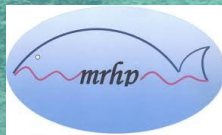


# Southwest Madagascar Octopus Fishery



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# Main specie

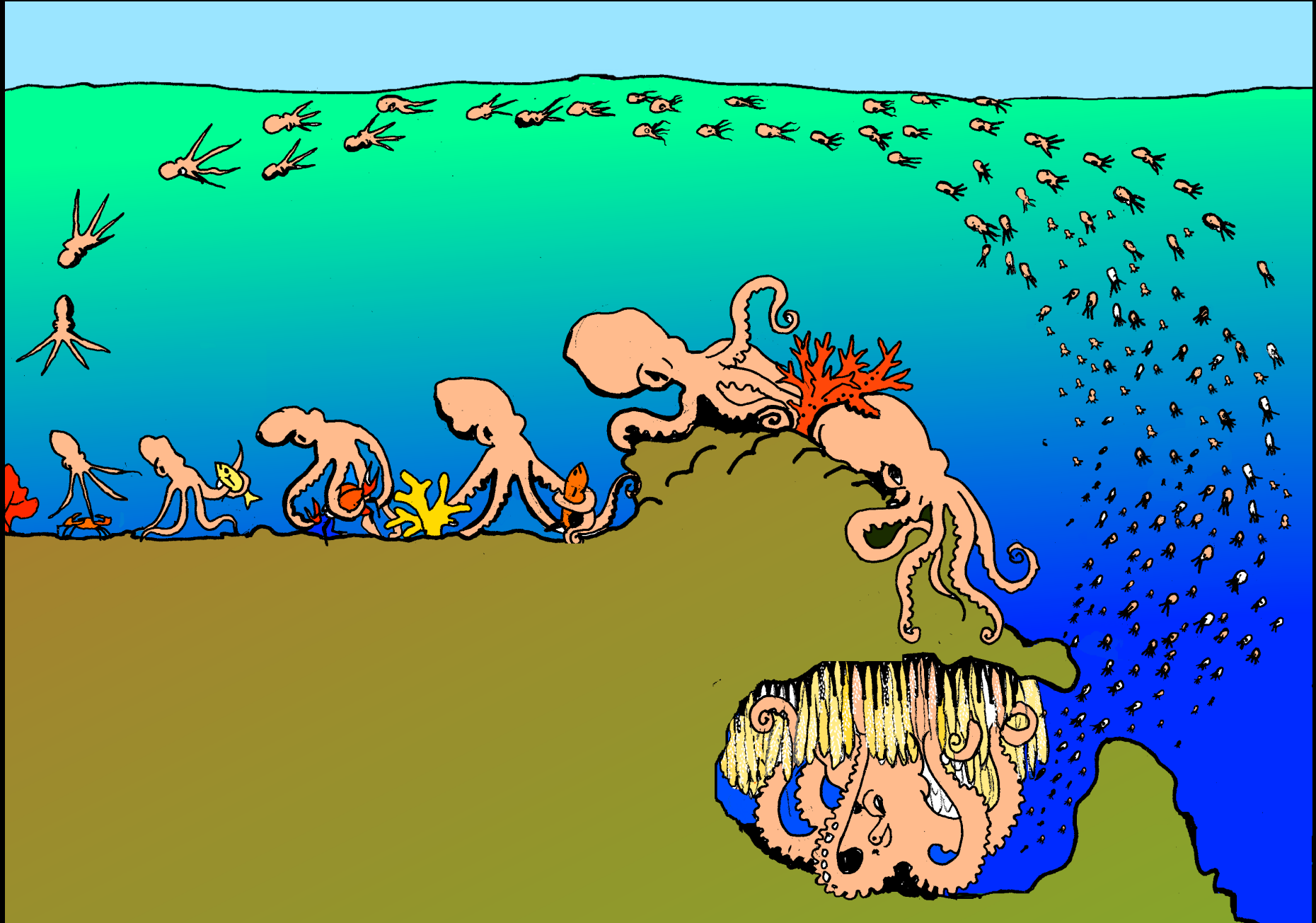


- *Octopus cyanea*
- 99 % of SW catch

# Habitat : coral reef



# Life cycle



# Fast growth

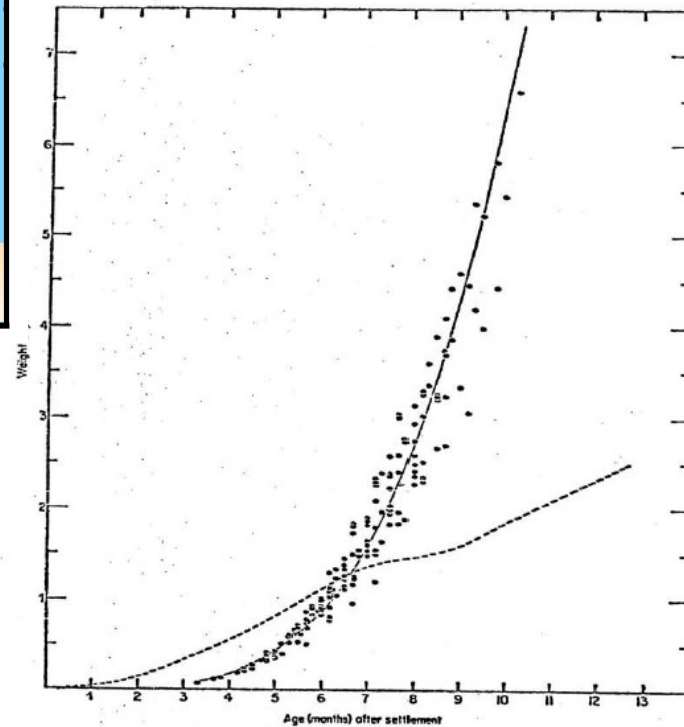
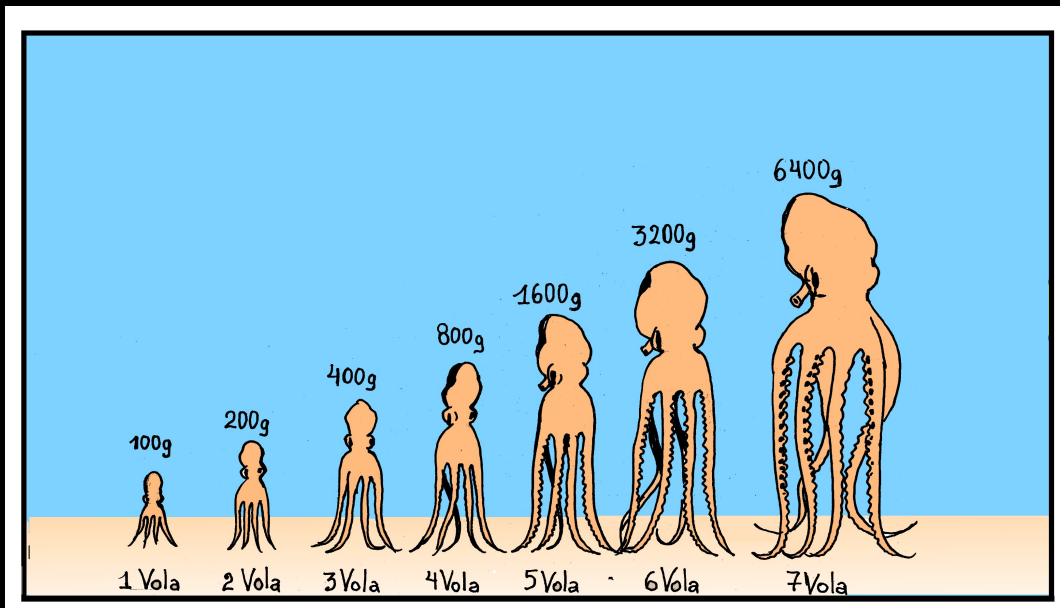


Figure 2. The growth curve of *O. cyanea* at 25.6°C obtained by plotting weights of 29 individuals (14 ♂♂, 15 ♀♀) at 15 day intervals is shown. The solid line represents the fitted curve described by  $W = (1.28 \times 10^{-6}) (x)^{3.92}$  where  $W$  is body weight (g) and  $x$  is the age in days. The dotted line represents the growth of *O. vulgaris* (redrawn from Nixon, 1969b) where there is a seasonal depression of feeding (and hence growth rate) by water temperature. (From Van Heukelem, 1973.)

