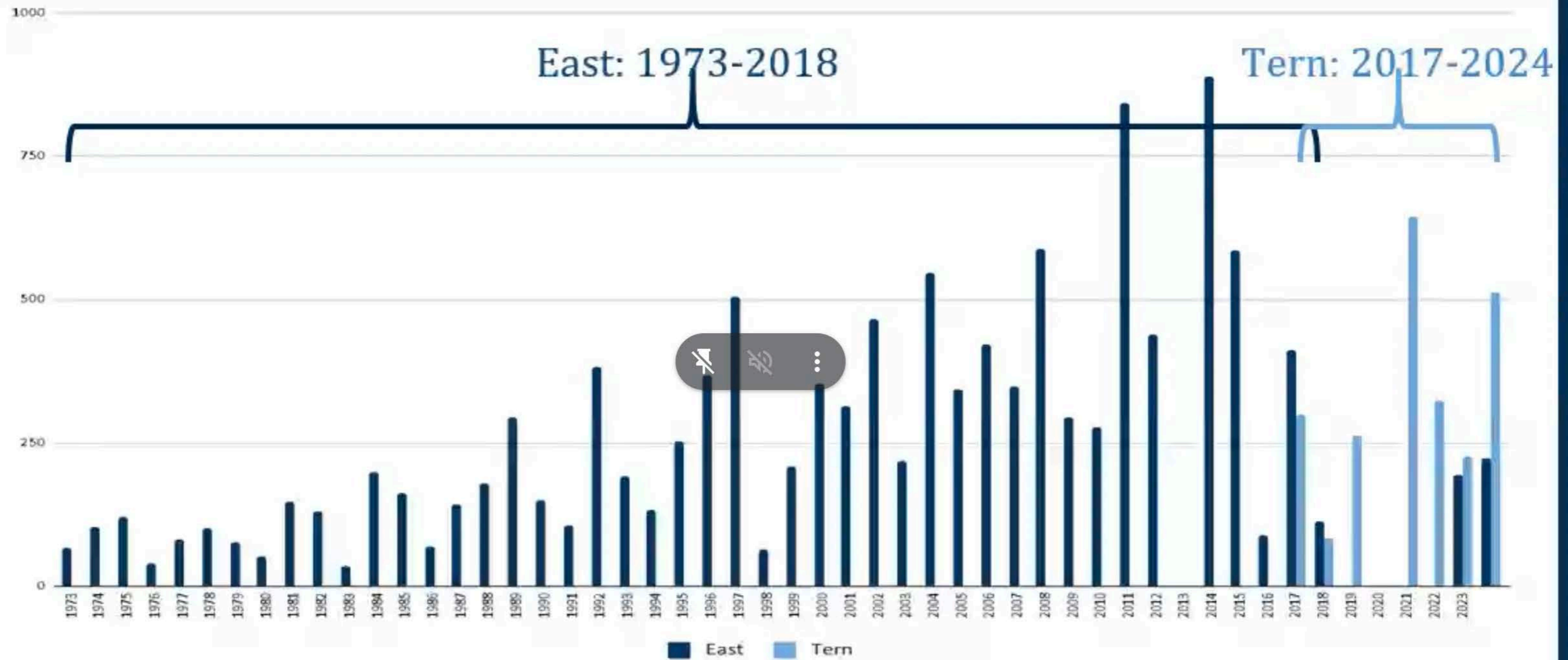


The Return of East Island



- Loss of all vegetation
- Potential nesting habitat decreased by 37%
- Increasing in size slowly since 2019
- Unknown if it will return to its original size

