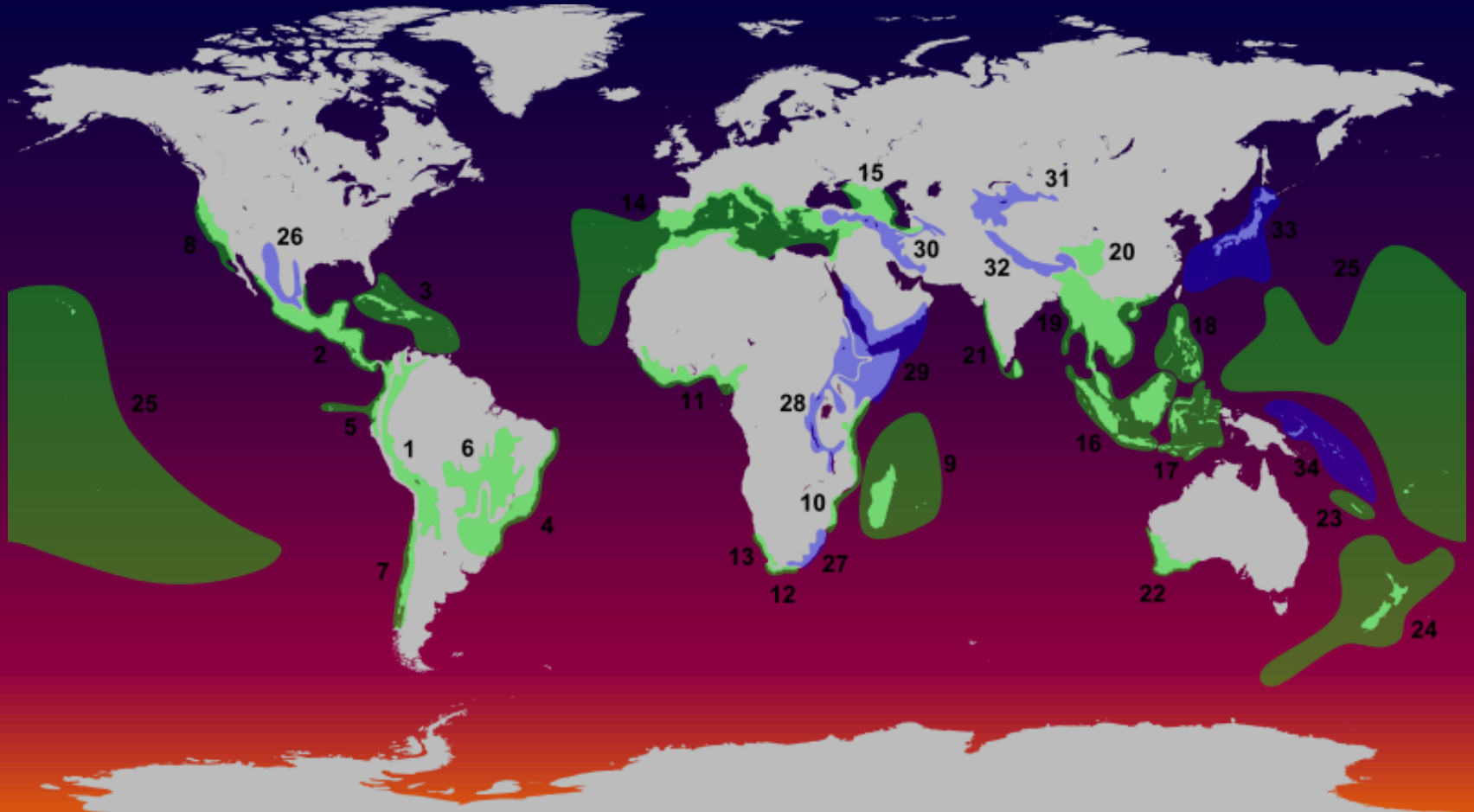


# INVASIVES SPECIES IN REUNION ISLAND'S RIVERS AND PONDS



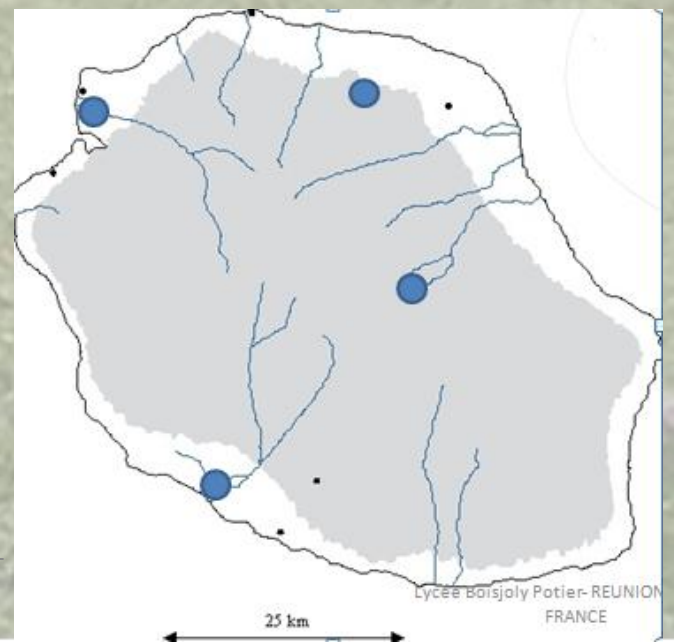
Reunion Island belongs to one of 34 HOT SPOTS OF BIODIVERSITY in the world



Isolated  
Young  
Few rivers  
high rate of endemicity



Lycée Boisjoly Potier- REUNION ISLAND -  
FRANCE



Lycée Boisjoly Potier-REUNION  
FRANCE



# Identity card of water hyacinth

- Scientific name** :  
*Eichhornia crassipes*
- Group** : Pontederiaceae
- Living areas** : tropical regions, ponds, soft water
- Size** : around 50cm to 1m (the roots → 3m)
- Reproduction** : rapid, vegetative and sexual.



