Mōlī (Laysan Albatross)

Kilauea Point National Wildlife Refuge

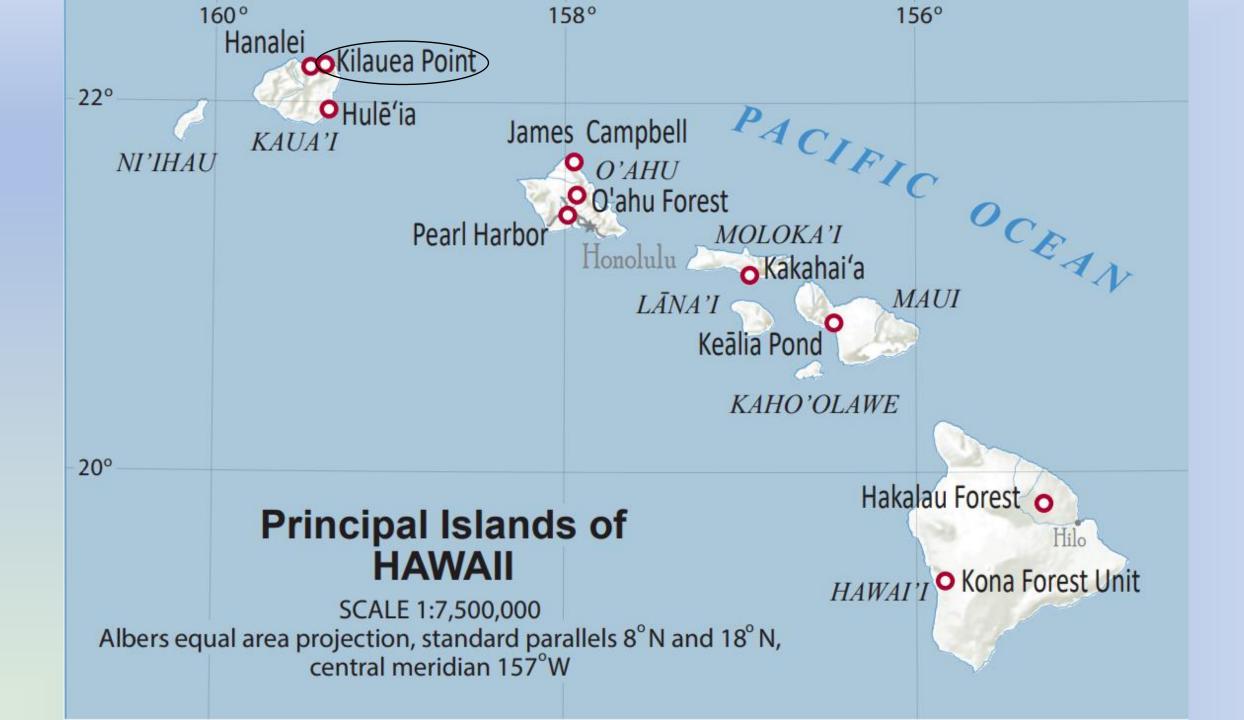


Kīlauea Point National Wildlife Refuge



U.S. Fish and Wildlife Refuges







Lesson One Learning Target

I can explain how seabird adaptations help molī survive in their habitats.

Adaptations are any structure (body part) or behavior that helps a plant or animal sustain themselves.



