Pick Or Skip? Manatees Take A Sip

Behavioural responses to different tastes in Greater Caribbean manatees (*Trichechus manatus manatus*)

Author: Astrée Calloch, Supervisor: Matthias Laska

INTRODUCTION

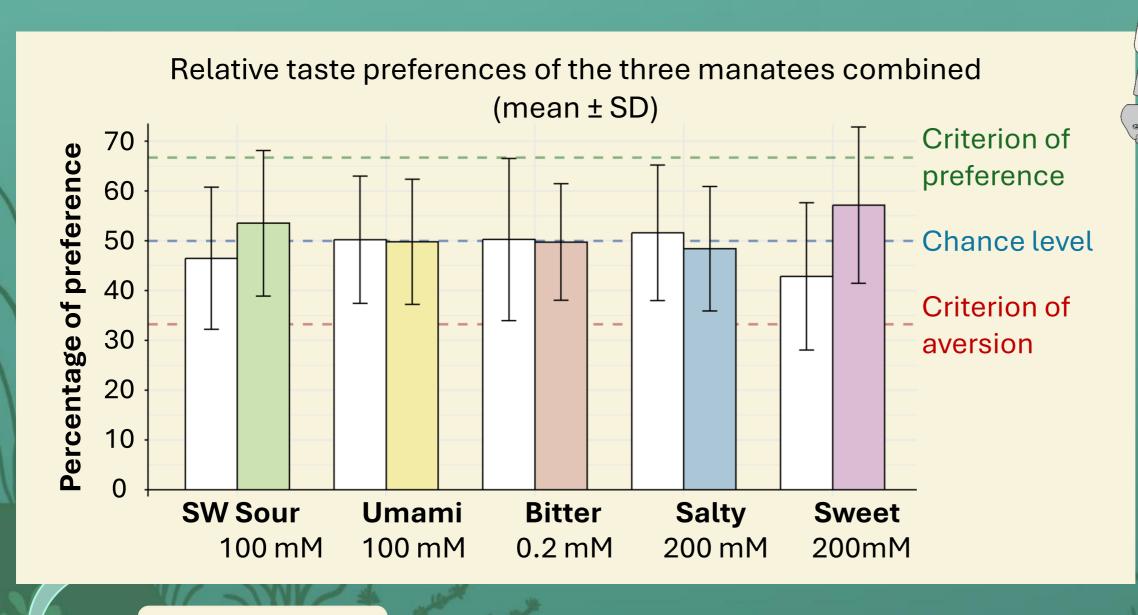
It is currently not known if manatees have a **functional sense of taste**:

- They have a high number of taste buds in their mouths.
- As herbivores, taste may help them to assess the safety, palatability and nutritional value of food.

<u>Aims</u>: Assess if manatees are able to perceive the five basic taste qualities and identify for which of these taste qualities manatees may display a preference or avoidance.

METHODS

- · 3 adult male manatees
- <u>Substances used</u>: sucrose (sweet), sodium chloride (salty), monosodium glutamate (umami), citric acid (sour), and quinine hydrochloride (bitter)
- Solvent and control: seawater (SW)
- Two-bottle preference tests of short duration (2 min)



RESULTS

The manatees **did not** demonstrate any significant **preference** for or significant **avoidance** of any of the taste stimuli used.

DISCUSSION

- The herbivorous dietary specialisation of manatees may not have prevented the pseudogenisation of their taste receptor genes.
- The functionality of taste receptor genes in manatees remains largely **unexplored** and warrants further investigation.