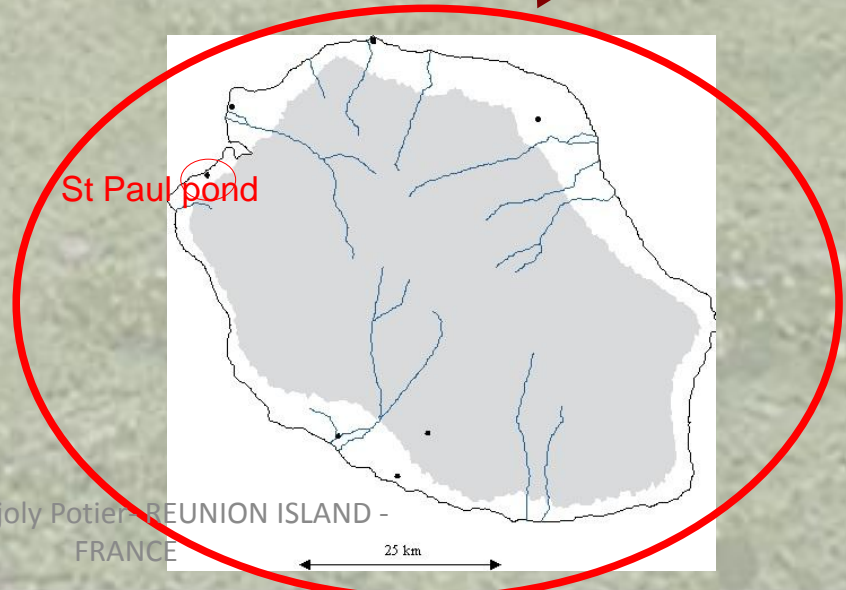
# 2) Introduction in Reunion Island



**When?** : 18th century

**Why?** : -To purify the water infested with mosquitoes.  
-To be used as an ornamental flower.

**Where?** : From Amazonia and the west of Brazil to St Paul pond

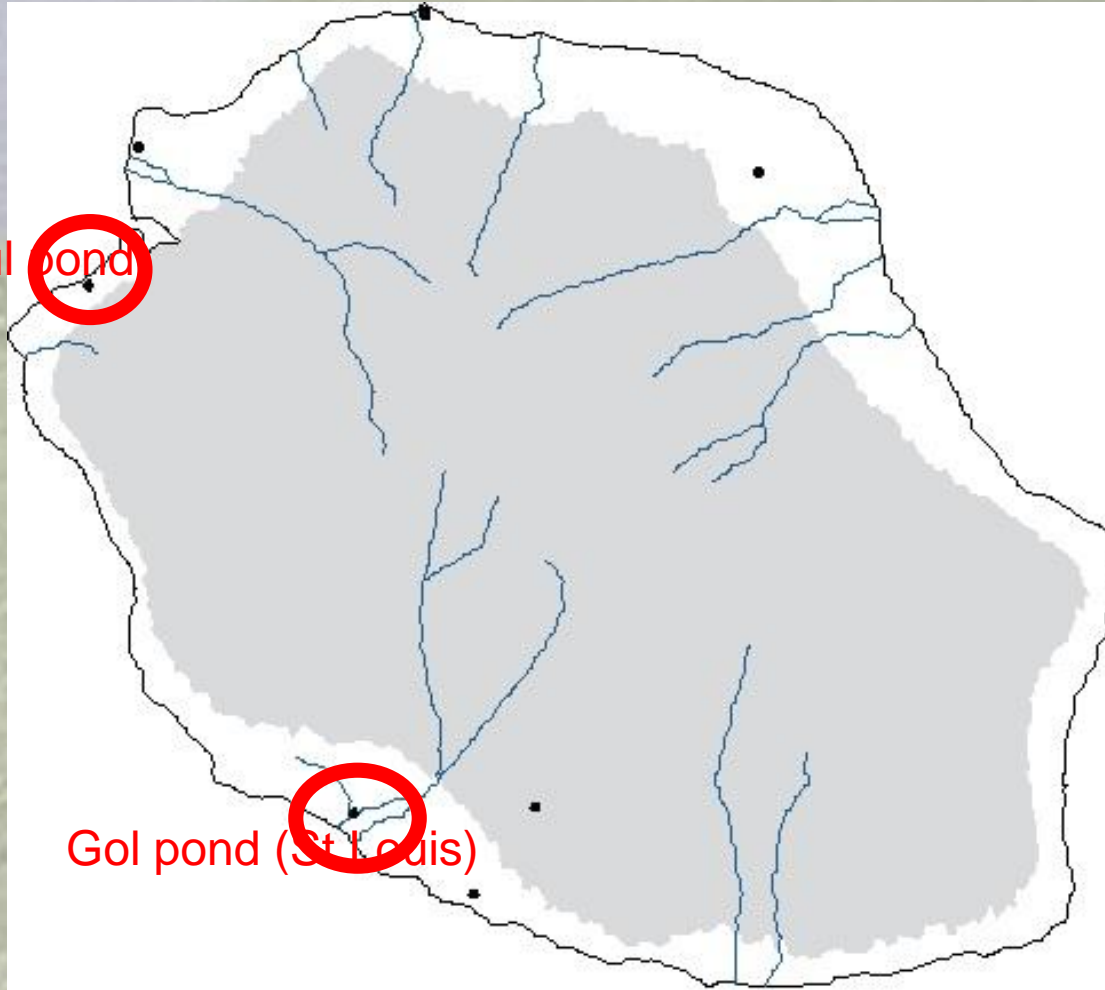






# 3) Current location

St Paul pond



Gol pond (St Louis)