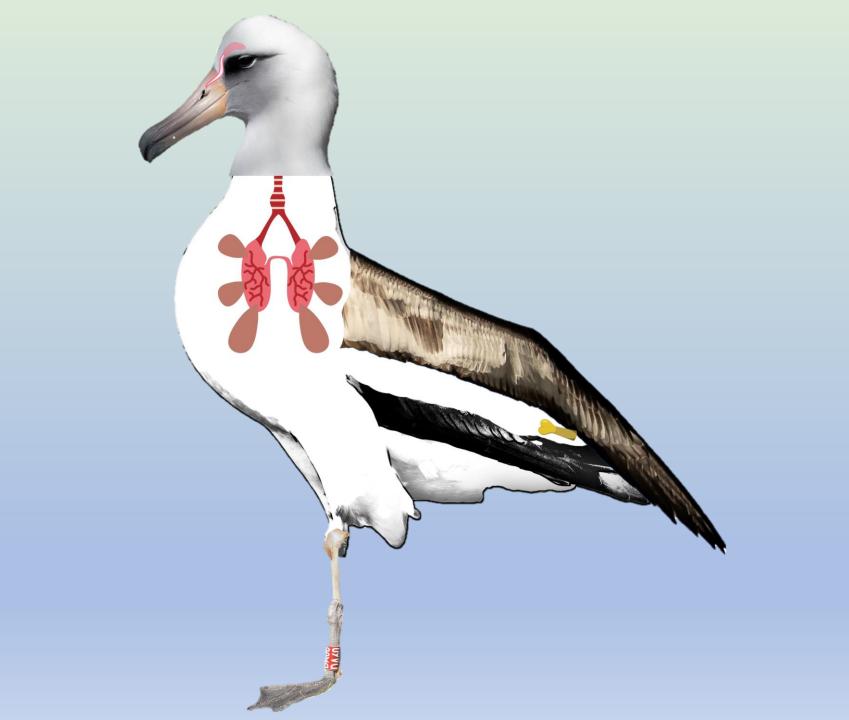
Nasal gland

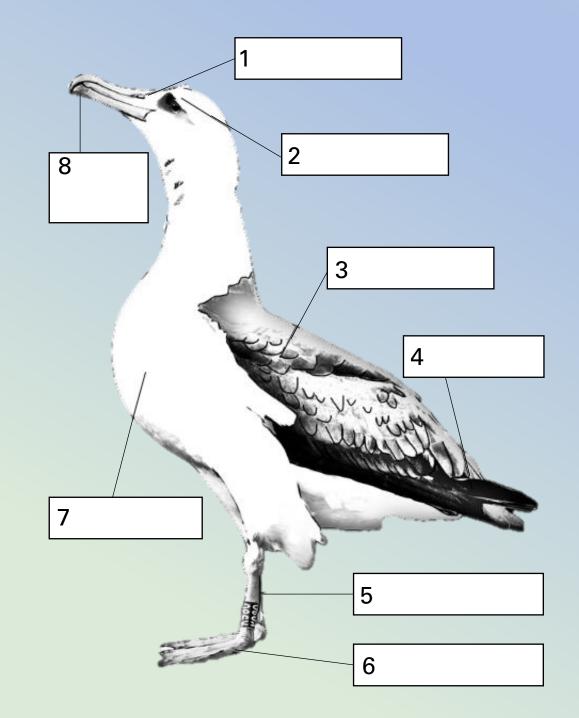
Nostril with salt secretions

(a) Location of nasal glands in a marine bird

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Royal albatross salt gland





Lesson One Learning Target

I can explain how seabird adaptations help molī survive in their habitats.

Lesson Two Learning Targets

I can explain how living in a **colony** while on land helps molī survive.

describe what makes it unique from other animals.

A **scientific model** is a physical representation of a real situation that can be observed.

Molī Courting Video



https://www.youtube.com/watch?v=z3DX86ZI_nc

Kīlauea Point Molī Hill



Princeville Colony



Moloa'a Colony



Midway Atoll Colony





Wisdom with her mate on Midway Atoll

Molī Life Cycle

Lesson Two Learning Targets

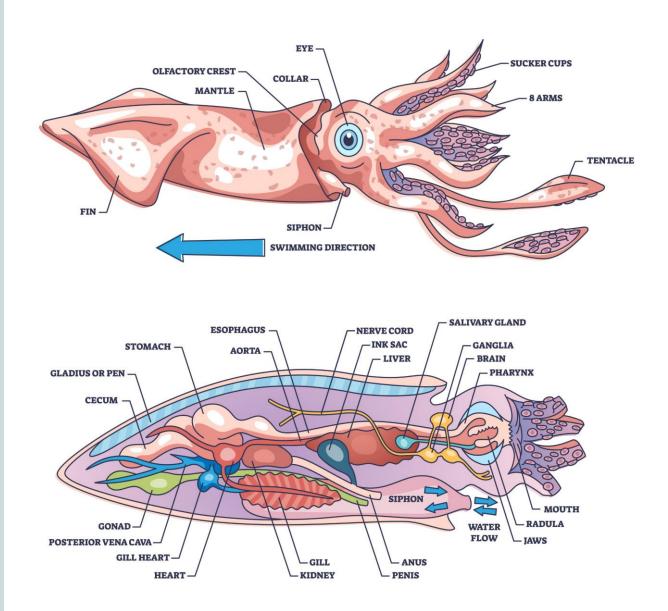
I can explain how living in a **colony** while on land helps molī survive.

describe what makes it unique from other animals.

