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ENVIRONMENTAL DEFENSE FUND™ DE MEXICO

Encontrando soluciones que funcionan

CeDePesca

Workshops to update scientific knowledge on the geoduck clam (*Panopea globosa*) and definition of research priorities

General objective

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- Promote the dissemination, discussion and updating of scientific research
- Through a process of collaboration between researchers, permit holders and authorities, define the research priorities for its management
- Generate synergies for cooperation in the development of the established priorities.

Workshop 1

(May 3th, 4th & 5th, 2021)

Objetive: Understand and update advances and research needs, seek synergies

Target Audience: researchers

- Participants from
  - Inapesca, Baja California State University (UABC), Intercultural Center for the Study of Deserts and Oceans (CEDO), National Fisheries Institute (INAPESCA), Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE), National Protected Areas Commission (CONANP), Biological Research Center from nortwest (CIBNOR), Interdisciplinary center of Marine Sciences (CICIMAR)

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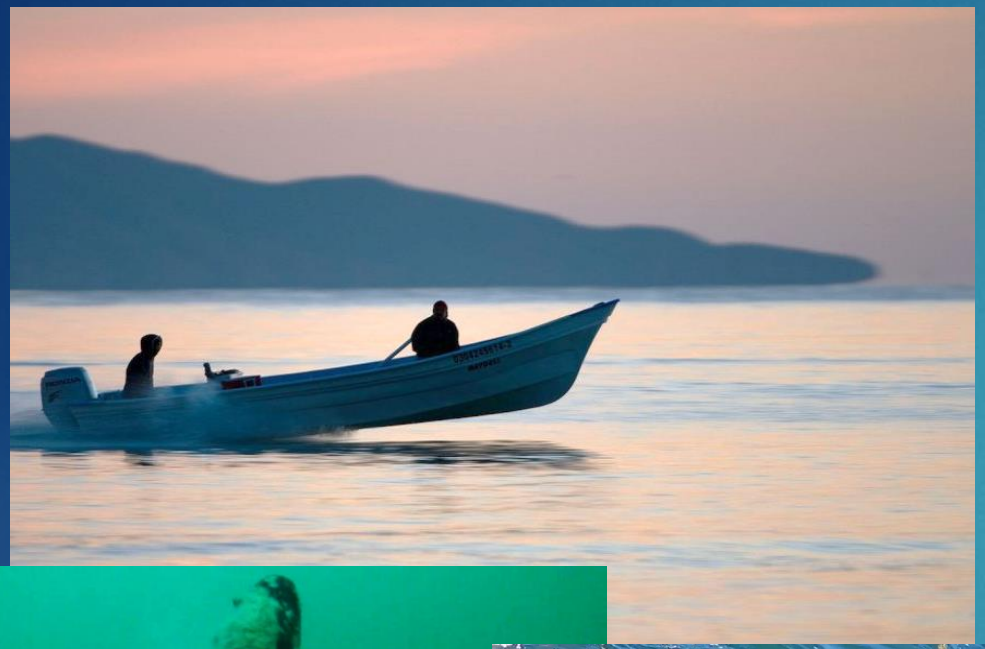
Workshop 2 (May 19th, 20th y 21st, 2021)



Objetive: Validate the results, generate synergies to cover the research needs aimed at strengthening the management of the fishery

- Target audience are
  - Permit holders
  - Researchers
  - Federal and State Authorities

