAMLR) which was ratified in 1980 and put into effect since 1982.

An international krill survey CCAMLR-2000 was carried out by vessels of four nations (Russia, UK, USA, Japan). The AtlantNIRO's contributions in the study of biological resources Antarctic (whale, fish, krill, squids) were very important and unique and may be used for better understanding and protection of oceanic ecosystems and for planning and development of sustainable fisheries.

The AtlantNIRO actively participates in CCAMLR work. Changes in the Law of the Sea, particularly the development of Exclusive Economic Zones (EEZs) and their extensions of national jurisdiction over living marine resources out to 200 miles offshore, profoundly affected international marine science and fishery organizations.

Themes of investigations traditionally based on study of biological resources of fishes and invertebrates (squids, krill). **Slides 11.** Ichthyological investigations includes special investigation on life cycle (UDC 597) and fishery investigation (UDC 597:639.2 - distribution, biomass, trawl and acoustic surveys, selectivity of fishery gears, etc.) **(Slide 12)**

Special investigations: 597.113- feeding; 597.113.4- growth, age; 597.115- genetics, polymorphism; 597.116- reproduction; 597.169- parasitology, diseases. **(Slide 13)**. Here we can see the more active work of our specialists on parasitology and reproduction of fish (fecundity, spawning, ichthyoplankton).

The investigations on parasitology has been described in the first part of contribution on the bibliography of AtlantNIRO (Koval, 2007).

The ichthyoplankton studies were commenced at the AtlantNIRO in 1954. These researches became the basis of long-term series of cod and sprat eggs abundance formation at the early ontogenesis stages (eggs, larvae). In the 1990s with the beginning of international projects

the ichthyoplankton researches in the Baltic Sea got a new powerful impulse.

The history of the early life stages of the fishes in AtlantNIRO covers more than 50-years period beginning from ichthyoplankton surveys of cod spawning grounds in the Baltic Sea in 1954. Later the geography of investigations was extended significantly and included ichthyoplankton surveys on spawning grounds of herring and hake in the North-Western Atlantic shelf, blue whiting and rockling in the open part of the North-East Atlantic, some pelagic fish of the Central-Eastern Atlantic shelf and also horse mackerel of southern part of the Pacific. The goal of these researches was a long-time series of spawning and larvae stocks which could be indicative of its spatio-temporal dynamics of spawning and an analysis of the environmental influence on its renovation. Egg and larval production estimations were also used for independent of any commercial fishing calculations of stock spawning biomass. (Alekseev F.E., Alekseeva E.I. 1988; Karasiova E.M., Arkhipov A.G., 2009)

As for works of concrete author we may receive information from special field - author and to see how many publications has got this scientist. We may prepare report with help

a special subprogram (**Slides 14-15**).

As we can see (**Slide16**) the international collaboration has rather stable level. As for qualitative aspect of the international collaboration the changes are there the last 20 years. The number of publications in proceedings of the international conferences and publications in foreign journals has been increased.

The professional possibilities of librarians have been changed after 1997. Typewriter has been replaced by computer, catalog – electronic catalog- electronic database (**Slide 17**). My personal life was changed after 1991. After the last expedition in Pacific ocean a wave of changes in our country and in our Institute carried me in the library (**Slides 18-20**).

It has been my fate to be the bibliographer of foreign literature in the library of AtlantNIRO since January 1992 and since 2003 I have tried to show different aspect of a librarian of foreign literature activities in our library. In the year of 60th anniversary of AtlantNIRO and 200th anniversary of Ch.Darvin we would like to show the evolution of possibilities of the library on example of one of its functions – monitoring of publications of our scientist and specialists. Over the past few years we have been striving to move from a paper based information to an electronic one. At first stage of this monitoring the bibliography compiled in lists in paper format, then since 2000 lists of bibliography were converted in electronic format and at last in format electronic database. Generally speaking, we would like to give more information for our reader on base traditional bibliography and show the evolution of international activity of AtlantNIRO on this bibliography base.

We must remember that, besides the buildings and collections, a library is a community, in our case comprising staff, our readers-researchers our colleagues from IAMSLIC/EURASLIC. Tremendous thanks must be sent to all librarians.

We are grateful for possibility to receive any help from our colleagues when we need it.

Due to these organisations and its conferences we have possibility to inform our colleagues about our work and to know so much new and useful information for us.

With respect to the work of our authors whose publications were used for this database and to the work of several generations of bibliographers of the library of AtlantNIRO, which had compiled bibliography of AtlantNIRO(1950-2008) we would like to show the evolution of investigations of AtlantNIRO and evolution of possibilities of library on example of one of functions of library – monitoring of publication activity of our scientists.

It is impossible not recognize that some progressive changes in library in the last seven years took place due to our membership in EURASLIC/IAMSLIC. Some expectations of our reader became fulfilled by our colleagues from libraries members

EURASLIC/IAMSLIC. We are grateful for help in our work with young generation of our reader, young specialists.

The future of our marine science is in friendly hands of EURASLIC/IAMSLIC.

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