# The size of the fishery

- 100.000 fishers
- 1000 tons in 2013, 850 tons exported



# Fishing technique



# Economic importance



# Main export companies



**Collect :**  
**COPEFRITO and Murex  
International**

**Exported to :**  
**- Mauritius (Murex),  
- Italy, France and  
Spain (COPEFRITO  
and Murex)**

# Fishery status

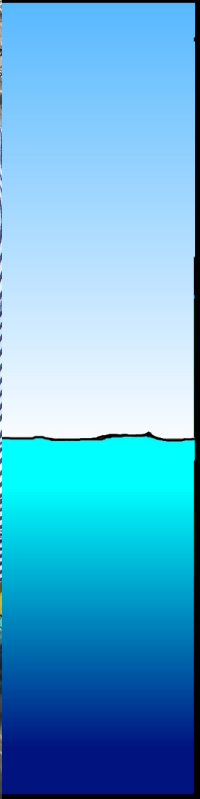
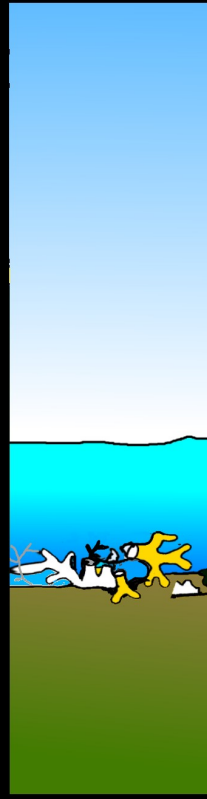
## Tendency

- **Growth since 1995 (114 t)**
- **Peak in 2003- 2004 : Total production around 900 tonnes.**
- **No evidence of over-exploitation**

## Threats

- **Bad practices**
- **New fishing techniques**
- **New collectors**
- **Lack of knowledge**