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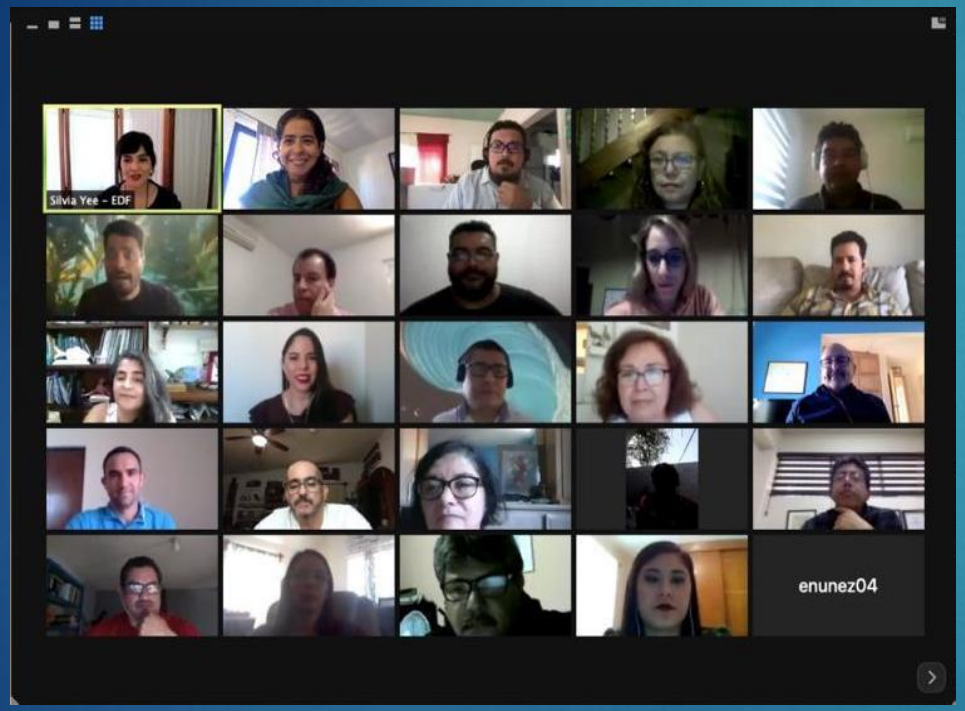
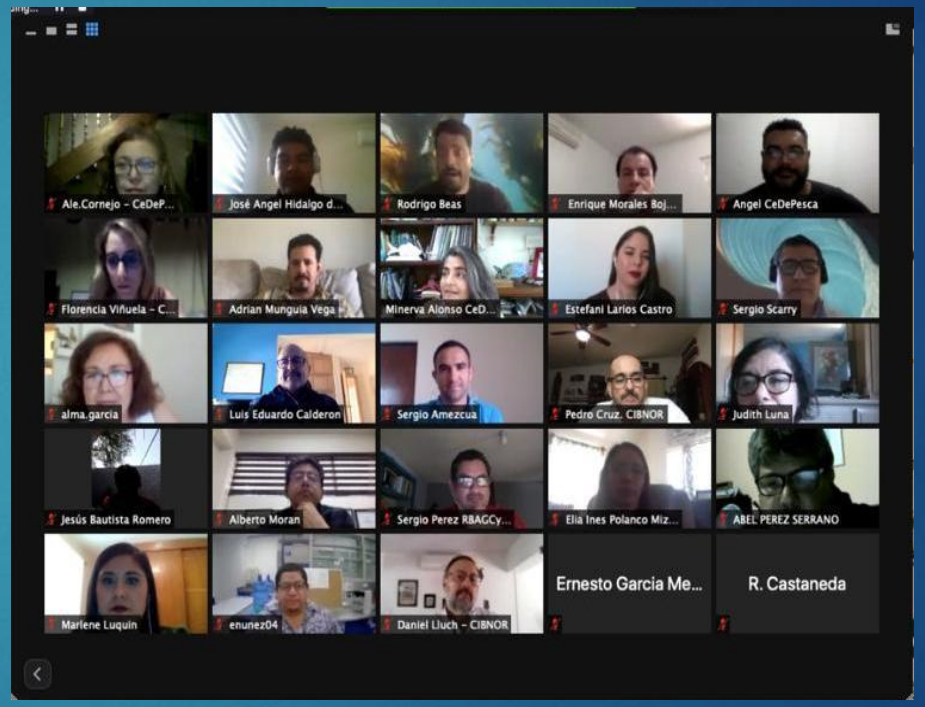
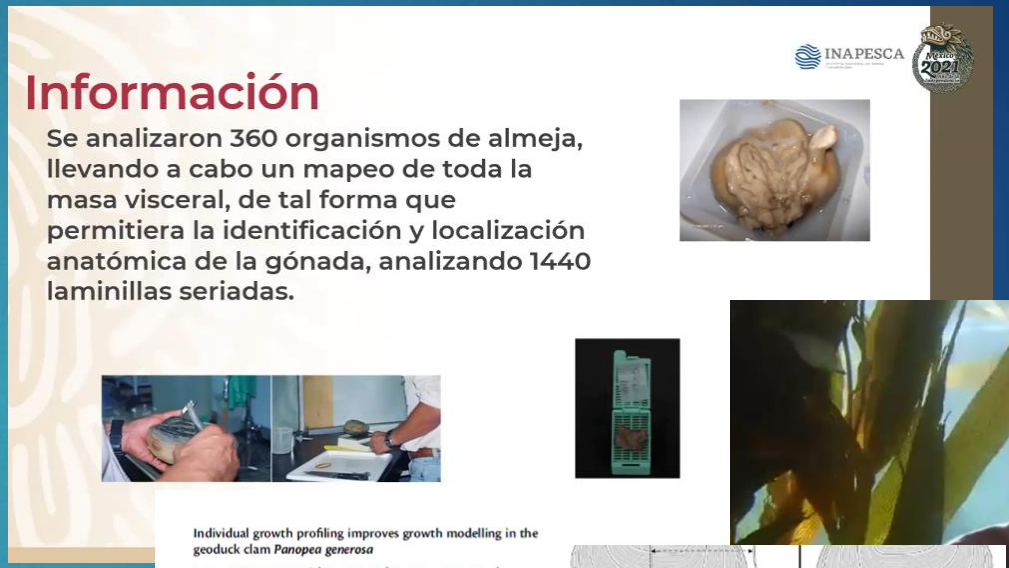
Results

