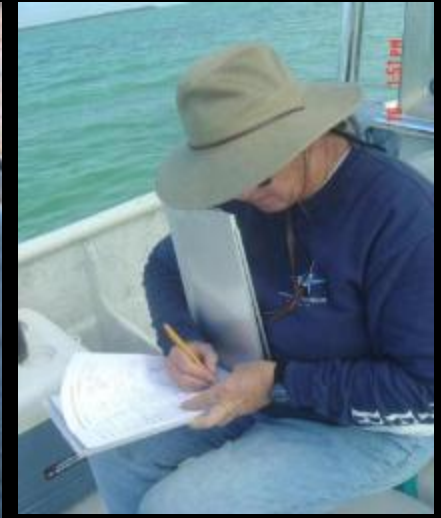


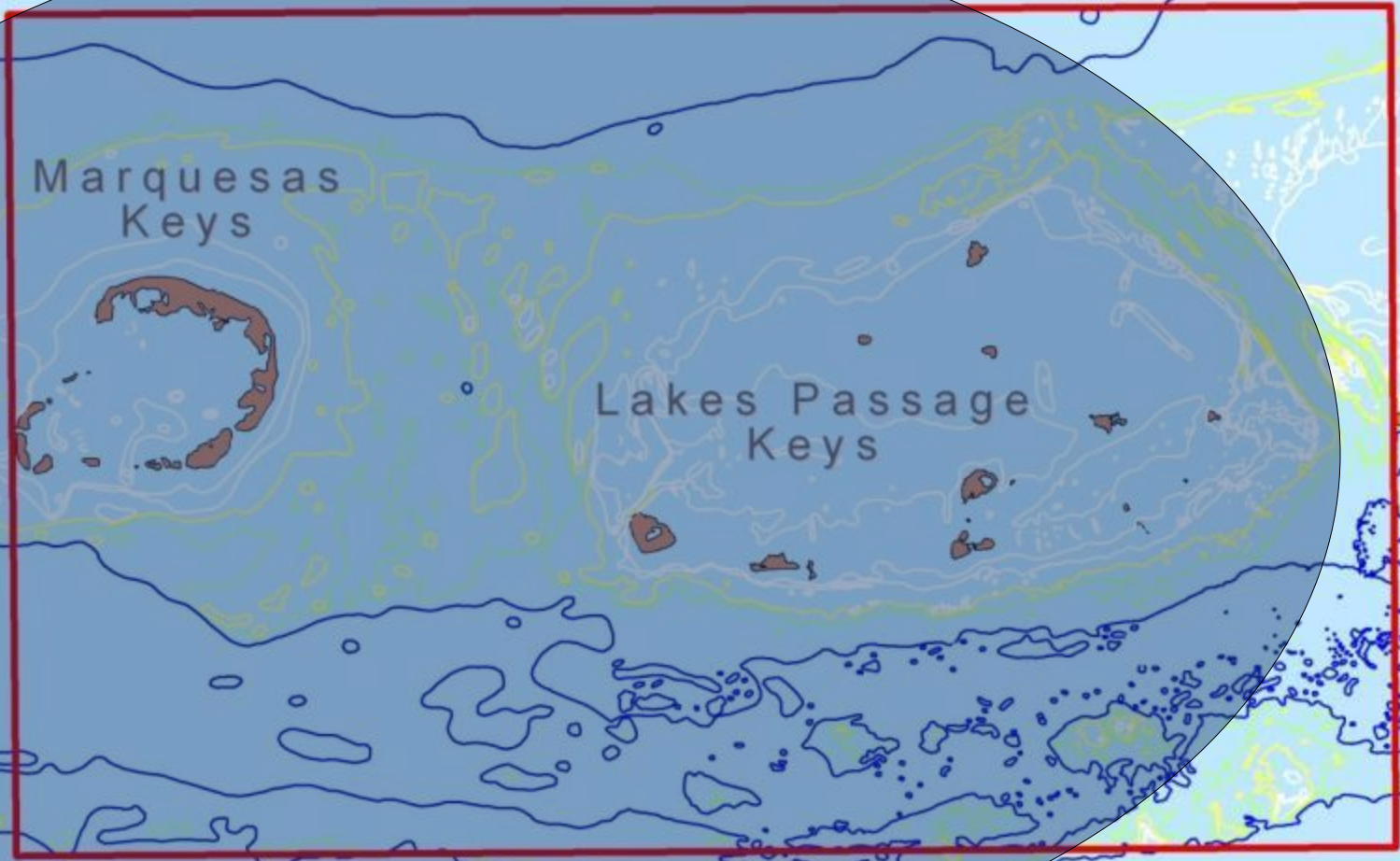
# INWATER RESEARCH GROUP



*Our mission is to provide the scientific community and general public with information to promote conservation of coastal and marine species and their habitats.*