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FRANCE

25 km



# 4) Consequences and solutions

- Reduces the mineral nutriment in the water.
- Too thick for light rays to get into the water.
- Reduces dissolved dioxygen concentration by eutrophication



Manual taking.



On rainy periods the pond water overflows and the water hyacinth is dispatched towards the sea.



# Identity card of Water lettuce

- **Scientific name** : Pistia stratiotes
- **Family** : Aracae
- **Living areas** : Pond
- **leaves** : around 14cm
- **Reproduction** :





# Introduction in Reunion Island



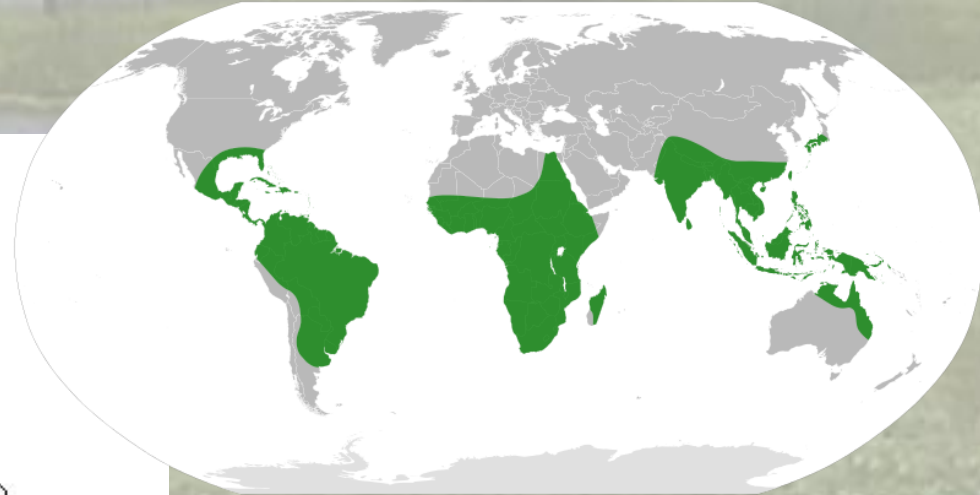
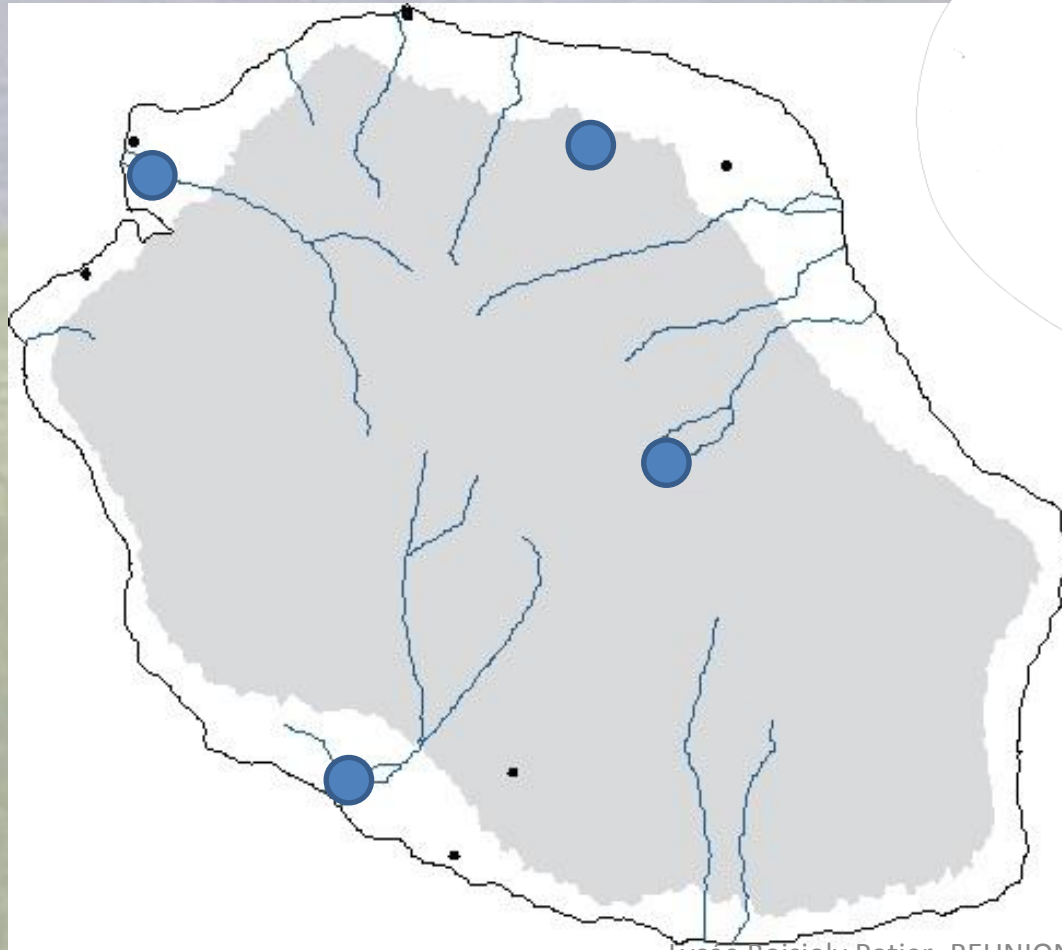
- When : ?
- Why : - Ornament  
- use like filter
- Where : from Africa