Honu Nesting Trend

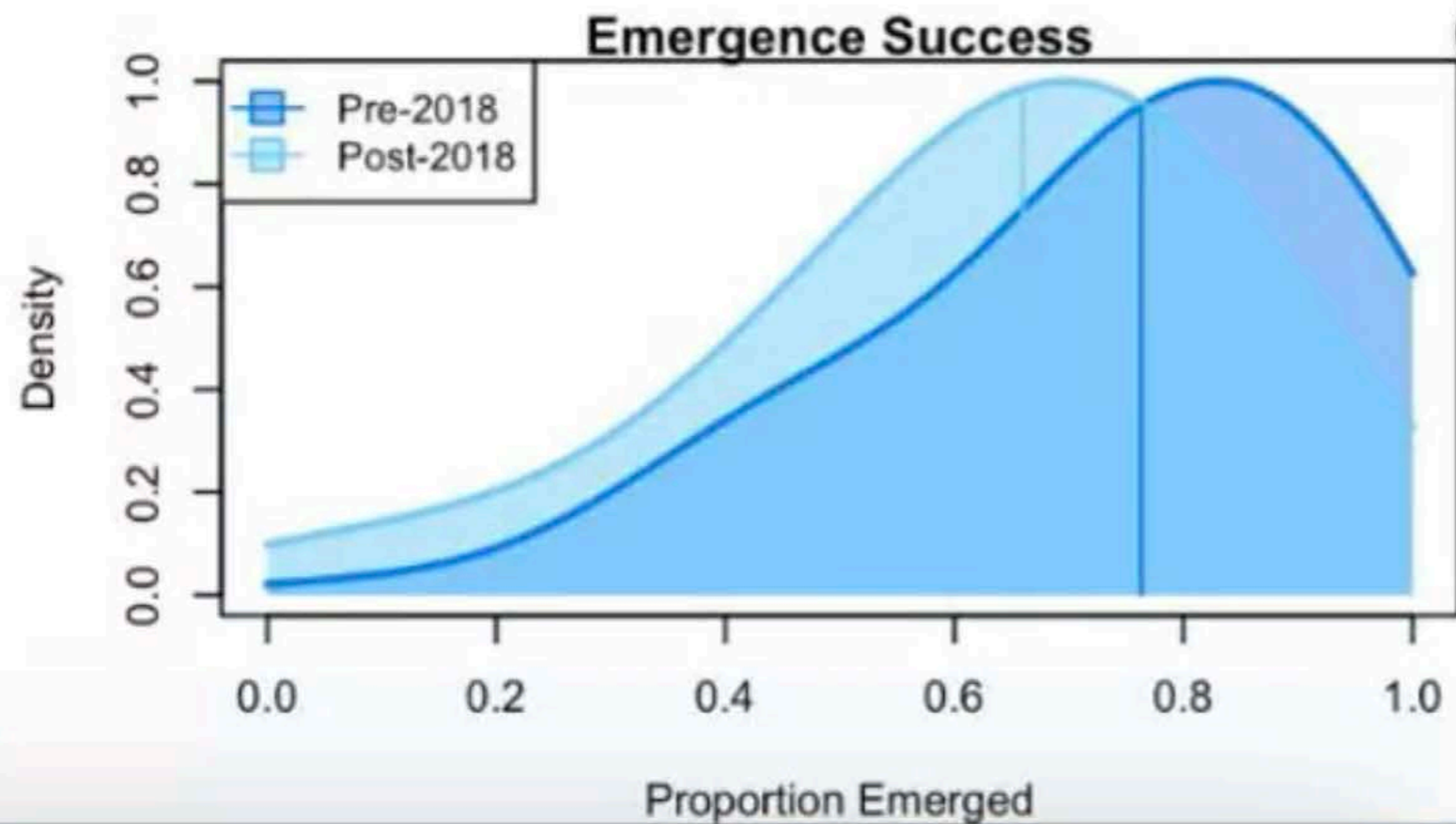