Refuge Boundary  
502 km<sup>2</sup>



# Visual Transect Counts of Sea Turtles



# Rodeo Captures



00.00.0000

# All Sightings and Captures of Sea Turtles 2002 – 2011 (147 sample days, 2681 km transects)

<u>Species</u>	<u>Sightings</u>	<u>Captures</u>
<i>Chelonia mydas</i> (green turtle)	2572	223
<i>Caretta caretta</i> (loggerheads)	1465	442
<i>Eretmochelys imbricata</i> (hawksbills)	201	88
<b>Totals</b>	<b>4238</b>	<b>753</b>

# Central Region

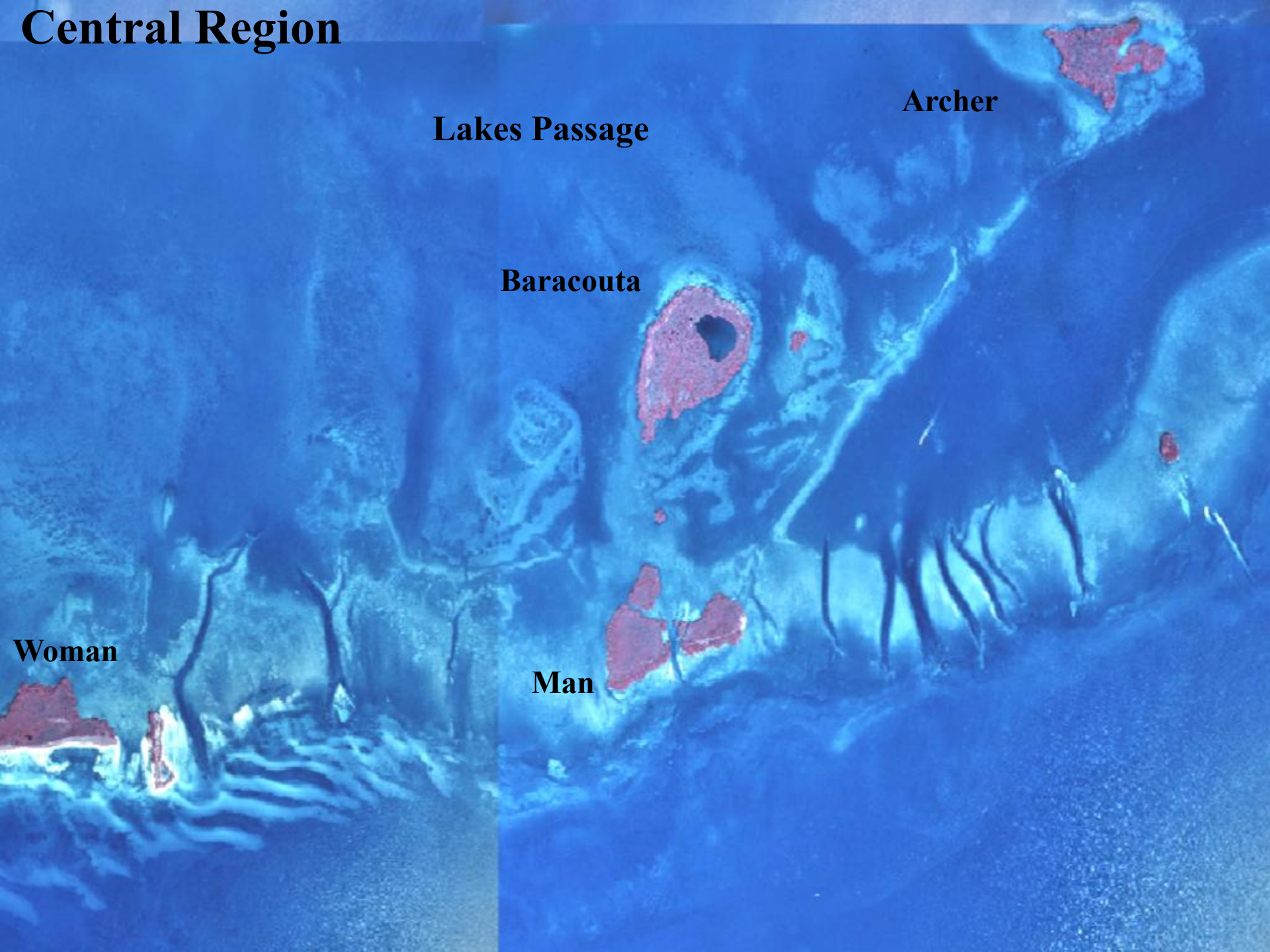
Lakes Passage

Archer

Baracouta

Woman

Man



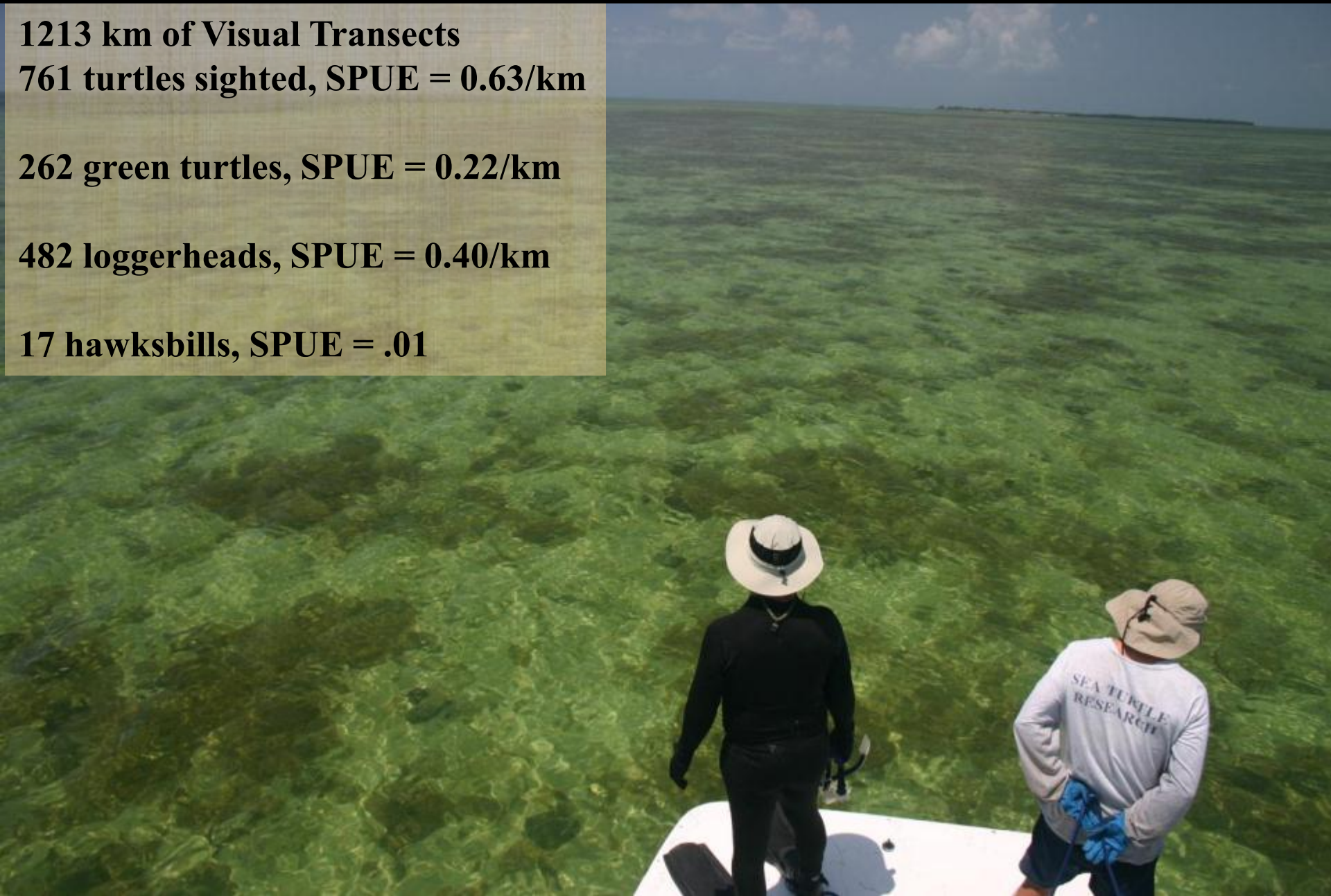


**1213 km of Visual Transects**  
**761 turtles sighted, SPUE = 0.63/km**

**262 green turtles, SPUE = 0.22/km**

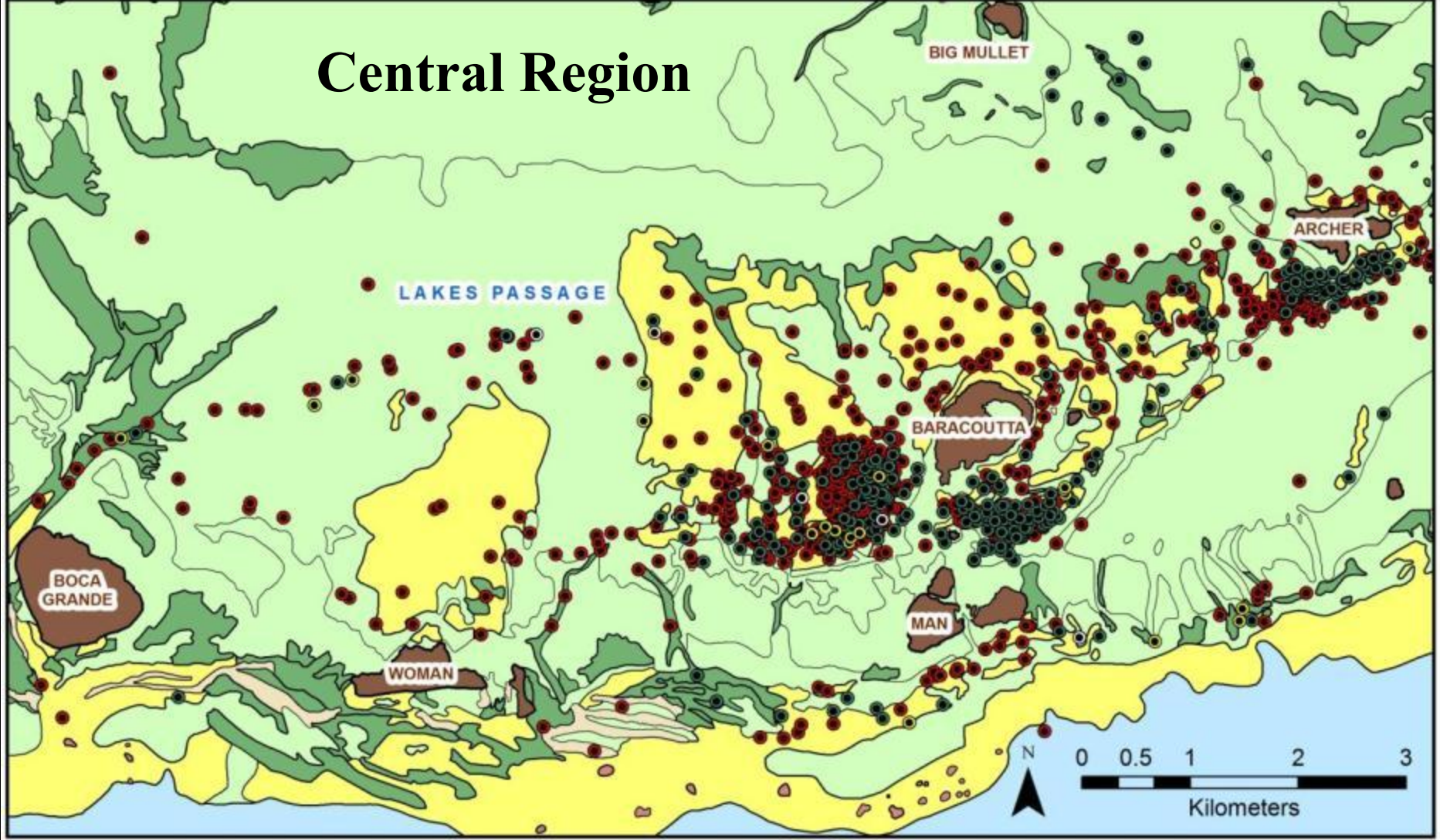
**482 loggerheads, SPUE = 0.40/km**

**17 hawksbills, SPUE = .01**

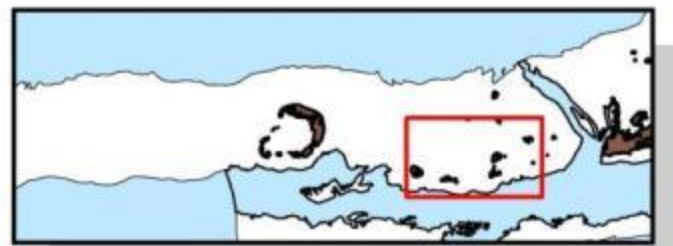




# Central Region



● LOGGERHEAD	■ BARE SUBSTRATE	■ OPEN WATER
● GREEN	■ CONTINUOUS SEAGRASS	■ PATCH REEF
● HAWKSBILL	■ HARDBOTTOM	■ PATCHY (DISCONTINUOUS) SEAGRASS
● KEMP'S RIDLEY	■ HARDBOTTOM WITH SEAGRASS	■ PLATFORM MARGIN REEF
● UNKNOWN	■ INLAND WATER	■ UNINTERPRETABLE/UNINTERPRETED
	■ LAND	