# Current Location



25 km

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FRANCE

# Consequences and solutions



- Block light and consume a lot of oxygen in spite of the other species (fishes or seaweed)
- Put out of the water





# The Australian crayfish (or blue crayfish)



## I- Presentation

-Scientific name : Cherax quadricarinatus

-Family : Parastacidae

-Size : 15cm for female and 18cm for male (until 25cm)

-Average weight : 250g

-Lifespan : 5 years

-Feeding : Can adapt its diet .

-Reproduction : Female lays between 300  
And 800 green olive eggs.  
The incubation takes about 6 weeks .

-Habitat : Between 15 and 30°C  
Australia



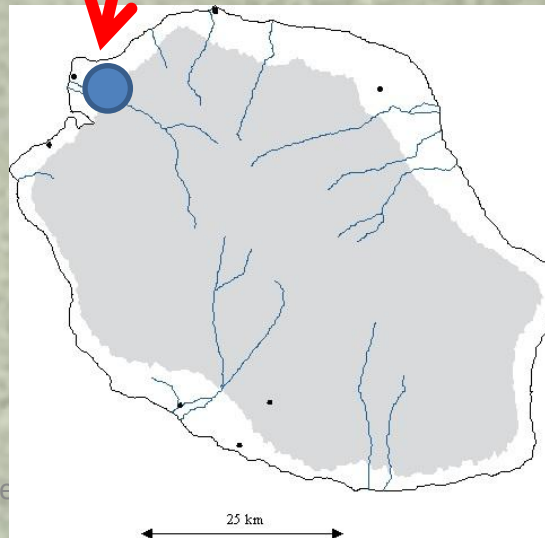


# Introduction in Reunion Island

**Where** : This crustacean found in " l'Etang de Saint Paul's " pond and it is invasive in this area .

**Why ?**

**When ?**



Lycée





# Consequences and solutions

Competition and predation behaviour of indigenous fauna which can lead important modifications on aquatic ecosystems. This species is often host to diseases ( virus , bacteria ) .



Fry = baby fish  
=bichique



Cabot bouche  
ronde = adulte



Species threatened by the  
Australian crayfish

"Bichique" and small shrimp .

# Identity card of Managuense



- **Scientific name:**

Managuense (*Parachromis managuensis*)

- **Family:** Cichlidae

- **Living areas:** Central America, Honduras, Costa Rica, Reunion Island

- **Size:** 50-65 cm

- **Reproduction:** spawning of 1000-2000 eggs

- **Food:** Eat fishes or micro-invertebrates





# Introduction of Managuense in Reunion Island

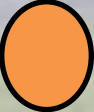


- **Why**: To kill Tilapias (introduced by aquaculture).
- **Where**: Introduced in Etang du Gol