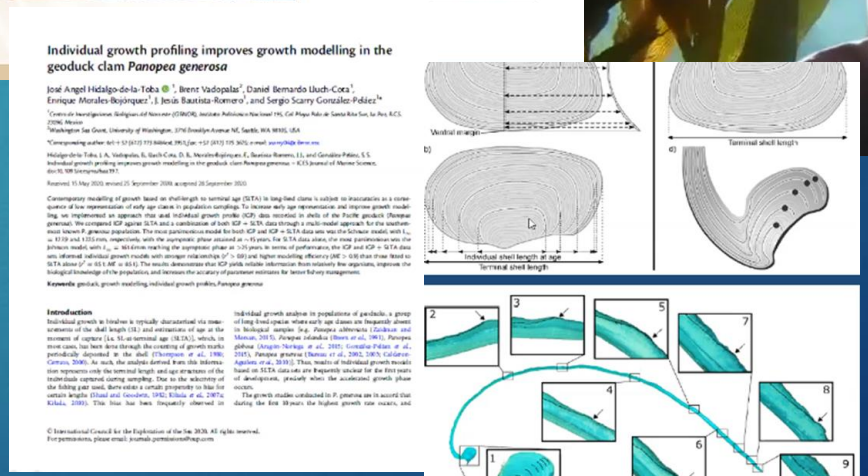

Silvia Yee - EDF
enunez04


Ale.Cornejo - CeDeP...
José Angel Hidalgo d...
Rodrigo Beas
Enrique Morales Boj...
Angel CeDePesca
Florencia Viñuela - C...
Adrian Munguia Vega
Minerva Alonso CeD...
Estefani Larios Castro
Sergio Scarry
alma.garcia
Luis Eduardo Calderon
Sergio Amezcua
Pedro Cruz. CIBNOR
Judith Luna
Jesús Bautista Romero
Alberto Moran
Sergio Perez RBAGCy...
Elia Ines Polanco Miz...
ABEL PEREZ SERRANO
Marlene Luquin
enunez04
Daniel Lluch - CIBNOR
Ernesto Garcia Me...
R. Castaneda