# Marquesas





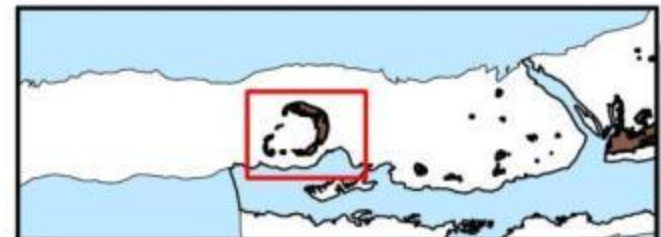
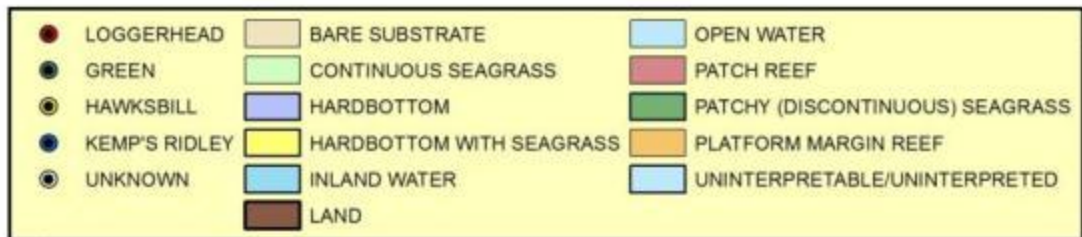
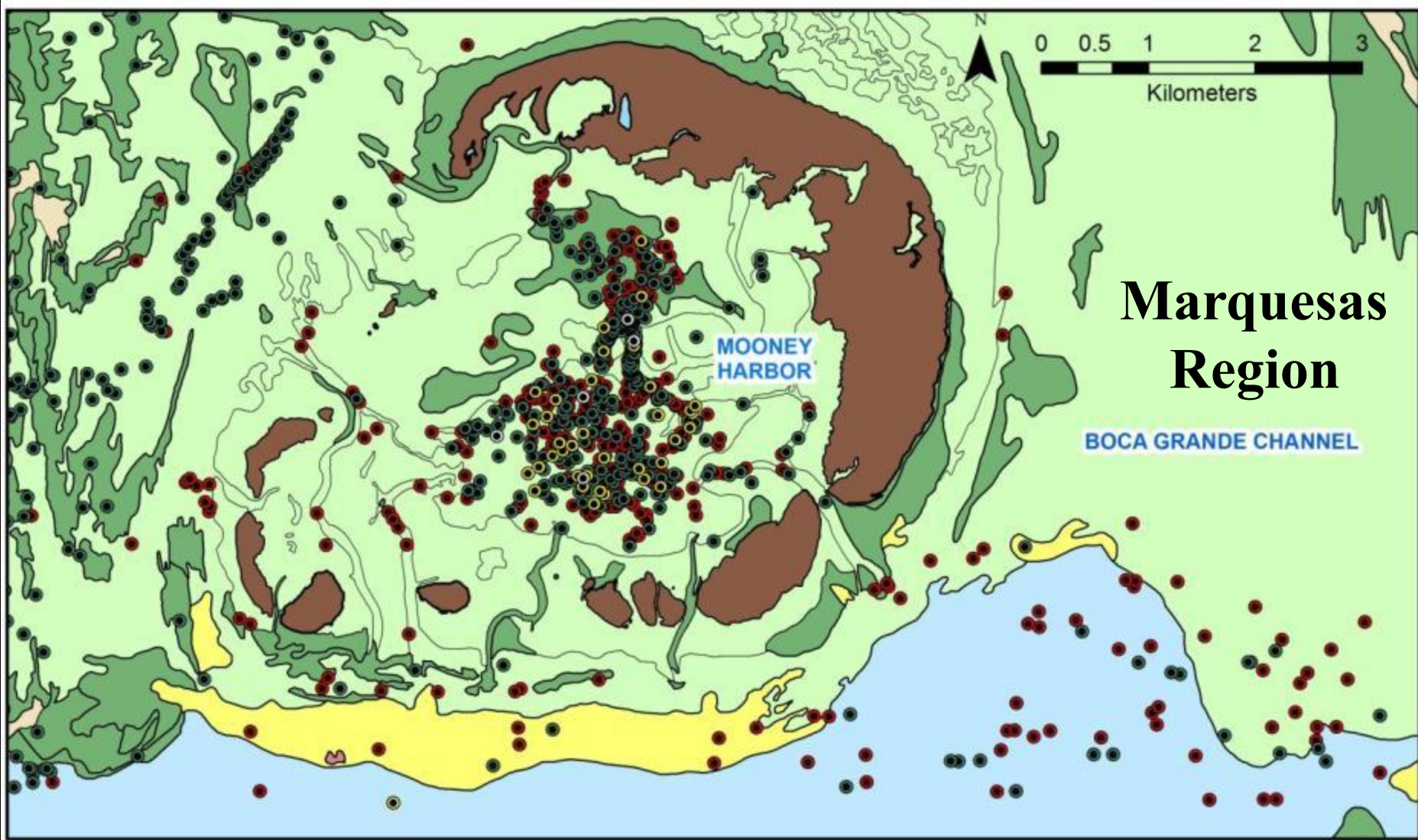
**483 km of Visual Transects**  
**564 turtles sighted, SPUE = 1.17/km**