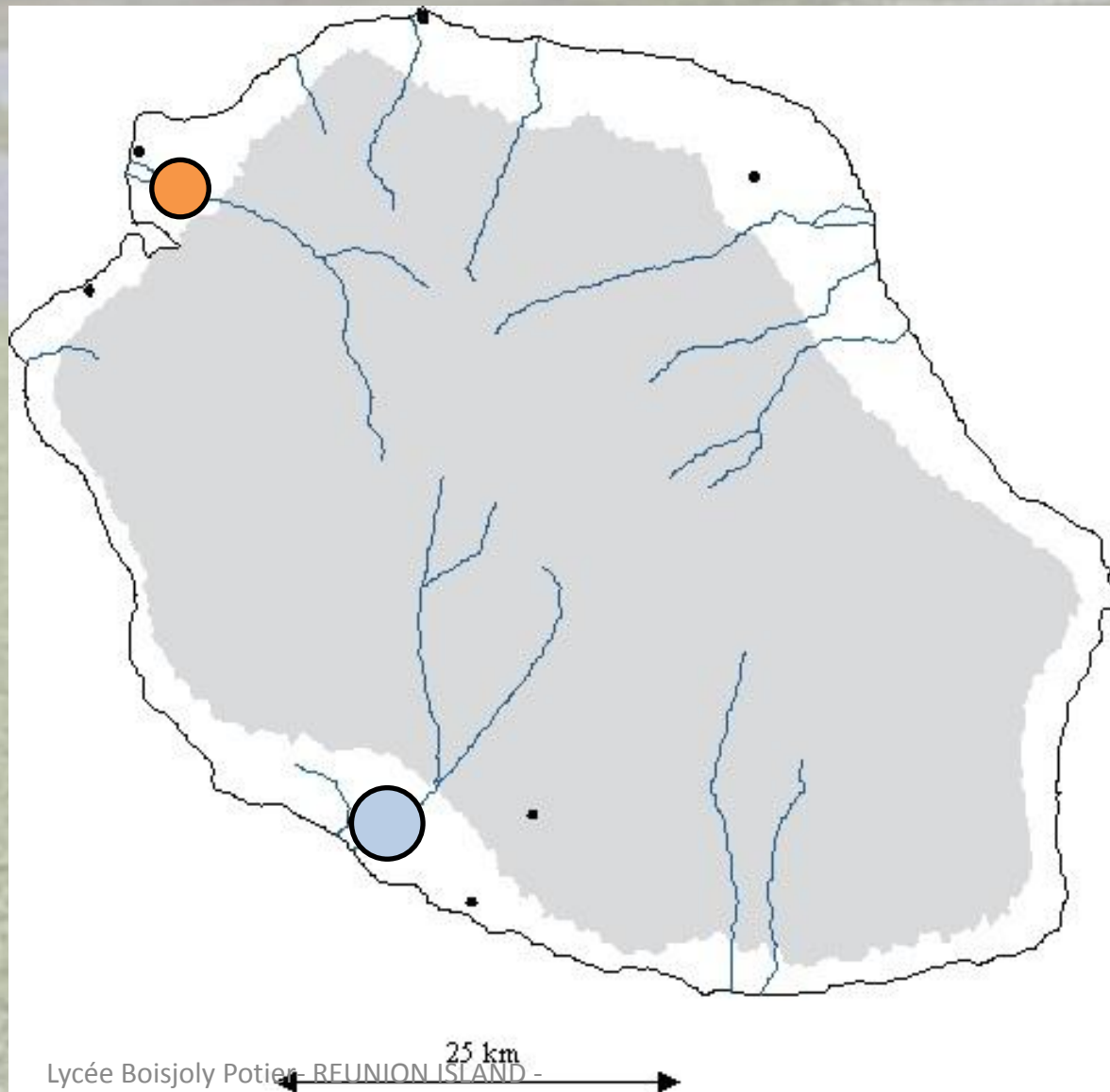




# Current Location

 Etang Saint-Paul

 Etang du Gol



25 km  
Lycée Boisjoly Potier - REUNION ISLAND -  
FRANCE





# Consequences and Solutions

- Predation and loss of endemic biodiversity.
- One of the solutions is to fish it ....but battle lost in advance ?

# Identity card of « Le Tilapia »

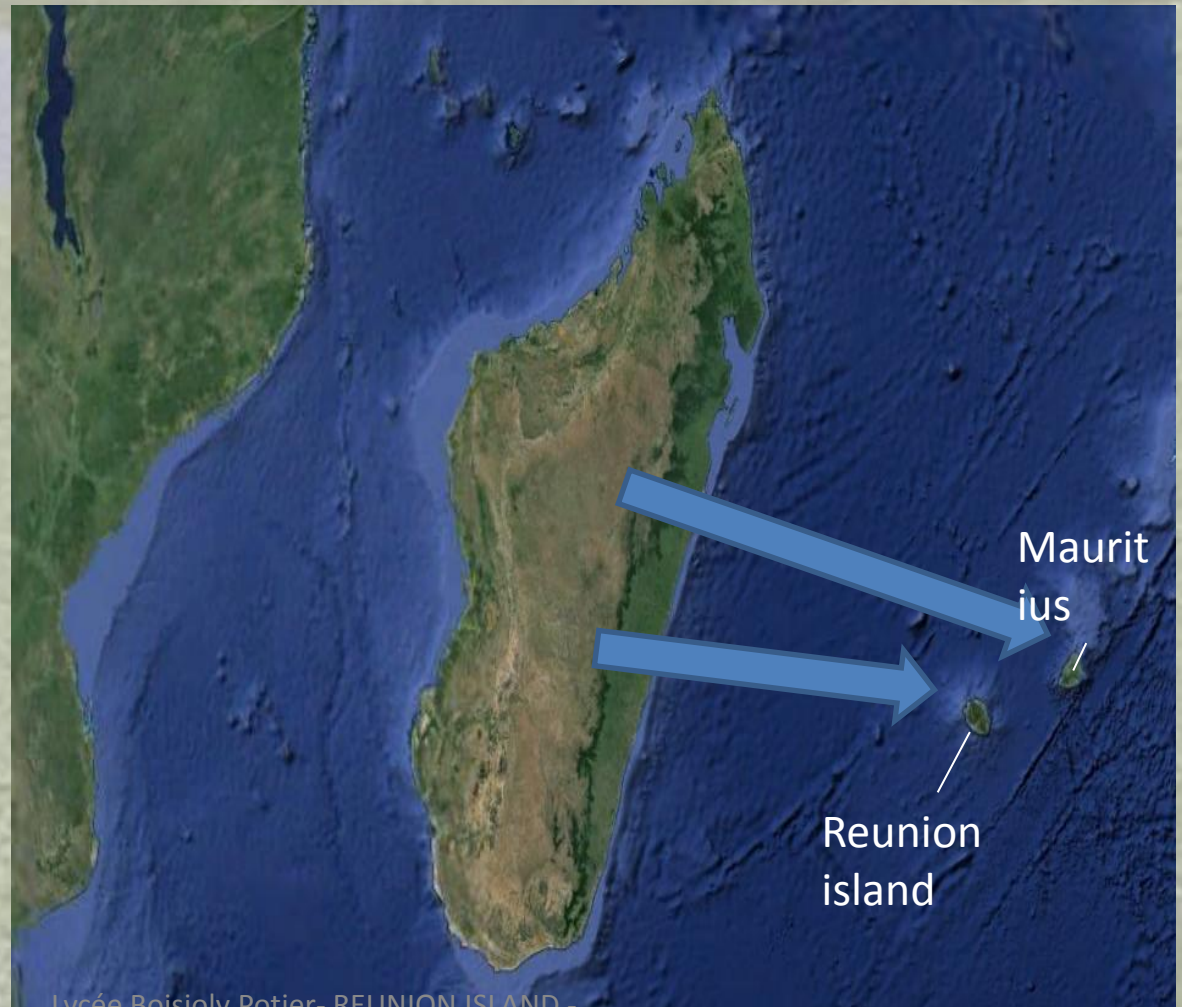
- **Scientific name** :  
*Oreochromis niloticus* spp
- **Group** : Cichlidae
- **Living areas** : warm rivers  
and ponds
- **Size** : 20-30 cm
- **Food** : mosquitos,  
phytoplankton
- **Colour** : silver