Day 1

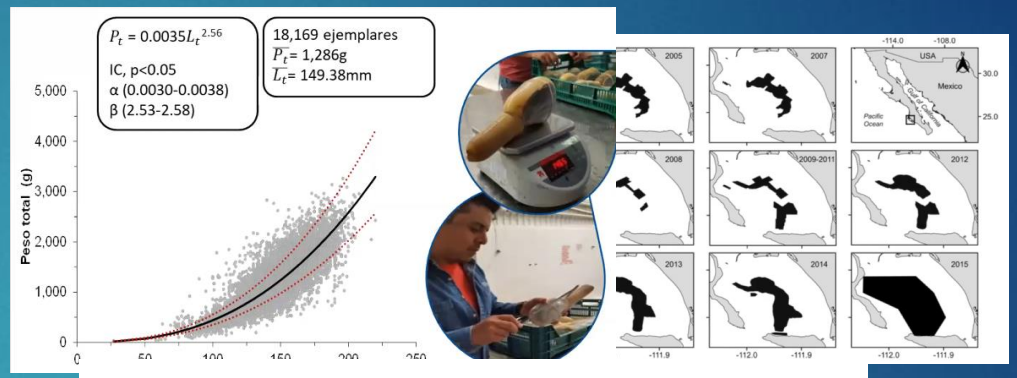
- Definition of specific biological reference points for the fishery for *Panopea globosa.*
- Factors and metabolites involved in successful recruitment and reproduction in each distribution area, including environmental parameters.
- Reproductive information, description of the populations and estimation of biomass of all zones.
- Determination of molecular markers that help sexual identification when sexual differentiation has not occurred.
- Evaluation of the proportions of maturity for incorporated into the estimation of spawning biomass.
- Evaluate negative senescence in the different catch areas to determine the maximum catch size.

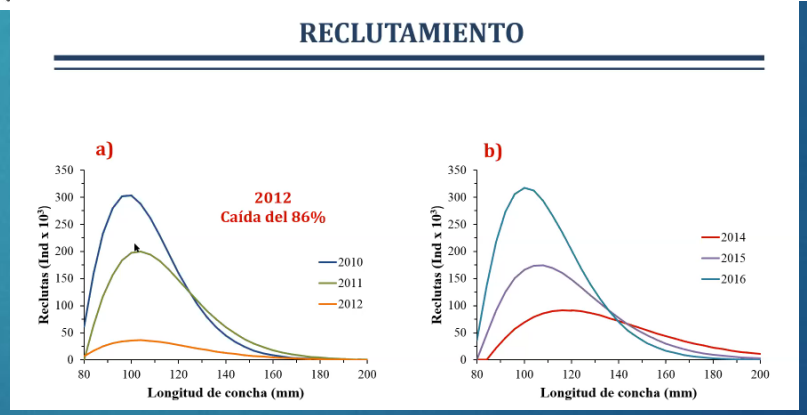




Day 2

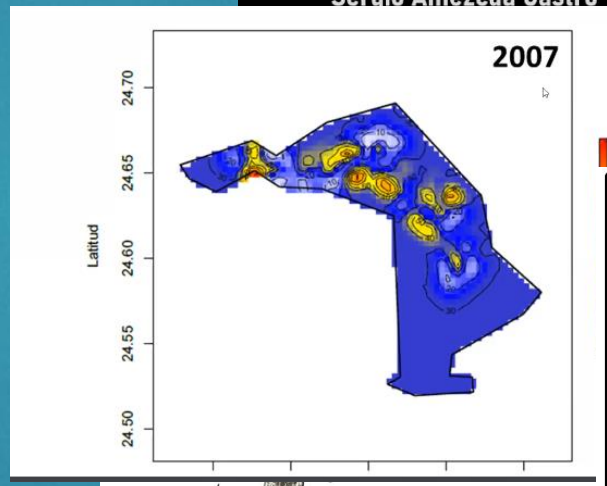
- Risk analysis on the effectiveness of the management strategy with a horizon of 50 years and identification of a strategy that allows us to return to the healthy quadrant. • Development of other evaluation methods to cover more area in less time.
- Delimitation of banks in each region, updating information on the minimum density of banks. Evaluation of deep zones to identify the limit distribution of the banks.
- Definition of structure, abundance, population density, density correction factors, connectivity between populations incorporating population genetic studies, molecular markers, with data dependent and independent of the Fishery
- Evaluation of the effect of illegal fishing.