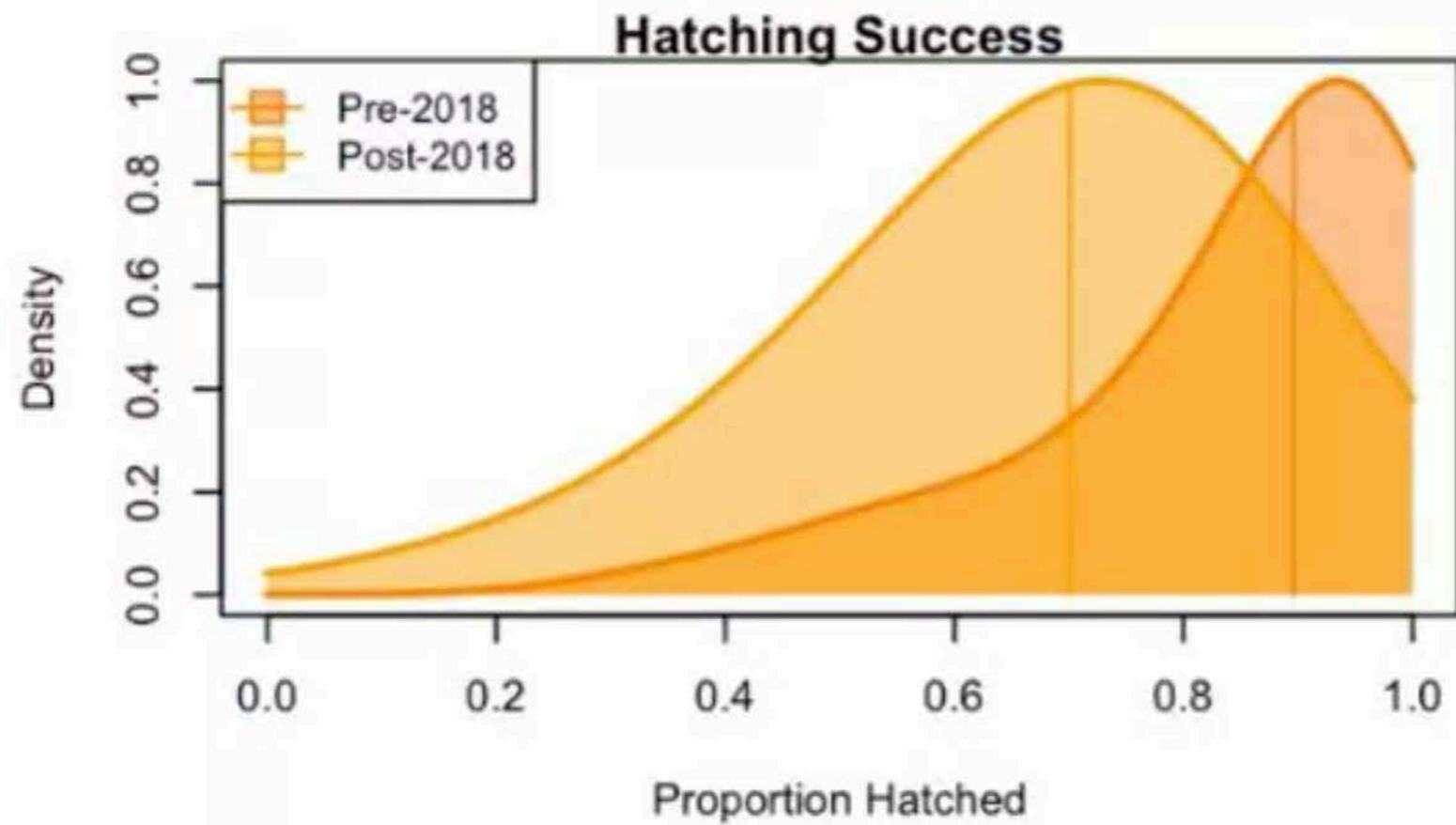