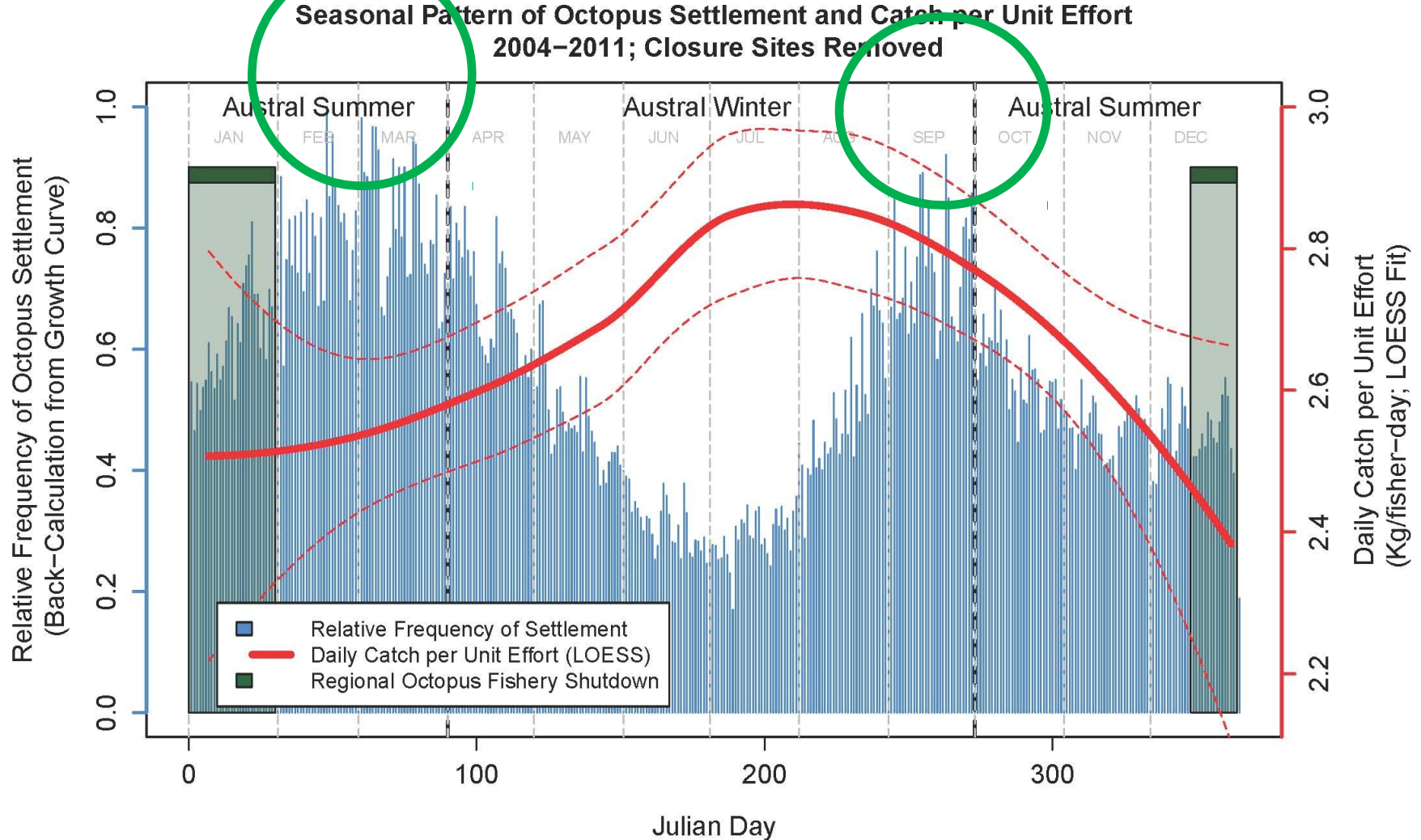
# Bad practices



# Management : scientific research



# Management : scientific research



- 2 apparent peaks in octopus settlement of the reef flat
- Target closures 5 months after the two peaks

# Management : closures and minimum size



- Temporary closures :
  - Local (DINA), since 2004
  - Régional (national law), since 2005
- 26 local closures in 2015
- Minimum size (350g)

**MANOMBOK'AMY 15 DESAMBRA  
HATRAMIN'NY 31 JANOARY  
TSY AZO ALÀ TY HORITA**



**DIDY HITSY VOLANA 16376/2005** : Iaan-tao, manombok'amy 15 desambra hatramy 31 janoary, ze fomba filà horita isaby dia tsy azo atao ato anaty fanitry atsimo andrefa ato.

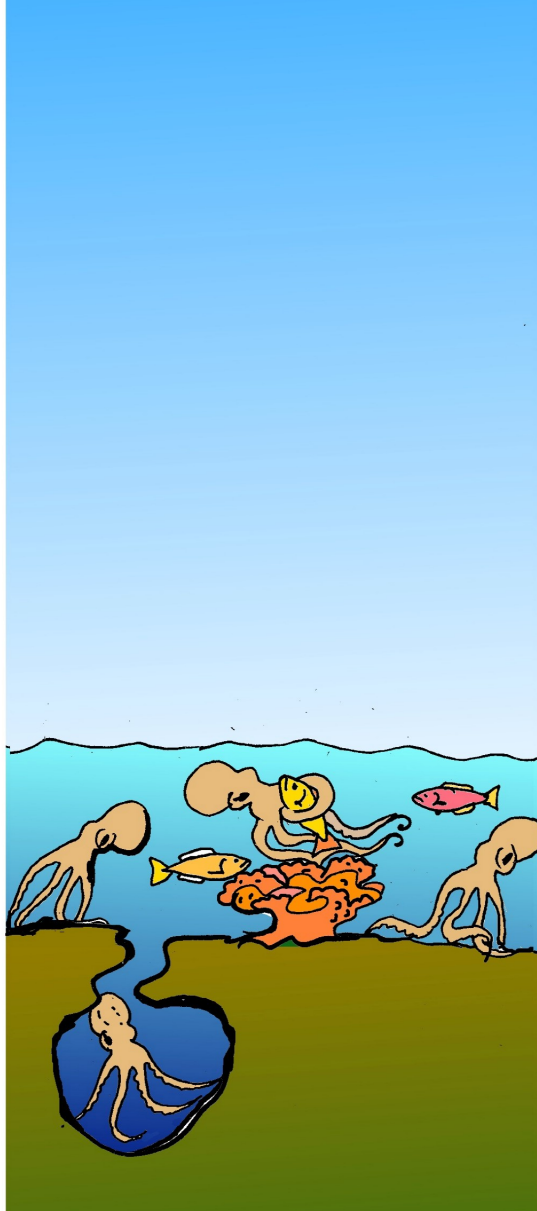
**FA MANINO ?**

Manatoly ty horita amin'ny vola Desambra sy Janoary.

