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Fisheries Development Institute Director participates in the South Pacific Permanent Commission Meeting

REPRESENTATIVES FROM COLOMBIA, ECUADOR, PERU AND CHILE ATTENDED THIS MEETING.

On January 29th and 30th, in Guayaquil Ecuador, the South Pacific Permanent Commission Assembly (CPPS) was held, the activity is carried out every two years and aims to review the CPPS programs and actions progress and adopts the decisions it deems pertinent regarding future operation.

Luis Parot Donoso, IFOP Executive Director commented "during Dr. Carole Durussel presentation from the German Institute, an institution that leads governance initiatives for areas beyond national jurisdiction and existing marine biodiversity in high sea protection and sustainable use. The professional invited to participate in a meeting Fisheries Development Institute about this topic that will be held at the end of February in Lima Peru and that brings together representatives from various countries, NGOs and the most important research centers in the South East Pacific"



Luis Parot, thanked the invitation and pledged IFOP participation in the activity that will be held during February in Lima, also expressed support for the STRONG HIGH SEAS project <https://www.prog-ocean.org/our-work/strong-high-seas/> and to protection of marine biodiversity and the regulation of coastal activities at sea initiatives.



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Universidad de los Lagos and IFOP researchers analyze southern hake life cycles diversity in Chilean Patagonia

Researchers from the Universidad de los Lagos and IFOP presented and analyzed Fondecyt 1131143 collaborative project results “Diversity of life stories, connectivity and variability in the relative contribution of estuarine and coastal habitats used by *Merluccius australis* in the South Pacific”. This activity was held in the “Marcos Espejo Vidal” auditorium on Wednesday, January 29th and was attended by researchers from both institutions and members of the Demersal Resources Southern Zone Scientific Committee among other guests.

The exhibitions, by Universidad de los Lagos researchers Pamela Toledo (PhD Program in Natural Resources Conservation and Management) and Edwin Niklitschek (Centro i ~ mar), showed evidence of the existence of at least four life cycles discreet in this species and analyzed this intra-specific diversity implications on its population dynamics, habitat utilization, trophic relationships, stability and resilience. From the above, a rich discussion was generated where the audience highlighted the need to deepen and progressively incorporate this new knowledge in conservation and resource management actions. To achieve this goal, it was agreed to continue collaboratively working between the two institutions.

The main researchers of the project, Edwin Niklitschek (Universidad de los Lagos) and Vilma Ojeda (IFOP), valued collaboration richness between the Institute and the universities, recognizing and thanking active participation and collaboration of different IFOP departments the endowment of the B / C Abate Molina, as well as the fundamental role of field support played by the staff of the Aysén and Puerto Montt headquarters.



IFOP Talk “Marine communities modeling and fishing impact”

At IFOP Valparaíso Auditorium, Dr. Mariella Canales and Dr. Gustav Delius offered “Marine communities modeling and fishing impact” talk. IFOP professionals attended and was organized by Dr. Juan Carlos Quiroz Stock Evaluation Department (DER) head, who referred to the Talk “as a necessary interaction to explore possible expansion areas in DER’s work. Currently our work is focused on scientific advice for fisheries management purposes, using a population models wide range .”

Dr. Canales explained “Multi-specific models by size spectrum are born as a simple conceptual way of modeling an aquatic community of individuals. They recognize that body size is a central feature in the structuring and functioning of aquatic communities, capturing a significant proportion of ecologically relevant traits of organisms in an aquatic ecosystem (growth, predation, metabolism, birth, reproduction, death) . A central aspect of these models is to assume that individuals abundance increases negatively with body size, which explains remarkable regularities observed in aquatic communities.”

During January 2020, Dr. Gustav Delius and Dr. Mariella Canales taught a course at Universidad Catolica Santiago on multi-specific models by size spectrum and the use of MIZER package. Both researchers also visited IFOP, where they presented initial results on pelagic fish community modeling in northern Chile with MIZER.



marine invertebrates samples exhibition. Both activities guided by our Institute researchers, who explained to visitors, relevant topics related to the biology of the species, ecological interactions, environment care, and in what It really is a fishing task and a sampling.



Researchers background

Dr. Delius is a Senior Lecturer at York, University UK where he works on size-based models for marine ecosystems fundamentals, and also maintains mizer modeling package.

Dr. Mariella Canales is a CAPES-UC Center researcher and has worked in the line of multi-specific size-based analyzes since her doctoral studies. Dr. Canales also has extensive experience in, stock assessment and management of Chilean pelagic fisheries monitoring.