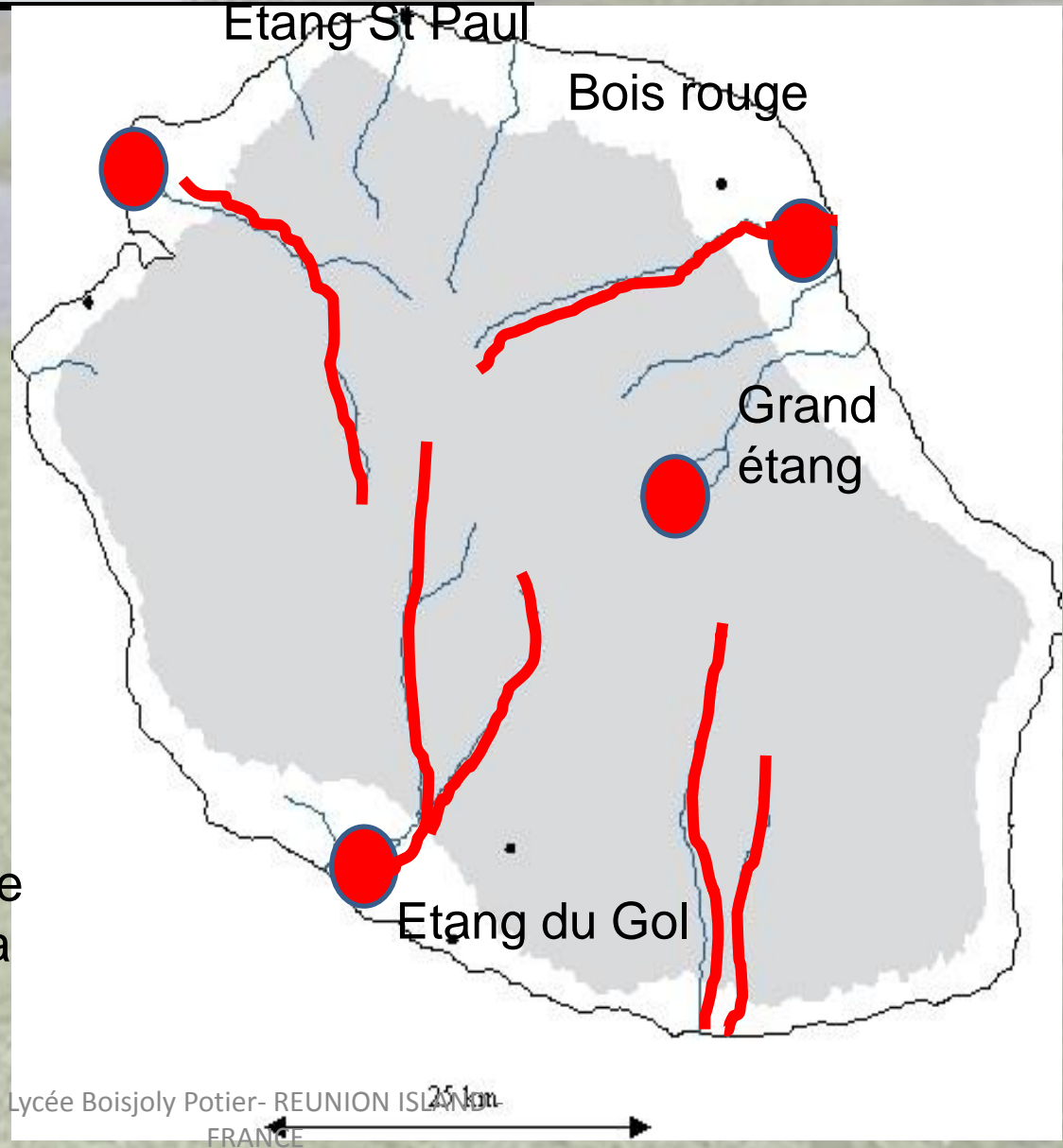
# Introduction in Reunion island

- **When** : In 1957
- **Why** : Feeding role
- **Where** : From Madagascar to farming pools





# Current location



Rivers

Ponds

Presence of Tilapia





# Consequences and solutions

- Impacts : taking place of local endemic fishes
- > disappearance of those species
- - No real solution ... yet