**262 green turtles, SPUE = 0.22/km**

**482 loggerheads, SPUE = 0.40/km**

**17 hawksbills, SPUE = .01**





# Eastern Quicksands







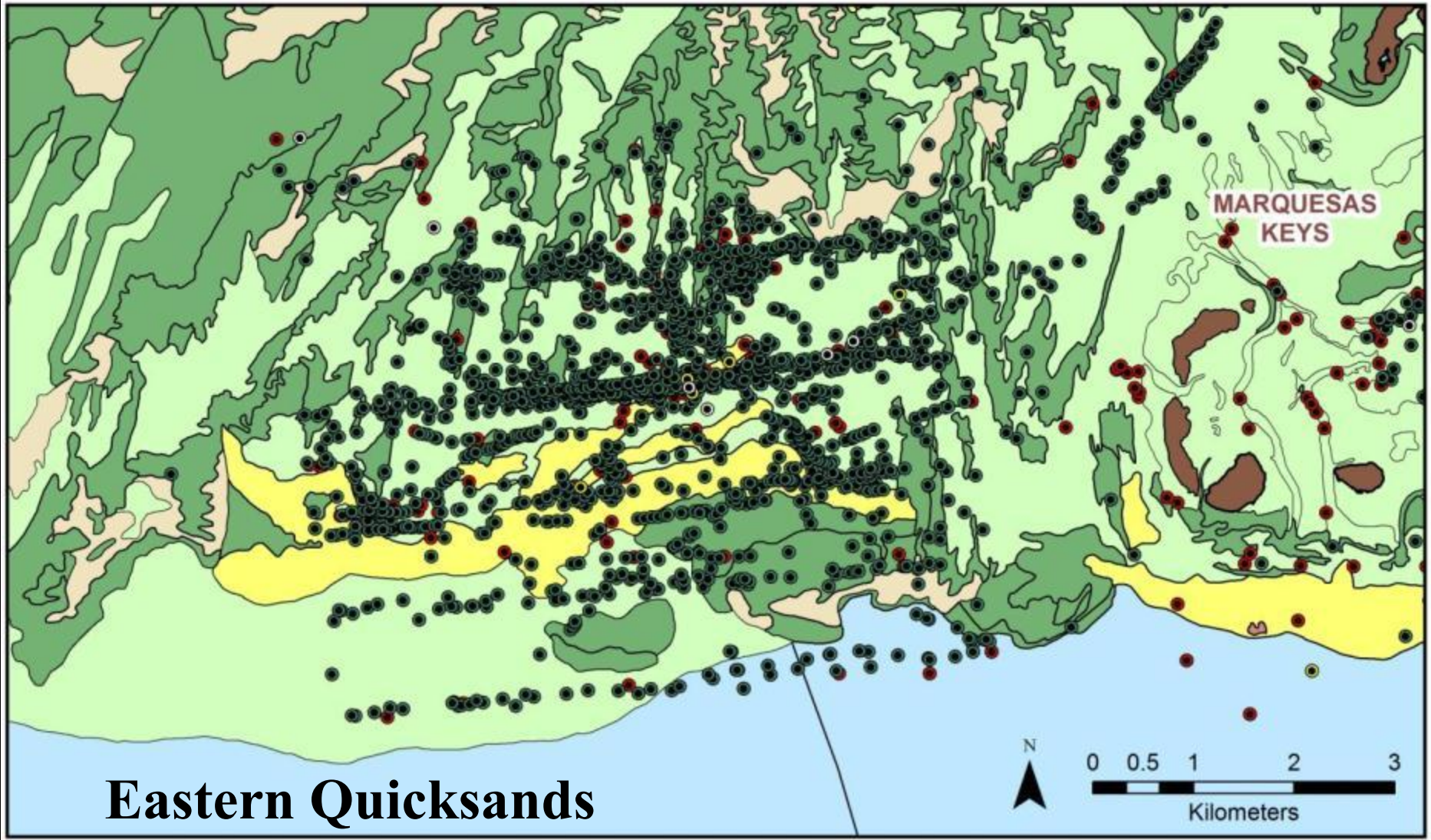
**795 km of Visual Transects**  
**1480 turtles sighted,**  
**SPUE = 1.86/km**

**1394 green turtles, SPUE = 1.75/km**

**82 loggerheads, SPUE = 0.10/km**

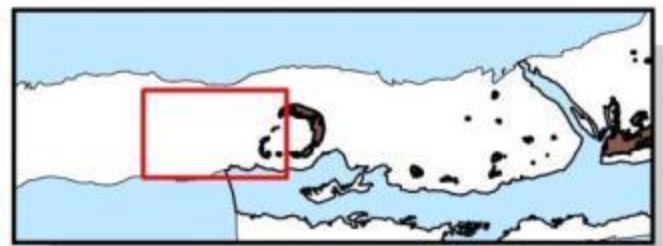
**4 hawksbills, SPUE = .005**





# Eastern Quicksands

● LOGGERHEAD	■ BARE SUBSTRATE	■ OPEN WATER
● GREEN	■ CONTINUOUS SEAGRASS	■ PATCH REEF
● HAWKSBILL	■ HARDBOTTOM	■ PATCHY (DISCONTINUOUS) SEAGRASS
● KEMP'S RIDLEY	■ HARDBOTTOM WITH SEAGRASS	■ PLATFORM MARGIN REEF
● UNKNOWN	■ INLAND WATER	■ UNINTERPRETABLE/UNINTERPRETED
	■ LAND	