IFOP participates in “Explora Va Camp” in Arica

Between January 6th and 10th in Arica, Explora Va camp was developed with the objective of strengthening skills of education professionals as change agents in their school institutions, through tools delivery and development that allow adding value to the educational community from the different science and technology dimensions.

The Fisheries Development Institute (IFOP) participated collaborating in the activity with a Stand that showed the institutional work and research carried out in fisheries and aquaculture, with emphasis on the monitoring programs carried out in the Arica and Parinacota region. The presentation included a fish and



Chilean highly migratory resources data collection challenge

Currently in Chile there are highly migratory fish fisheries, which are developed inside and outside the Chilean Economic Zone, such as swordfish and goldfish, and as an accompanying fauna, oceanic sharks are caught, and a high diversity of bony fish. The administration of these fisheries is a challenge since they constitute complex socio-economic systems, in which they interact with high-altitude fleets of the European Union, Japan, Taiwan and other countries. Chile needs to generate scientific information in order to know fleets dynamics, populations and ecological interactions in pelagic ecosystems. IFOP is aware of the fisheries research role has reinforcing information collection on these species both at their landing ports and aboard craft boats.



Scientific Observers Workshop 2020

Between January 28th and 30th in Viña del Mar, within ASIPA Project – Monitoring of fisheries of highly migratory resources annual activities framework. Biological fisheries aspects 2020, the 2020 Scientific Observer Training Workshop was held.

The Scientific Observers are technicians and professionals trained to collect data on fishing activities and captured species biological samples, based on this information, IFOP scientists generate fisheries knowledge and provide scientific advice required by the country's fishing institutions; in particular, the one requested by the Undersecretariat of Fisheries and Aquaculture, for highly migratory fisheries sustainable management.

Dr. Patricia Zárate explained “Among scientific observers carried out activities are bycatch registry of sea turtles, birds and mammals and marine mammals sighting aboard fixed design platforms. These activities are carried out under ASIPA Project – Highly Migratory Resources Monitoring. Ecosystemic Approach. During January 30th, 2019 results were reviewed and later presentations and discussions related to the identification of species, biological monitoring and sampling for the year 2020 were made.

These Scientific Observers conversation opportunities are fundamental, on the one hand, to know challenges and problems of their work aboard the vessels of the fishing fleets and, on the other hand, to reinforce their knowledge. The Scientific Observers are the basis of scientific research carried out in the Institute and therefore it is very important that they collect the information in the best way”.

Patricio Barría researcher and head of the first project referred to the workshop, said that “it is an annual planning activity, with the purpose that scientific observers become aware of the objective of the project and the scientific and technical challenges. The demand for scientific information every day is greater, because they are fisheries managed in the country and

also associated with the Inter-American Tropical Tuna Commission (IATTC) in which certain quality standards must be met, as well as additional information requirements that complement fishing activity. In addition, he emphasized the important work carried out by Scientific Observers as it is a demanding task that is not risk-free, such as the monitoring of high seas fisheries, and it is crucial and irreplaceable to be able to advise the sectoral authority to scientifically substantiate the regulation and the fishing system”.

Abate Molina Scientific Vessel sailed off north for anchovy research trip

THE SCIENTIFIC EXPEDITION IS LED BY THE FISHING ENGINEER FRANCISCO LEIVA, THE CAPTAIN OF THE SHIP IS ENRIQUE QUIERO

Yesterday, February 11th, at 5 pm and for 27 days, a team of 29 professionals and technicians from IFOP Fisheries Development Institute sailed off from Valparaíso, aboard the B / C Abate Molina, with the aim of; Characterize and evaluate existing anchovy stock between the Atacama region and the Coquimbo region, using hydroacoustic method, during the maximum recruitment period.

The specific objectives are:

- To estimate size of anchovy resource stock and its spatial distribution in the fishery maximum recruitment period.
- To characterize and analyze in a space-time context, through biological indicators, evaluated stock demographic composition and interannual variation.
- To characterize and analyze study area present oceanographic conditions and their relationship with resources spatial distribution.
- To characterize anchovy aggregations in the area and period of study.
- To determinate stomach content and to sort anchovy specimens trophic behavior in the area and study period.
- Ecological information survey in order to advance to a fisheries management based on ecosystems. Phase II: Analysis in temporal and spatial context of species main groups, present in acoustic echograms from 2003 up to date.

A report on this resource's status will be made with the scientific cruise obtained information.

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