Nesting female abundance on East Island increasing ~3-5%

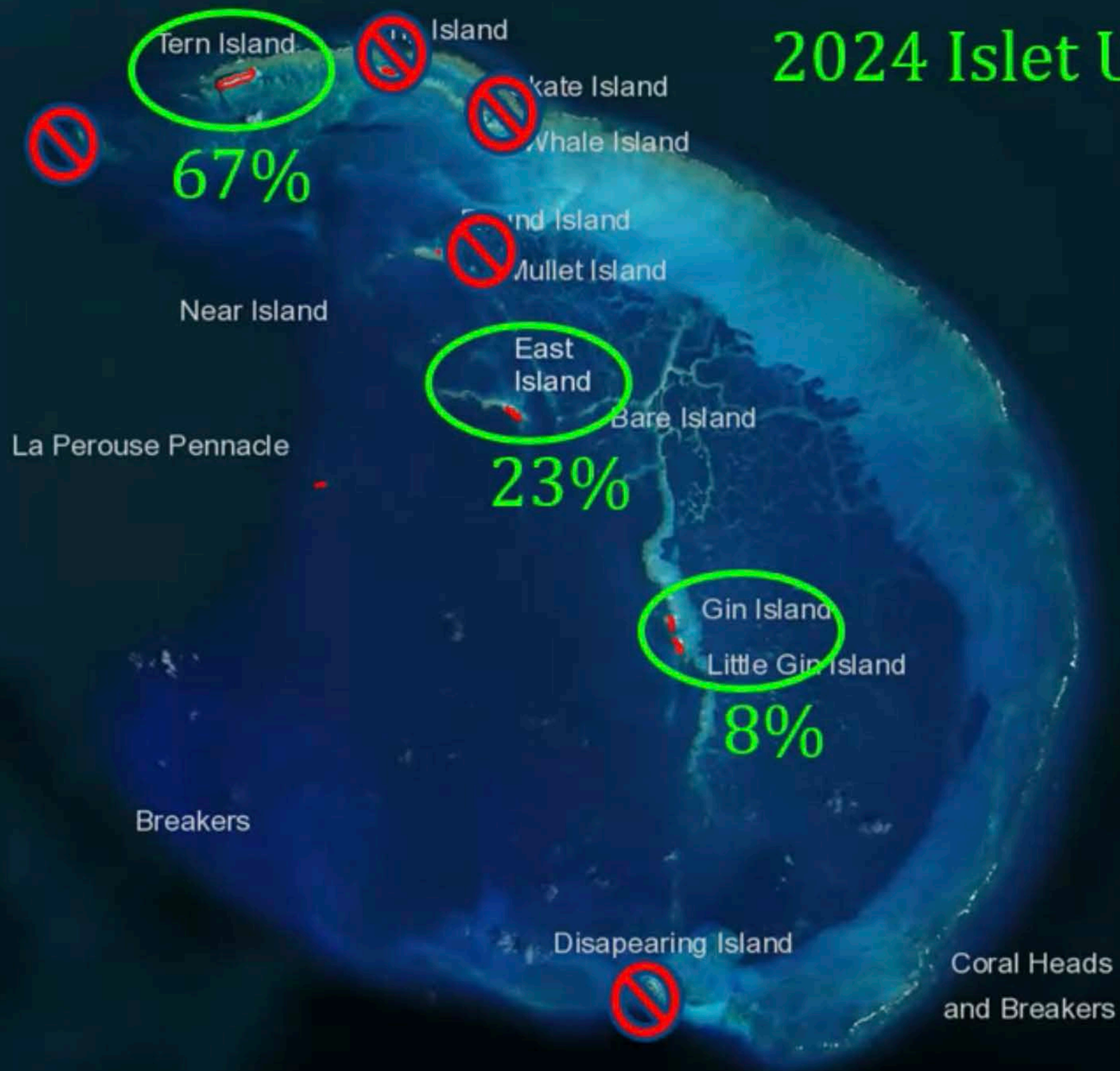
Nest Success

Calculated nesting demographic distributions under a pre- vs post-Walaka analysis conveyed:

- A constant median of 94.5 eggs per nest
- A **20% reduction** in median hatching success (90% to 70%)
- A **10% reduction** in median emergence success (76% to 66%)