# Identity card of Chinese turtle

**Class** : Mauremys sinensis

**Family** : Geoemydidae

**Length** : < 25 cm

**Food** : water  
plants, fish, snails, worms, insects

**Breeding** : between 5 and  
7 years







# Introduction of Chinese turtle in Reunion Island?

**Where does it come from ?** Coast provinces of the south of China. North and center of Vietnam. Laos and Taiwan.

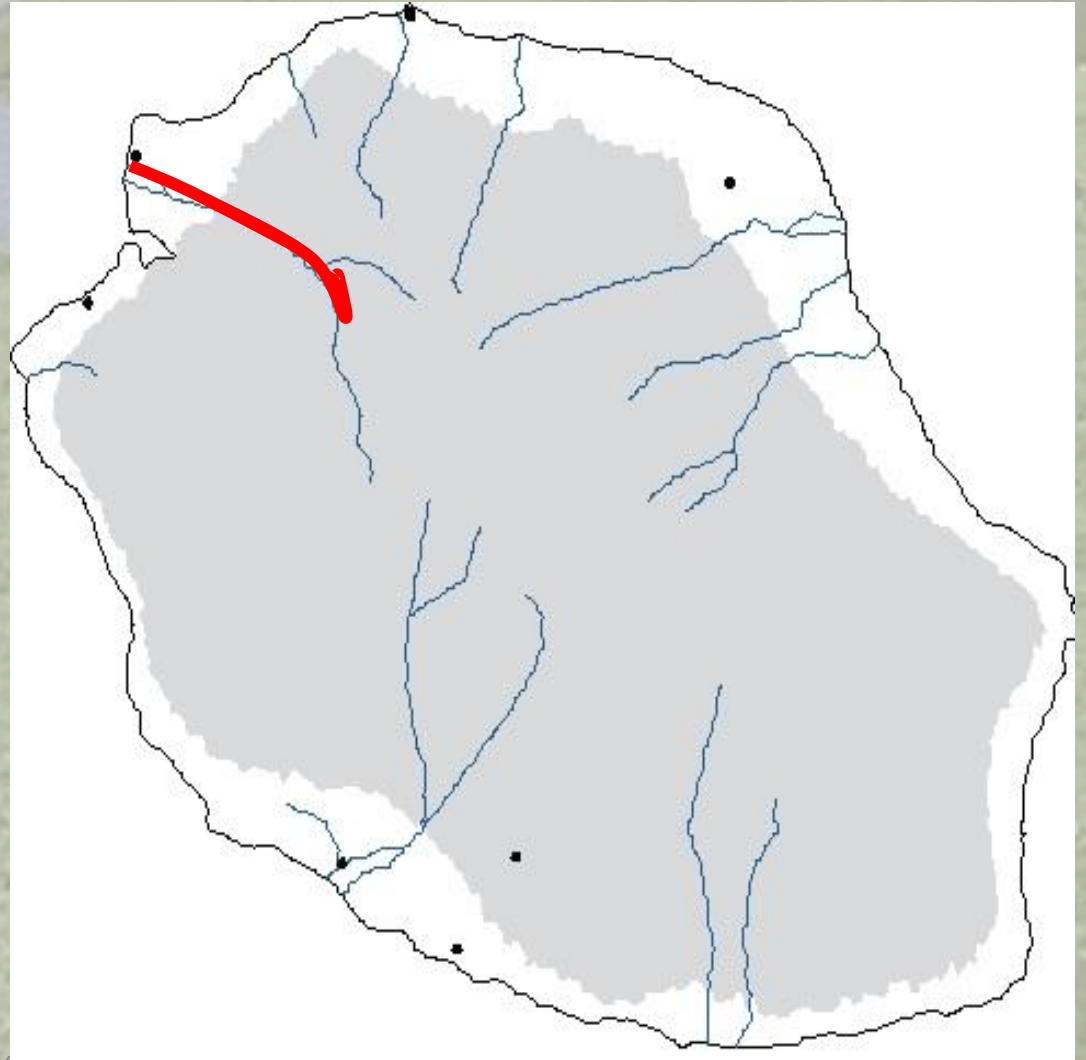
**How ?** Possibly escaped from their breeding space.

**Why ?** To become pets

**When ?** End of 20th century

# Current location

Rivière des Galets and maybe ponds



25 km

Lycée





# consequences-Solutions

- Harmful for waterways.
- May consume insects and fish.
- No real solutions nowadays



