EDITORIAL

Seaflower Programme: 10 years of marine scientific research

Programa Seaflower: 10 años de investigación científica marina

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Colombia is a country widely recognized in the world for its natural and cultural wealth, as well as for its extensive geography, made up of five continental biogeographic regions that merge with the Pacific Ocean along the western coast and with the Atlantic Ocean on its northeast coast through the great Caribbean Sea. These two macro-basins directly support about 39% of the Colombian population (CCO, 2018)[2]. This natural heritage is a great challenge since, in order to establish strategies that allow economic development and ensure the preservation of ecosystems, it is necessary to study and understand the territory in its economic, biological, social and cultural contexts.

In 2014, the Colombian Ocean Commission (CCO) projected the National Plan for Marine Scientific Expeditions (PNEC) as a strategy to strengthen territorial integrity and projection, economic development, governance and sustainable use of resources, through the generation of comprehensive knowledge of the marine-coastal territory of Colombia. In this way, with two scientific programs -SEAFLOWER PROGRAM AND PACIFIC PROGRAM-, the PNEC is based on a model of intersectoral cooperation, which allows the country to articulate the necessary sectoral efforts for the generation of knowledge about the marine and coastal territory, in such a way that territorial needs and demands are integrated for decision - making, institutional scientific and technical capacities, and the traditional knowledge of local communities.

By virtue of the above, the SEAFLOWER PROGRAM aims to know and study the physical, chemical, biological and social characteristics of the Archipelago of San Andrés, Providencia and Santa Catalina, which was declared a Seaflower Biosphere Reserve (SBR) by the United Nations Educational, Scientific and Cultural Organization (UNESCO) within the framework of the Man and Biosphere Program (MAB), in order to preserve its biological, ecological and cultural diversity. Additionally, in 2005, the Ministry of Environment and Sustainable Development declared the Seaflower Marine Protected Area (AMP), which covers 65,000 km². Finally, in 2014, the area was assigned as an Integrated Management District, thus constituting the largest and most populated of the country's marine island reserves.

The SBR has 180,000 km² and is made up of the islands of San Andres, Old Providence and Ketlina, Courtown Cays, Southwest Cays, Roncador Bank, Queena Reef, Serrana Bank, Serranilla Bank, Bajo Nuevo Bank and Alice Shoal, and all the other islets, cays, banks and adjacent atolls. These feature ecosystems of high productivity, biological diversity and the most important extensions of coral ecosystems in the national territory.

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[2] Colombian Ocean Commission. (2018). National Policy of the Ocean and Coastal Spaces. PNOEC.

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The SeaFlower Program is a national strategy of great value for the generation of scientific knowledge in the SBR, which promotes the fulfillment of the three objectives of biosphere reserves: *(i)* conservation of biological and cultural diversity, *(ii)* sustainable development and *(iii)* logistical support for research and education. This program has ensured that local communities are directly involved in its development, recognizing the value and importance of their traditional knowledge and territorial authorities. 30% of the researchers who have participated in the expeditions are *Raizal* and islanders, being the department with the greatest scientific representation. This guarantees that the community benefits from the research projects and that they serve as tools to strengthen their processes of governance, territorial management and socioeconomic progress.

Thanks to the articulation between the defense, environment, productive, academic, private and civil sectors, among others, since 2014, ten marine scientific expeditions have been carried out in eight geographical areas of the SBR. In these, 131 research projects have been developed on marine and coastal biodiversity; the physical component of the marine environment, culture and education; marine and coastal environmental quality; the sustainable use of hydrobiological resources; the application of engineering and technologies; and the threats and risks in marine and coastal areas. In this way, 95 national and international institutions and organizations have participated, including 24 research groups recognized by the Ministry of Science, Technology and Innovation. Likewise, the academic knowledge of 200 researchers has been integrated with the *Raizal* and island community.

Through the development of the ten Seaflower scientific expeditions, 11,000 biological records belonging to 13 taxonomic groups have been obtained, of which 425 are new species records, either for the Cay Islands, the SBR, the country or the Great Caribbean Sea. In this way, the expeditions have made it possible to increase the inventory of marine-coastal species reported in the archipelago by 18%.

With the aim of strengthening the processes of social appropriation of the marine and coastal territory of the SBR, the purpose of this volume of the CIOH Scientific Bulletin is to disseminate multiple results, findings and discoveries of the Seaflower Program, an inter-institutional strategy that completes a decade of generating scientific knowledge at the SBR.

I therefore highlight the work carried out by 41 researchers, who contributed with the main results of their research projects, allowing the formation of this interesting document of scientific dissemination, which will allow the generation and propagation of new scientific-marine knowledge of our biooceanic maritime country.

Understanding that the sea is not only a body of water, but also a vital source that provides employment, livelihood, energy, as well as economic and social development, from the Executive Secretariat of the CCO we continue to work in a coordinated manner with the different entities of the national government, the academic community and the civilian population, with the firm conviction of continuing to contribute to the consolidation of Colombia as a biooceanic power for the benefit of all Colombians.