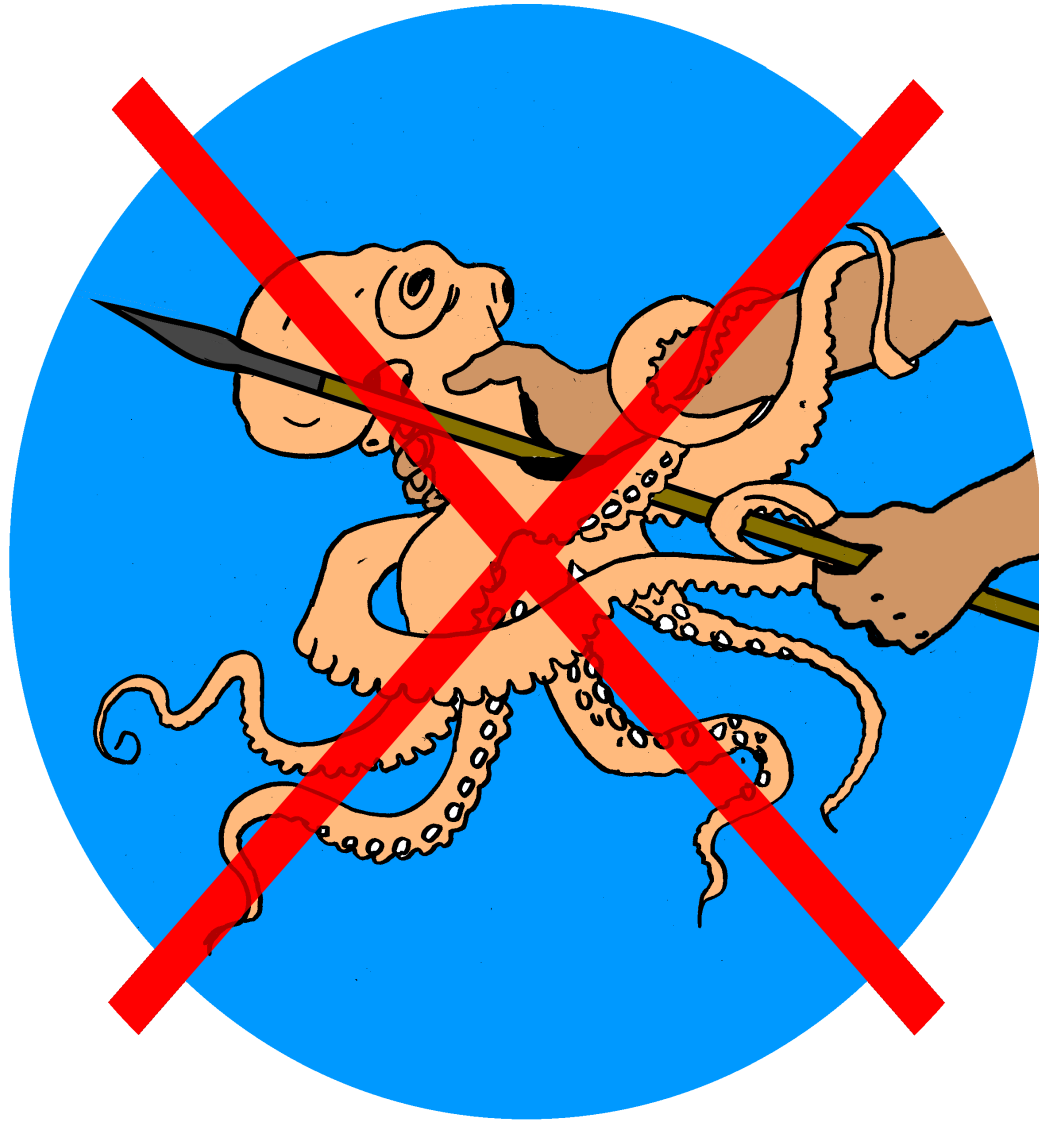
Lafa arova horita, mihamaro ty vokositry azo ty pihake.