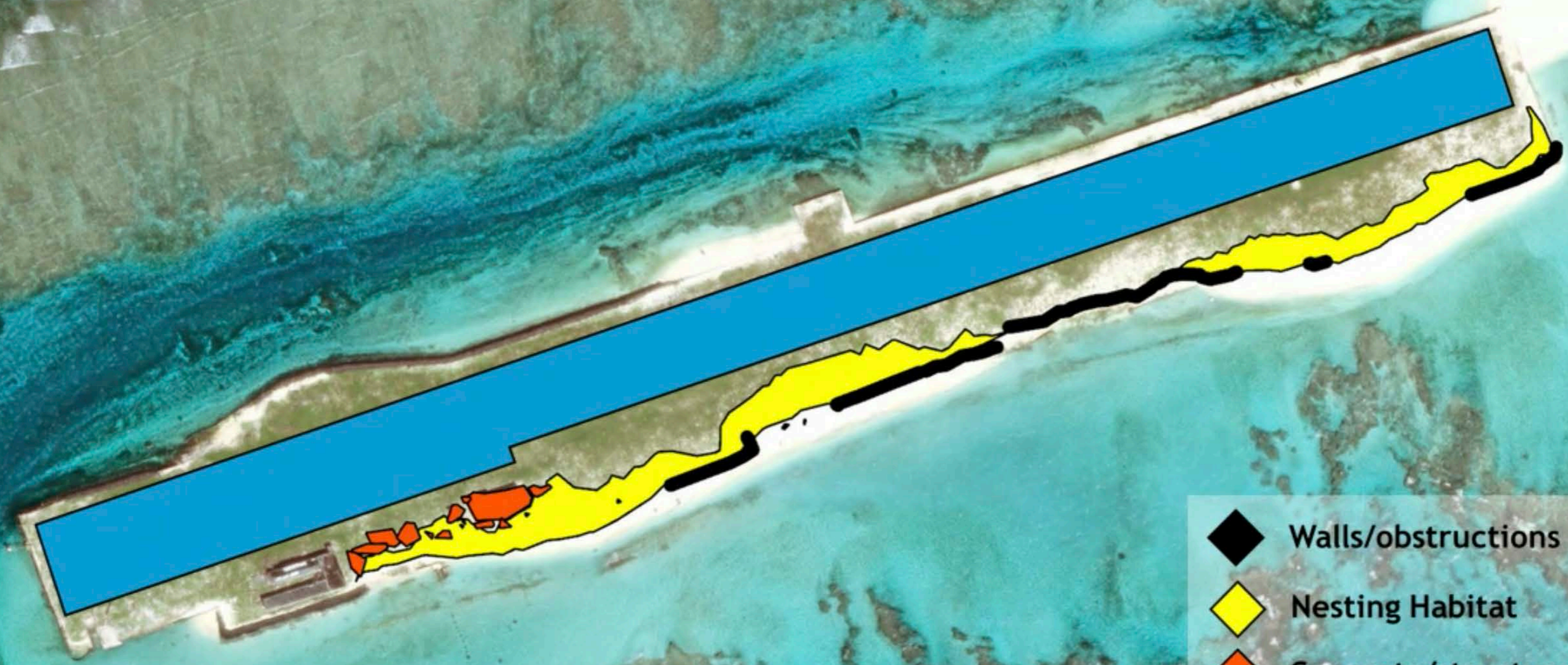
2024 Islet Use



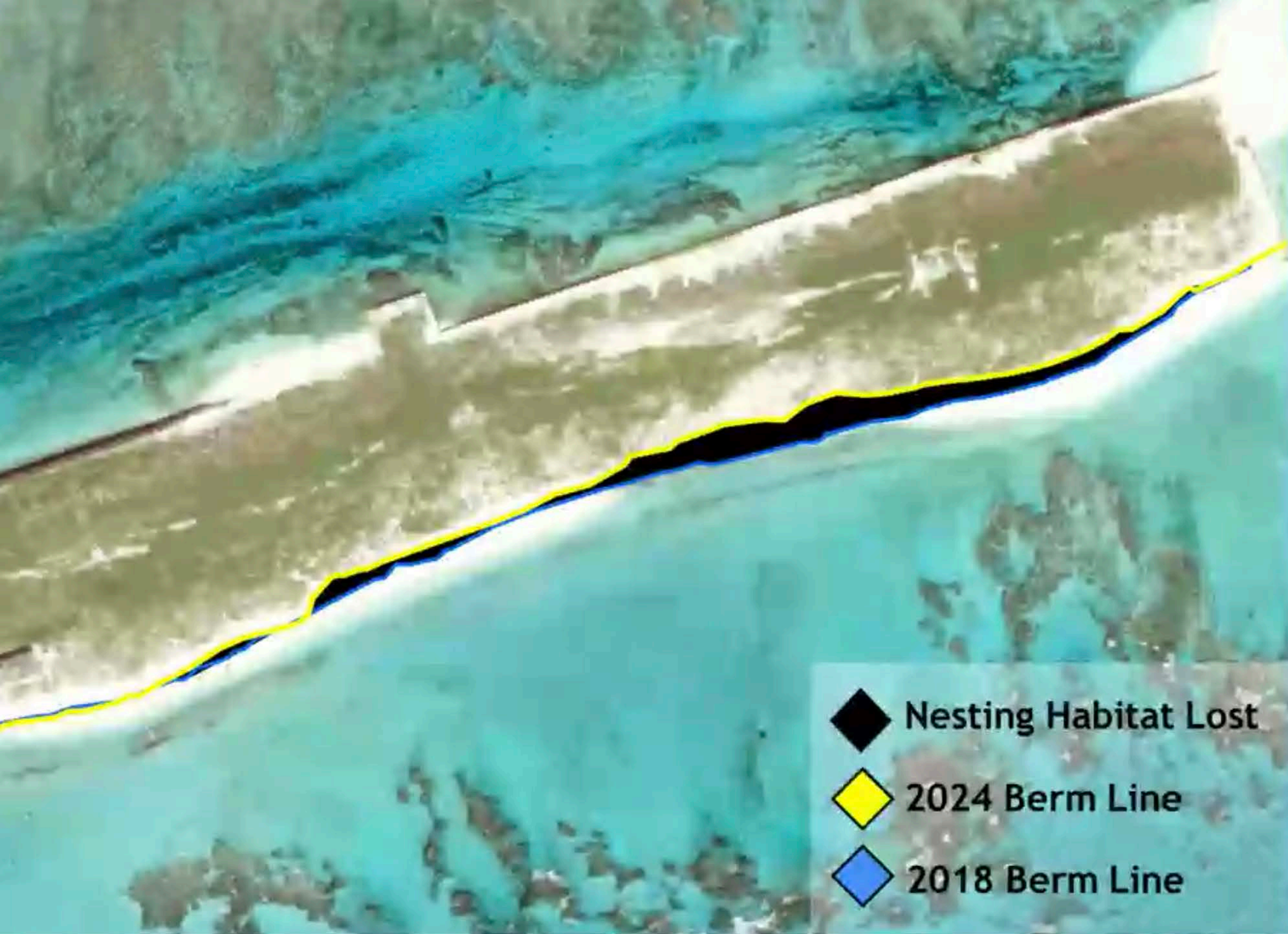
Honu at Lalo

- What islets are honu utilizing?
- East Island more exposed to storms?
- Tern Island most likely to be reinforced?
- NOAA Turtle Camp returning to East Island in 2025

