

Key findings during

SEACUSEY

- Divers fish at 35m depth on average
- Total dive time averages 34 mins per dive, with only 66% (21 mins) of which is spent looking for sea cucumbers
- Visibility underwater is a key factor determining catch
- DNA showed that there is a single stock per species (Pentard & White teatfish) throughout the Seychelles. Though, weak genetic difference was observed across samples of White teatfish, possibly due to their low abundance in the Seychelles.
- Pentard reaches sexual maturity at approximately 31cm length
- Logbook data collection using the app is more accurate & less time consuming for skippers, as well as related SFA staff
- The BDMer tool will speed & facilitate the analysis of logbook data by SFA
- If data is accurately collected by skippers, an estimate of stock can be determined
- A collaborative research framework is proposed to advise the Management Advisory Committee of the fishery & promote adaptive co-management

For more information please visit our website: seacusey.ird.nc

or contact marc.leopold@ird.fr or rgovinden@sfa.sc

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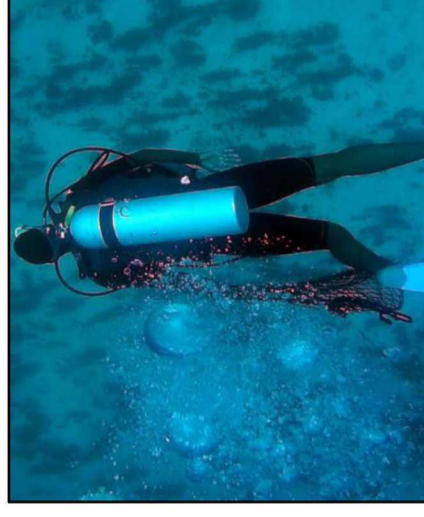
Coordination: Marc Leopold (IRD), Rodney Govinden (SFA)

Partners: IRD, Seychelles Fishing Authority (SFA), Université de La Réunion, Association of Members of the Sea Cucumber Industry in Seychelles (AMSSI), and the Sea Cucumber Harvesting Association (SCHA)



SEACUSEY

National workshop on the sea cucumber fishery in the Seychelles



12th September 2018

ICCS Committee Room 1

Mahé, Seychelles





Pentard (*Holothuria spp.*) - the main target sea cucumber species in the Seychelles

Background

Since the 1990s, most sea cucumber stocks have been over-exploited worldwide and in sharp decline. In the southwest Indian Ocean region, specifically in the Seychelles, the sustainability of the sea cucumber fishery is a major national issue.

The overall objective of the SEACUSEY project is to ensure the sustainability of the economic sector related to sea cucumber resources in the Seychelles through adaptive co-management. Its specific aim is to define and implement operational management measures that are adapted to the diversity, genetic structure, abundance, distribution and evolution of stocks of the three main commercial species (the pentard, the white teatfish and the prickly redfish).

In order to achieve these objectives, the SEACUSEY project was prepared and carried out in association with the three key actors of the sector in the Seychelles (SFA, SCHA & AMSSI), as well as the French research partners (IRD & The University of La Réunion).

Workshop Agenda

Objective: present the project findings and discuss future implications

9h-10h

- A welcome and introduction into the recent history of the fishery management system in Seychelles
- Promoting collaborative research: the SEACUSEY project
- Overall objectives of SEACUSEY
- Q & A session

20 mins tea break

10:20h-12h Experimental monitoring program

- Experimental fishing survey
- Dive profiles and fishing time underwater
- Data server
- Q & A session

12h-13h Lunch break

13h-14:20h Developing an electronic logbook

- Demonstration of the smartphone application
- Feedback of app use from a skipper
- An expectation protocol in the new fishing season (2018-2019)
- Q & A session

14:20h-15h Other research outcomes

- Genetic structure & size at maturity of the resources. *Video demonstration of sampling on board 'Brizar'*
- Q & A session

15h-16h Debriefing: what next?

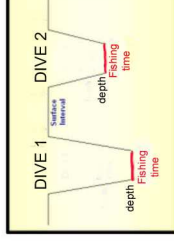
- Suggestions for future research and future of the fishery in 2018-2019
- Q & A session

Key Activities during SEACUSEY

- Experimental fishing



- Dive profiling



- Fishing data collection via an app



- Development of the BDMER tool



- Biological and DNA sampling

