THE IMPORTANCE OF COLLABORATION BEWEEN LIBRARIANS AND SCIENTISTS: NEW ROLES FOR LIBRARIES

Ramírez J., M.C. Ramírez, R.G.

Institute of Marine Sciences and Limnology Mazatlán Academic Unit, U.N.A.M. Av. Cap. Joel Montes Camarena s/n Explanada de la Azada, Cerro del Crestón, Mazatlán, Sinaloa, C.P. 82040, México. Email: <u>biblio@ola.icmyl.unam.mx</u>

Abstract: The current activity was carried out among a group of researchers, the librarian of the Dra. María Elena Caso Muñoz Library, and the head of the Computer Center of the Mazatlan Academic Unit, ICML, UNAM. A research project on the compilation of information about diverse pollutants in coastal lagoons of Sinaloa State was under way at the Mazatlán Academic Unit. The information will be used by academic institutions, the state government and decision makers to indicate places of interest for preservation, as a basis for further studies, and for the implementation of mitigation activities. A key aspect of the participation of the librarian and the computing specialist lies on the accessibility to available information through electronic resources and by using the Latin American Regional Group of IAMSLIC. Nevertheless, in order to access more information, personal visits to educational institutions, governmental agencies and civil associations were necessary. The objective of this paper is to highlight the importance of collaboration - through IAMSLIC to provide digital media; this way libraries play editorial roles in addition to traditional functions. In this new scenario, the organization of electronic resources facilitates users' access to documents and data. Compiled data about contaminant levels included average values, maximum, minimum and standard deviation. Included contaminants were persistent organic compounds, nutrients, heavy metals and microorganisms. Also, maximum permissible limits according to the Mexican Official Norms and/or International Regulation were indicated: in those cases where normative values did not exist, they were recorded as the natural levels reported in the international literature.

Keywords: collaborative work, digital resources, pollution levels, Sinaloa.

Sinaloa state is located on the northwest coast of Mexico; it is considered a leader in agriculture, fisheries and aquaculture. At the national level it is the state with the largest hydro-agricultural infrastructure, aquaculture and fisheries. In this context, population and economic activities of Sinaloa have great potential to expand; consequently, it is very important to examine the pollutant levels found in recent years in coastal ecosystems in order to give a general view on the environmental quality.

Scientists of the geochemistry group at Mazatlan Academic Unit of ICML, UNAM were Dr. C. Green-Ruiz, R. Alonso-Rodríguez, F. Páez-Osuna, J. Ruelas-Inzunza, C. Ruiz-Fernandez and M. Soto-Jiménez. They compiled, organized and analyzed relevant results of studies related to anthropogenic pollutants in the coastal lagoons of Sinaloa, which could serve to indicate sites of interest. Analyzed information comprised documents in various formats (digital and paper); additionally, information was obtained from some institutions directly. Such activities were conducted with the collaboration of the staff of the Library "MECASO" and the computer center of the unit.

Globalization and new information technologies have implications about the availability of reliable and timely data, and how these factors affect users' perceptions of the libraries. Libraries should be seen not only as physical holdings but as incorporating the virtual collection, and librarians also need to understand the changes in reference and research processes and the new roles that libraries must play. We need to add value to our digital resources.

We must emphasize that when we talk about new libraries, we are speaking about the same organizations, with a change in the methods we use to reach our users, who are usually seeking to develop expertise in information retrieval, search strategy design and the use of new tools and information resources. Today, the role of librarians is very important. Their function is not only to conserve and to be guardians of the library's acquisitions; now they must be modern professionals in information management in order to satisfy the information needs of the user community..

Current users of university libraries go directly to the computer to start their research, consult the electronic catalog of the library or other specialized databases. The technologies are changing the way that they are researching and accessing information. Technologies are increasingly more likely to be personalized. An example of this is IAMSLIC; the organization promotes collaboration and the importance of digital media such as abstracts, descriptions, and theses. Without disregarding the traditional roles of our libraries, now we need to facilitate electronic resources for users to access and to retrieve not only documents but data. Examples of such efforts include: OceanDocs, Aquatic Commons, Tesiunam, CIBNOR Electronic Theses, CICESE, CICIMAR, among others.

Currently, we have begun with the abstracts of theses and soon the entire body of theses will be digitized and added to Tesiunam and Aquatic Commons and OceanDocs repositories. In the case of the compilation study, available information on contaminant levels in coastal lagoons of Sinaloa was searched in electronic media and through library-level contacts with those institutions in the region through some Mexican members of the Latin American Regional Group of IAMSLIC and others institutions.

Although we found valuable information in this way, the main obstacle was the lack of information on the websites of various institutions in the region. It was necessary to make some visits to educational institutions, research, government and civil associations in the

state of Sinaloa that had documents on the subject. In particular, we collaborated with 12 libraries in the area, CIAD-Unidad Mazatlan, CIIDIR-Unidad Sinaloa, IPN, ESA del Valle del Fuerte, U.A.S, Estación Oceanográfica de Topolobampo, Secretaria de Marina, Facultad de Biología, U.AS., Facultad de Ciencias del Mar, UAS, Facultad de Ciencias Químico-Biológicas, U.A.S., Instituto Tecnológico de Los Mochis, U de O-Campus Guasave, ICML, UNAM, and Instituto Tecnológico de Mazatlán.

Finally, from information generated over the past 30 years, data were ordered by the type of pollutants associated with water, sediments or organisms. Average values, maximum, minimum and standard deviation of the concentrations of persistent organic compounds, nutrients, heavy metals and microorganisms were considered in every coastal lagoon. Furthermore, the values were contrasted with the maximum permissible limits according to national and international regulation, and in those cases where there is no normative value, natural-reported levels in international literature were used as reference. This information will allow an environmental diagnosis of coastal lagoons of Sinaloa, and will constitute a basic tool for planning mitigation actions and growth in the different basins of the state.

The final product is an Atlas with a CD with a database and the bibliographic information is the following:

References

Green Ruiz, C., Alonso Rodríguez, R., López Aguiar, K., Páez Osuna, F., Ramírez Jáuregui, C., Ramírez Reséndiz, G., Ruelas Inzunza, J., Ruiz Fernández, C., Soto Jiménez, M., Tripp Quezada, L. (2009). Atlas de contaminantes: Lagunas costeras de Sinaloa. FOMIX Sinaloa, XX pp.