2024 Tern Island Nesting Habitat



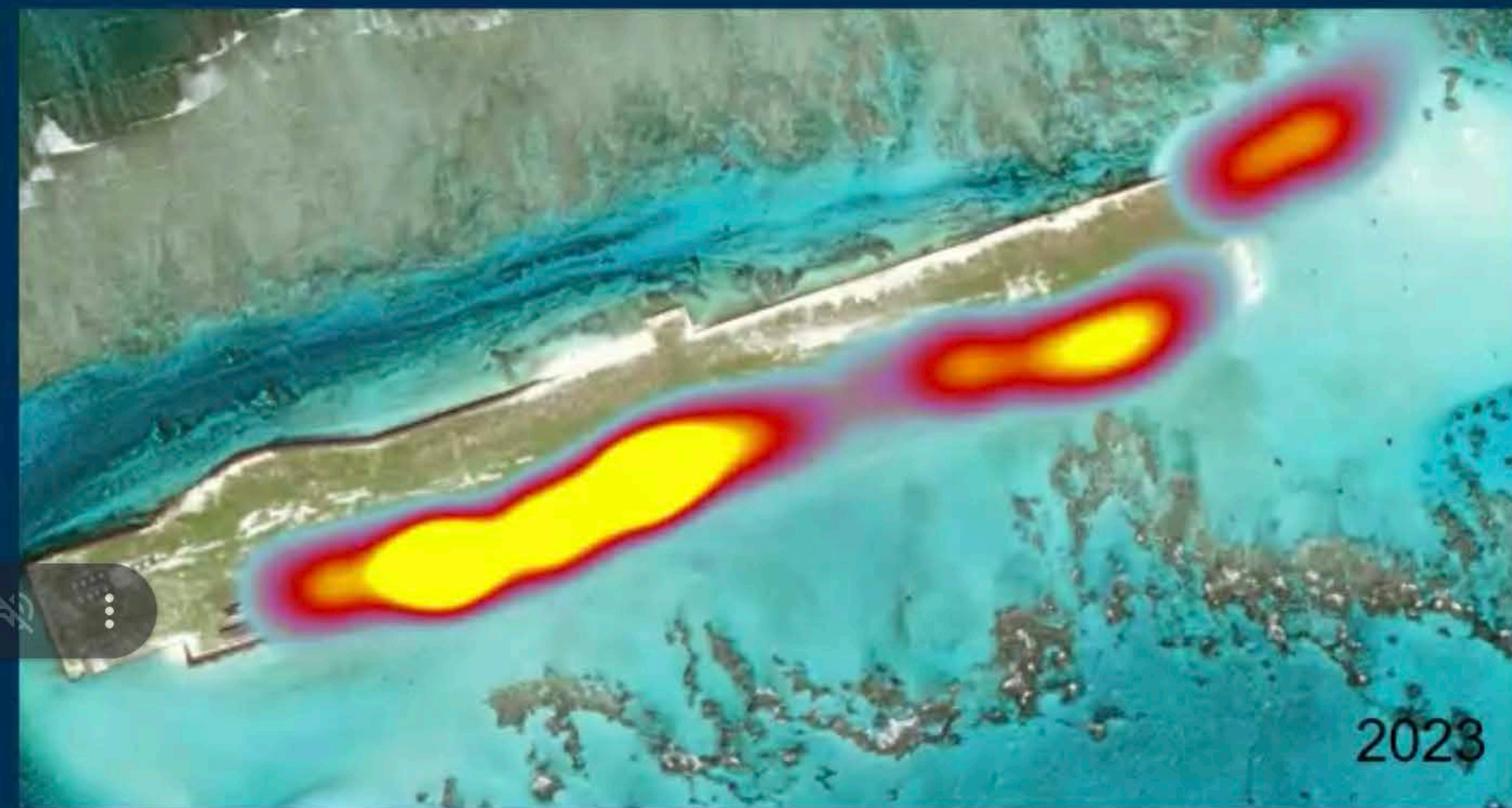
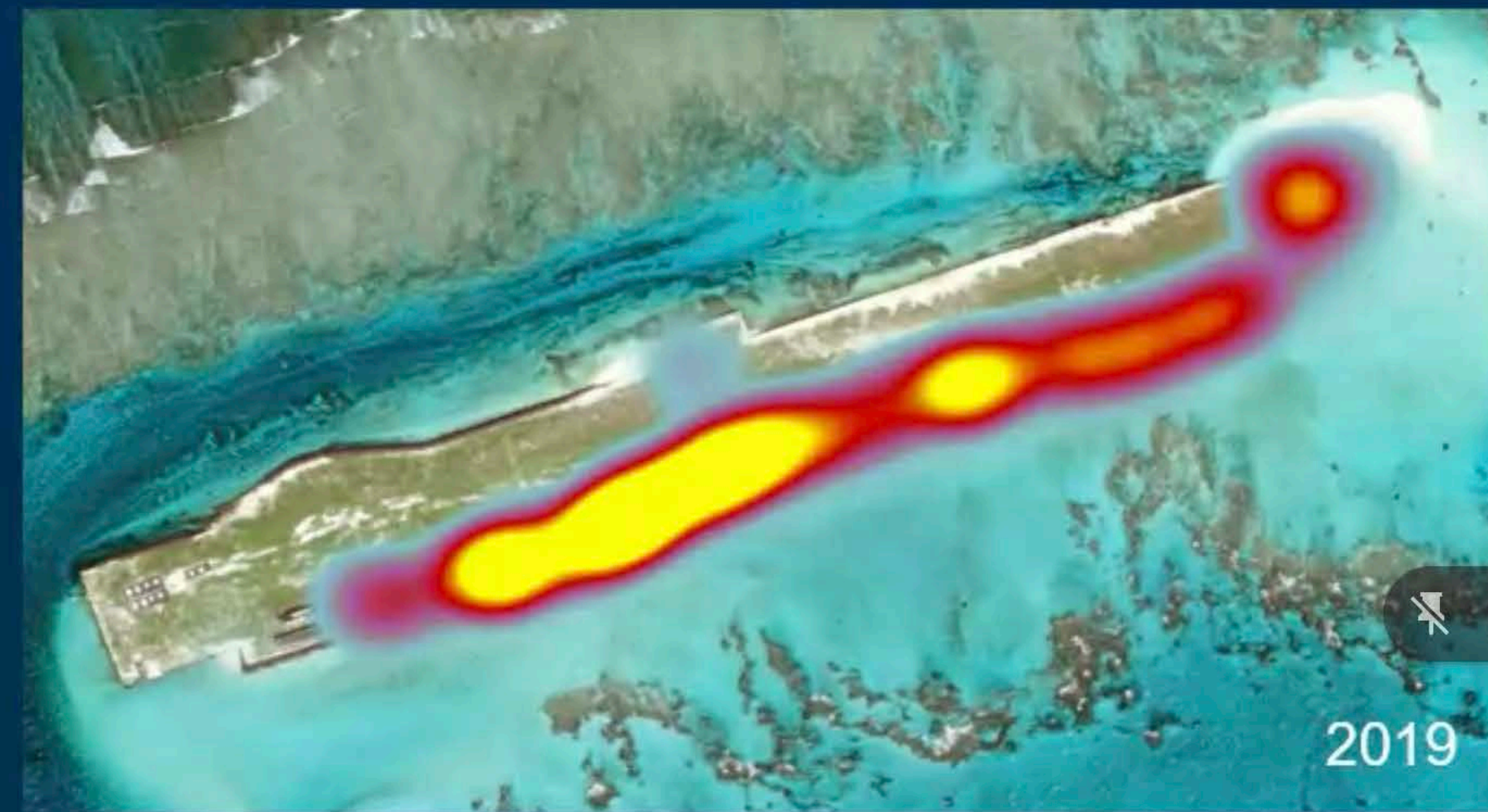
- ◆ Walls/obstructions
- ◆ Nesting Habitat
- ◆ Concrete/structures
- ◆ Runway hardpack



Erosion of
South Beach
(Tern Island)
from
2018 to 2024:
~0.5 hectares

Loss of
vegetation
barrier

Shift in Nesting Density



- Distribution is becoming more segmented each season
- Nests are at a greater risk to be dug up and destroyed by other turtles
- How will this affect carrying capacity?