# Management : local closures

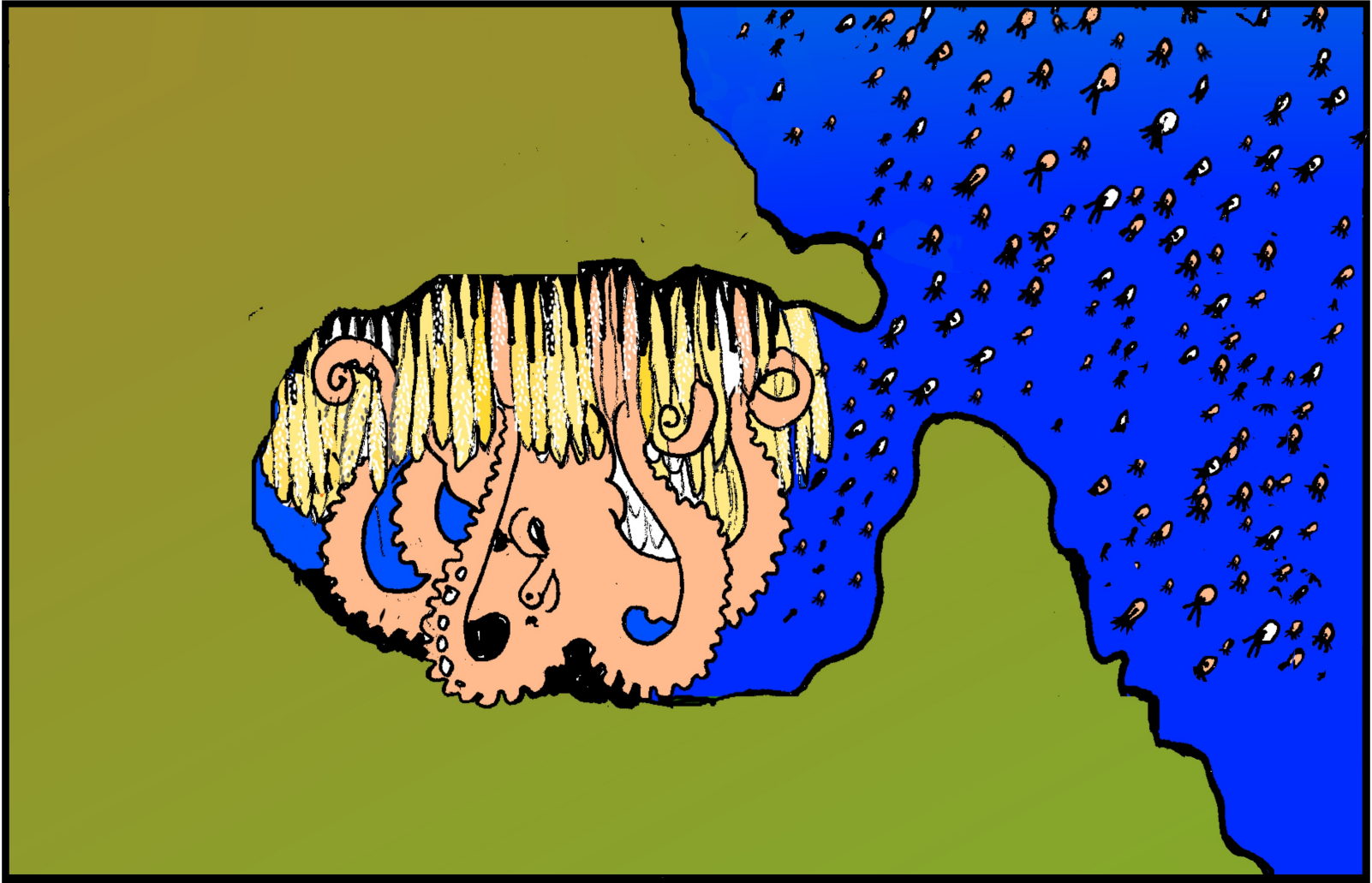


**Management : Regional closure, 15th of December to 31st of January**





# Management : Regional closure, 15th of December to 31st of January



# MSC : Marine Stewardship Council



# MSC principles

## 1. Target Stock Sustainability

- Harvest strategy
- Stock Status

## 2. Ecosystem Sustainability

- Non-target species
- Ecosystem
- Habitat

## 3. Effective Management

- Government & Policy
- Fisheries Specific Management

# MSC advantages

- **Fishery famous**



**Projects, donors**

- **Good stock management**



**Sustainability**

# Misaotra bevata !