Lesson Three Learning Target

I can propose a solution to human-caused marine debris and make a claim about the merit of that solution.

SQUID ANATOMY









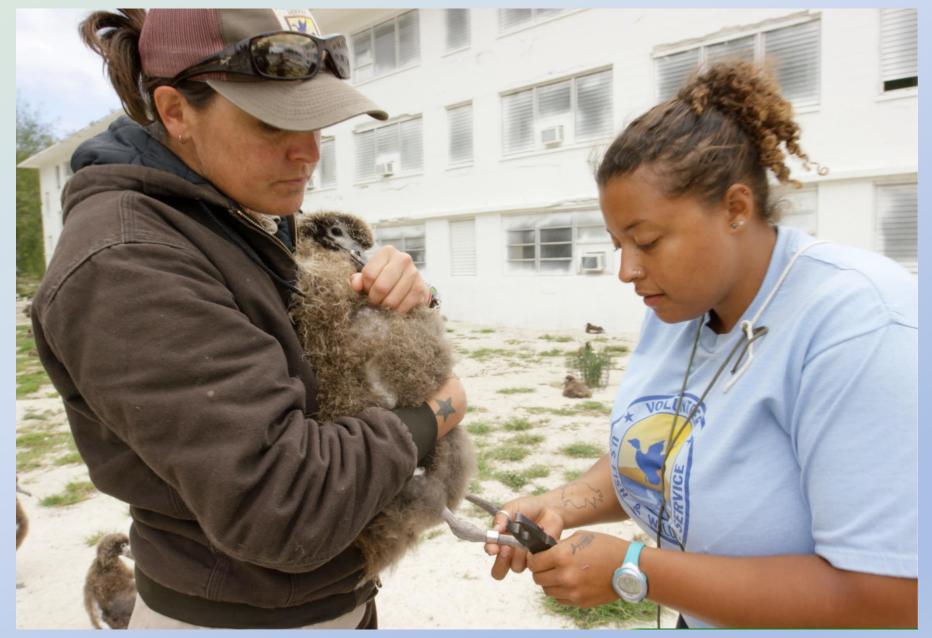
Lesson Three Learning Target

I can propose a solution to human-caused marine debris and make a claim about the merit of that solution.

Lesson Four Learning Target

I can plot coordinates using latitude and longitude.

I can explain why seabirds migrate using tracking data.



