Predator-prey interactions, new representations in a changing world



Photo credits: Peter Law, Unsplash

Context

→ 4 BBC Earth videos

→ Documentary channel about nature

→ Explain predatory behavior from different animal species

→ Aim to show that predation can take different forms

→ Total time: 15m30s

BBC EARTH

Three Concepts

I - Predation : A beneficial/harmful interaction

II - Adaptation

III - Social vs Solitary Predation

Predation : A beneficial/ harmful interaction

- Biological interaction in which one organism, the **predator**, kills and eats another organism, its **prey**.

→ Beneficial for the predator and harmful for the prey

→ Component of the food chain/trophic network

→ Different predatory strategies : ambush, pursuit, etc.

→ Different prey strategies : hiding, fleeing, defending, etc.



Credits: Bob Brewer



Credits: Rafael Peier

Adaptation

- Modification of an anatomical, physiological, or behavioral trait under the influence of **natural selection**, with the new state of the trait enhancing the individuals' **fitness**.

→ During predation, a lot of different adaptations can be observed, including behavioral adaptations

- Examples :

Octopus walking on land to hunt



Credits: BBC Earth

Tursiops (dolphins) all sliding on the same side to catch more fish



Credits: BBC Earth

Social vs Solitary Predation

Social predation : When multiple individuals, often from the same species, hunt together.

→ More chances of catching prey

→ Not always a guarantee to actually eat



Credits: BBC Earth

Solitary predation : When the predator searches for food alone.

→ Harder to catch a prey on your own

→ Once the prey is caught, you're guaranteed to get to eat



Credits: BBC Earth

Vocabulary

To jink

To make a quick, sudden movement to avoid something.



Credits: Paul Levesley

Hare

French : lièvre

To outlast

To survive longer/stay alive.

Oysters

French: huîtres

Low tide/high tide

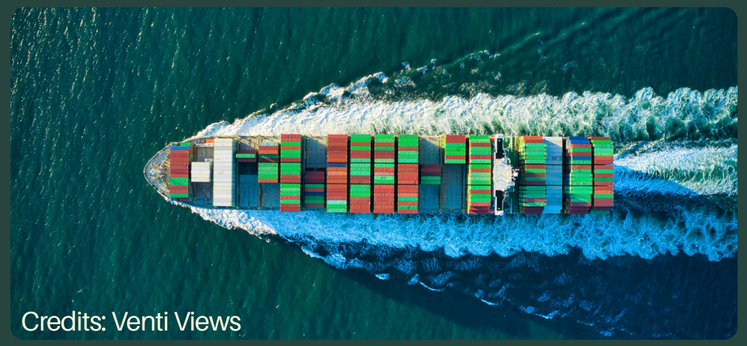
French: marée basse/haute

Mudbanks

Muddy area near water.

Bow Wave

Wave that forms at the front of a ship or a moving body in water.



Credits: Venti Views

Stranding

French: s'échouer

Tursiops

Other name for dolphins.



Credits: BBC Earth

Daring

A bold action.

Grit

Abrasive particles (ex : sand)

Vocabulary

- **To probe (Fr : sonder)**

To search into or examine something.



- **Overwhelmed**

Defeated by a person or group with a lot of force.

- **To flush out**

To purge. Here, it’s refering to ants searching and eating all prey in the area.



- **Pinned down**

to stop something from escaping by surrounding it.

Pronounciation Tips

- **Jink vs Jinx**

To Jinx : to cause a person or group to experience bad luck.

- **Lethal**

Not like the french pronounciation : the “e” makes a french “i” sound.

- **Stealthy and stealthily**

In stealthy, the “y” makes a french “i” sound.
In stealthily, the “i” now make a slight “a” sound.

- **Startled**

The “l” is pronounced after the “e”.



Credits: Matsvei Liatkouski

Thank you for your attention

Links to the videos :

Wolves and hare :
→ https://www.youtube.com/watch?v=gGludGaPKag&t=1s

Dolphins :
→ https://www.youtube.com/watch?v=EVJ_sbmw07M&t=1s

Octopus :
→ https://www.youtube.com/watch?v=ebeNeQFUMa0&t=1s

Army ants :
→ https://www.youtube.com/watch?v=JsfiUR0ZzLw&t=164s