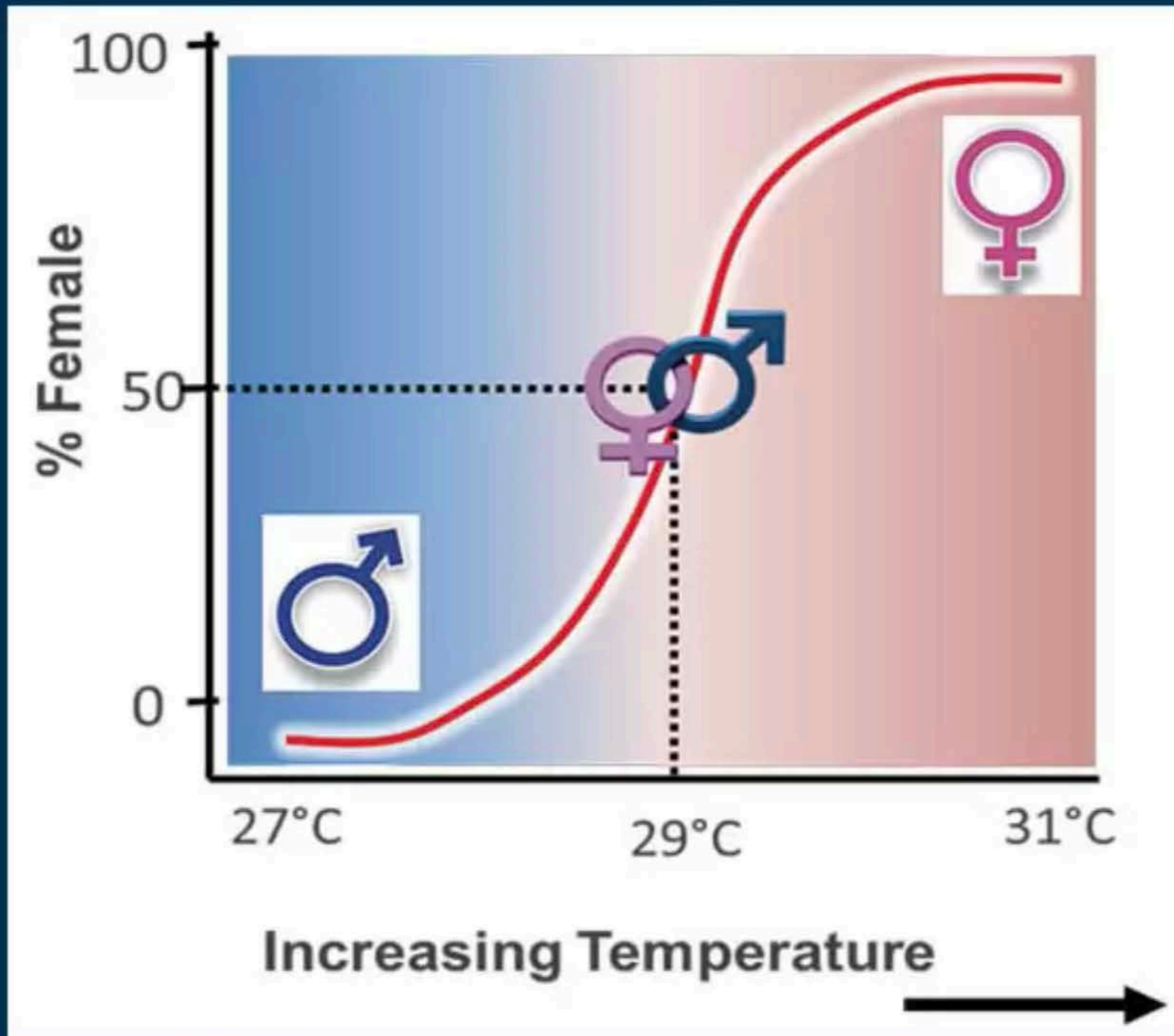
Honu Life History Overview

Life History Traits

- Only ~1/1000-10k hatchlings survive to adulthood
- Age of sexual maturity: 25-30 years
- Reproduce every ~2-5 years



Honu Life History Overview



Life History Traits

- Temperature-dependent sex determination

Tern 1932



The Coral Carrier, A. Binion Amerson, Official US Navy photograph 80-CF-79793-1

Return Tern Back to it's Natural State

- Prior to 1942 Tern resembled East Island
- Remove all infrastructure, sea walls and fill in dredged channels
- Will hydrology allow Tern to stabilize or will it disappear?
- Could leave no remaining emergent land