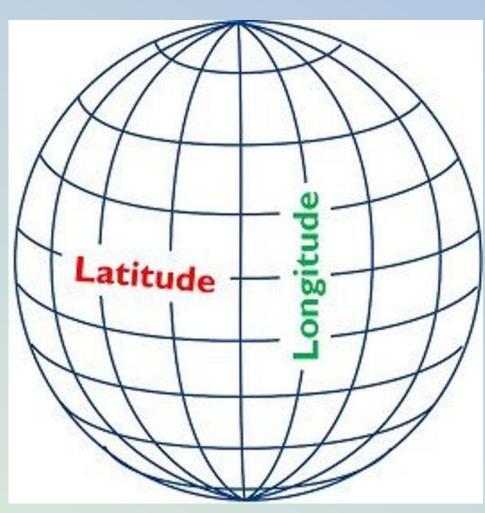
Banding an albatross on Midway Atoll

Bird Banding on Midway Atoll



https://flic.kr/p/DNqeg4

Geographic Coordinate System

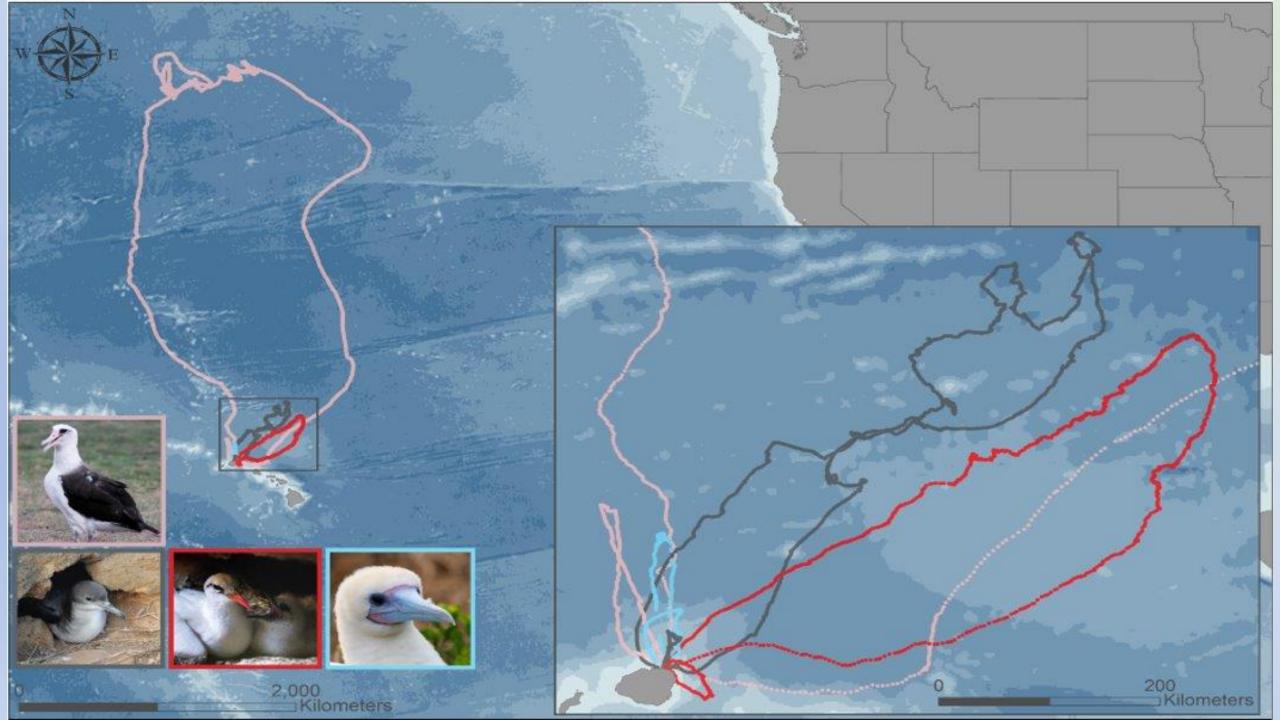


Latitude runs horizontally, East-West

Longitude runs vertically, North-South

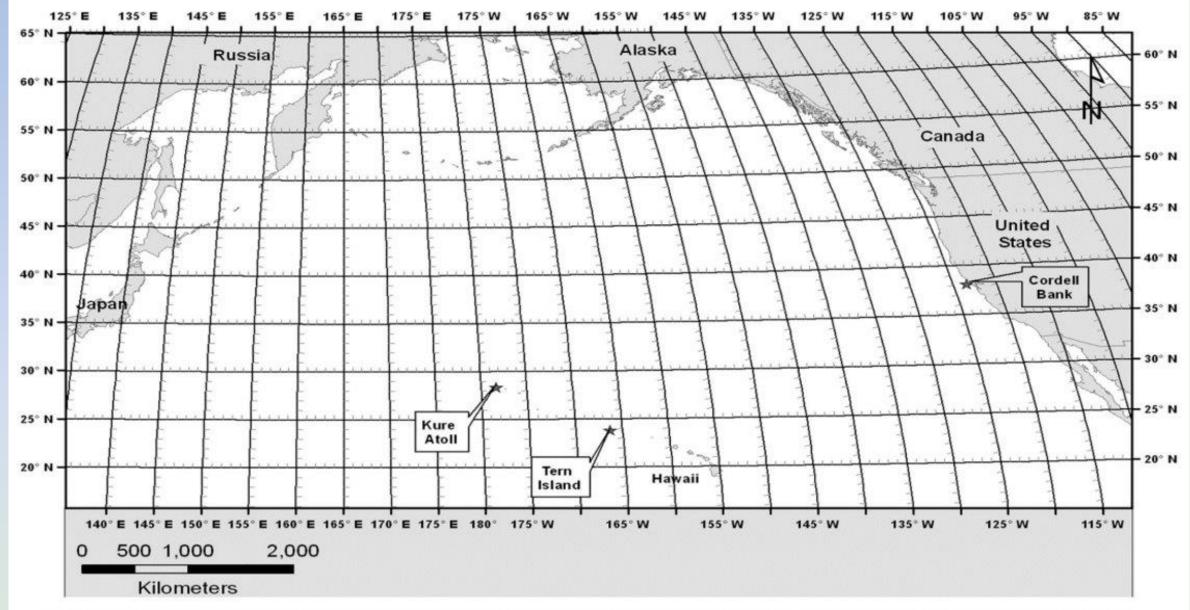
Global Positioning System (GPS) uses a satelite to locate things with these coordinates