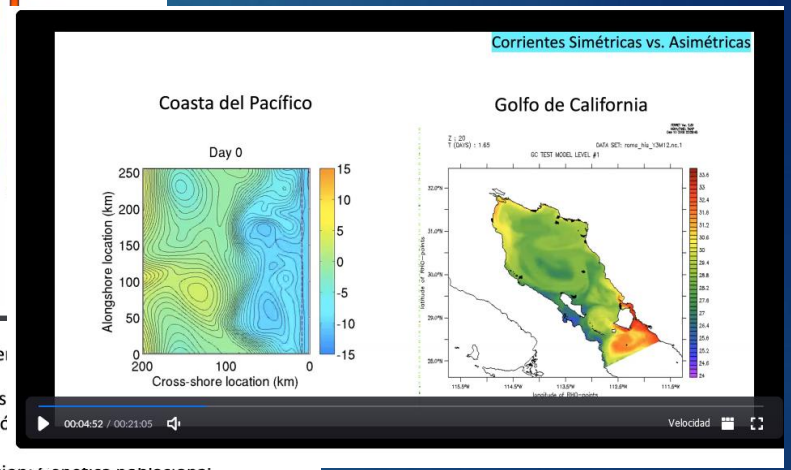


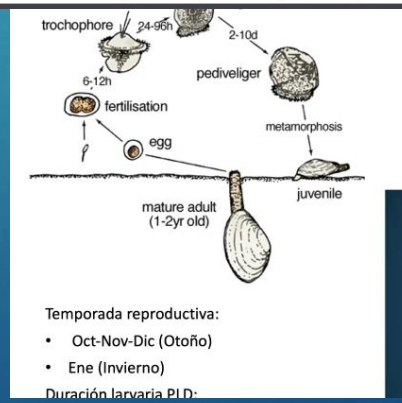


Day 3

- Public health and animal health studies (risk to human health and impacts and effects of HABs). Is it possible to use it as a biotoxin indicator?
- Exploration of correlations between the presence of harmful algal blooms and environmental variables, taking into account the presence of cysts in the clam capture areas.
- Define the relationship between larval dispersal and the effect of removal of the bottom of the fishing gear.
- Determination of the impacts of oceanographic aspects on population dynamics, including turbulence and connectivity and the relationship between the contribution of the Colorado River and the species.
- Generation of long-term data to identify the vulnerability of the fishery to long-term environmental events.
- Identification of temporal variation in recruitment and connectivity patterns based on environmental variables



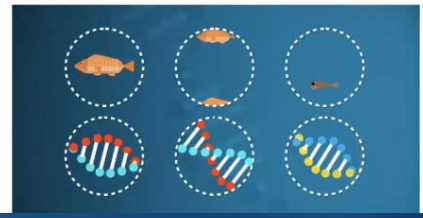




Como entei

1. Hipótes
Modelació

2. Validacion: Genetica poblacional



Identified challenges

- Insufficient qualified economic and human resources, as well as limitation or lack of equipment for depths.
- Ensure economic resources that can cover long-term projects given the biology of the resource.
- Difficulty of access for researchers to capture areas to obtain samples.
- Little willingness to share data.
- The law does not define topics absent from the investigation as of management interest. Likewise, adapt management strategies to the case of national populations, as particular information is generated.

Detected needs

- To integrate regional & long term studies
- To consolidate information, human & economic resources

2nd workshop. May 26th, 2021.

Participants

- INAPESCA
- CONAPESCA
- State Fishery and aquaculture office
- Fishermen representants
- Researchers
- EDF
- CEDEPESCA