# IDENTITY CARD OF THE AFRICAN COMMON TOAD

**Alternative name** : Gutturalis toad

**Scientific name** : Bufo Bufo or Bufo gutturalis

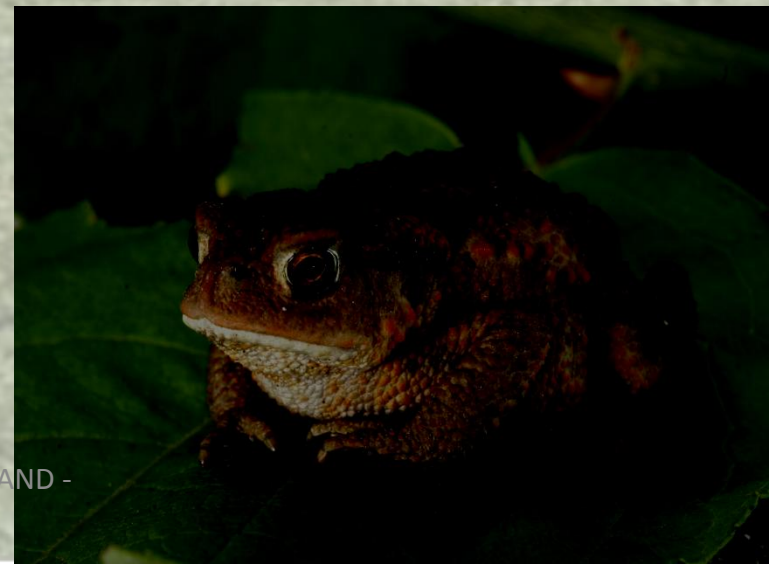
**Class** : Amphibia

**Family** : Bufonidae

**Size**: 7 to 12 cm

**Breeding** : water

**Food**: other frogs, insects, spiders





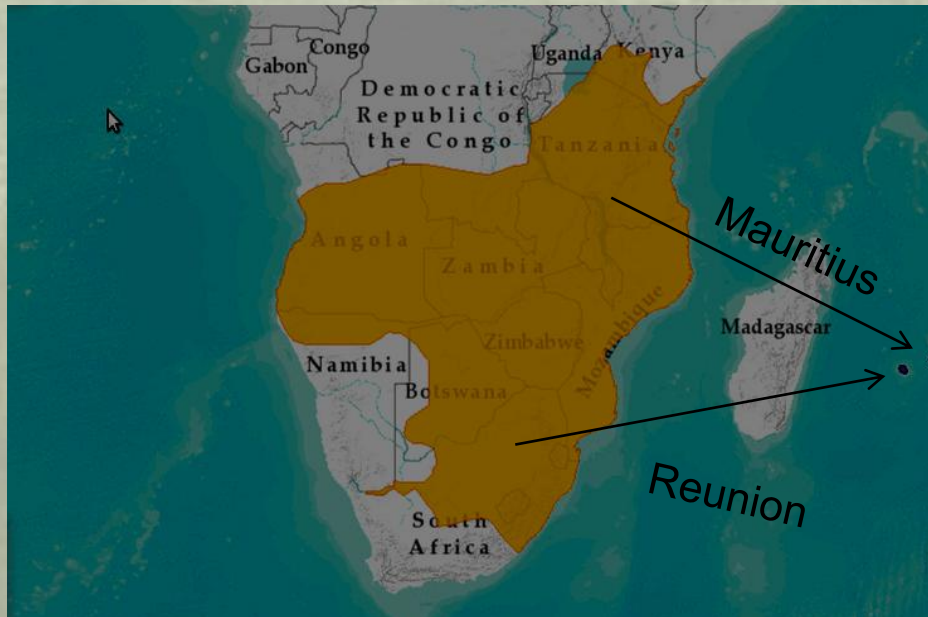
# Introduction to Reunion Island



When ? 1927

Why ? To fight paludism, malaria

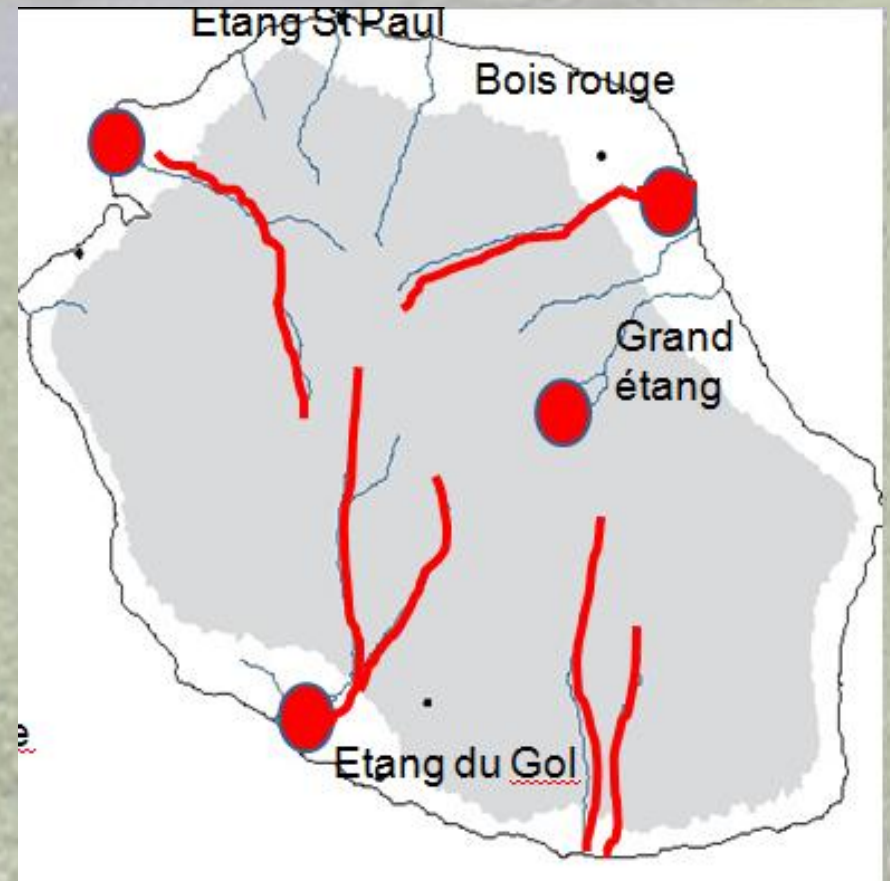
Where ? From southern Africa



# Current location



in Reunion island : humid areas  
The gutturalis toad is very adaptable  
to any environment.







# Consequences-Solutions

The Bufo bufo is a great predator.

Gecko de Manapany



Gecko des Hauts





Education and Culture  
Lifelong learning programme  
COMENIUS