Latitude and longitude are a system of lines used to describe the location of any place on Earth. Although these are only imaginary lines, they appear on maps and globes as if they actually existed.

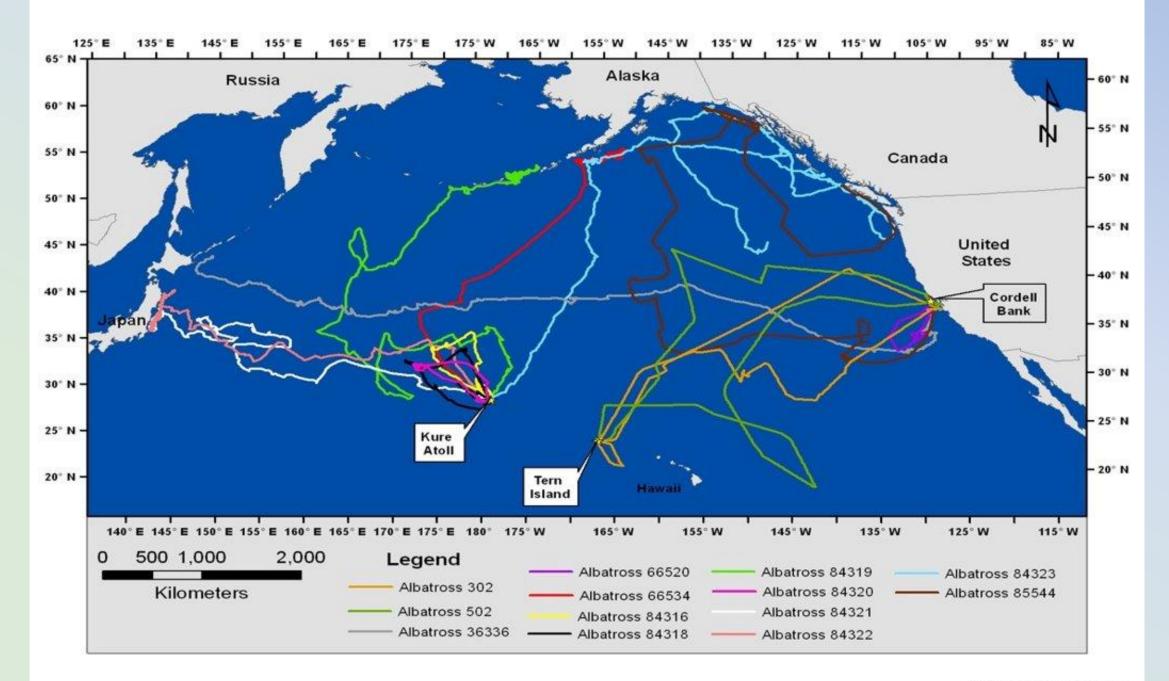


Plotting GCS coordinates

- 1. Find the first latitude point and line up the yardstick (or ruler) horizontally across the map.
- 2. Place the second yardstick vertically along the longitude line.
- 3. Make a point at the intersection of the two yardsticks.
- 4. Label the point



Based on your tracking maps, what can you observe about the migration movement of these two birds?



Data courtesy of Oikonos

Lesson Four Learning Target

I can plot coordinates using latitude and longitude.

I can explain why seabirds migrate using tracking data.