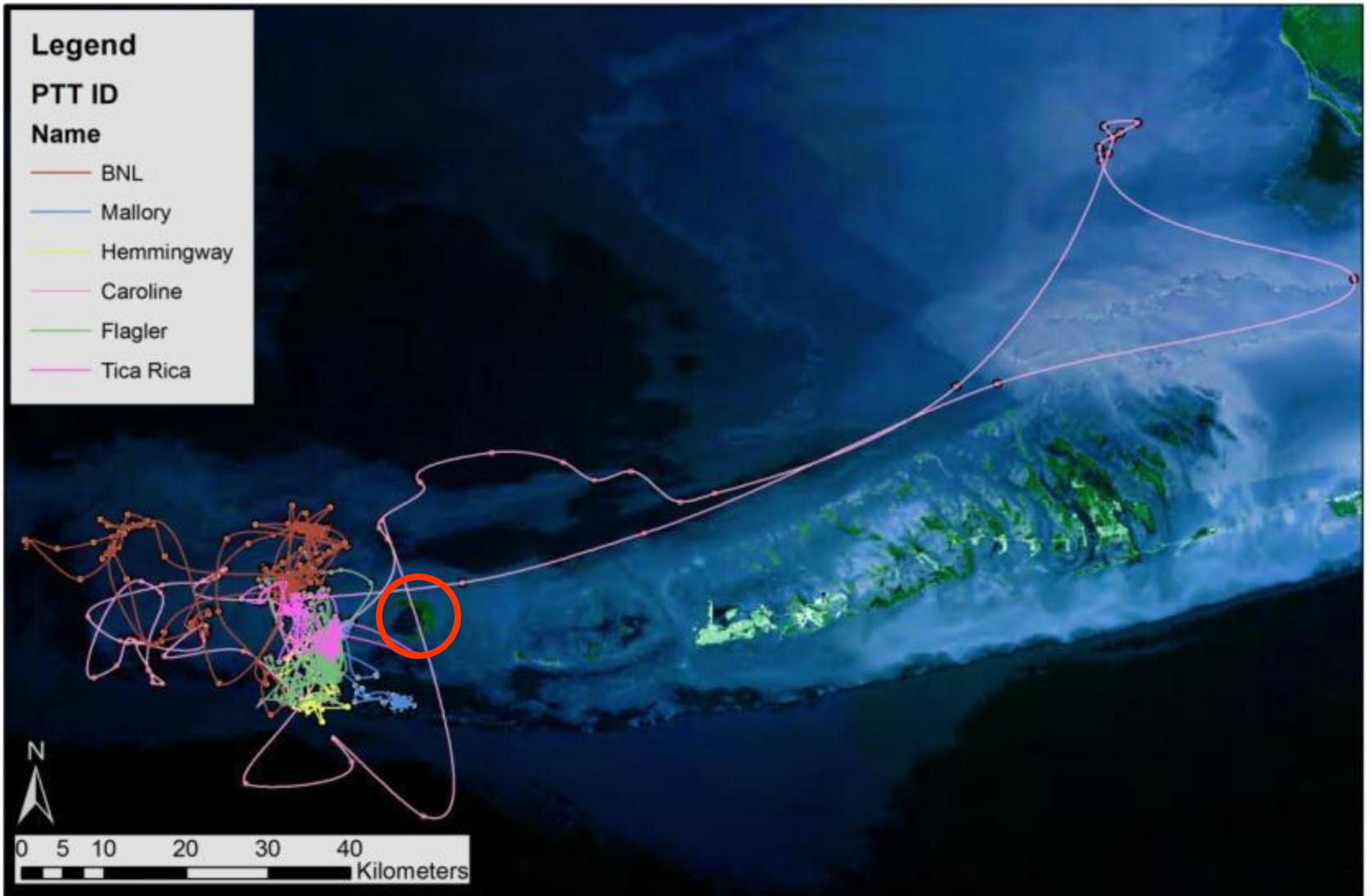


## Legend

### PTT ID

### Name

- BNL
- Mallory
- Hemmingway
- Caroline
- Flagler
- Tica Rica



## Key West National Wildlife Refuge Sea Turtle Project

*Fastloc GPS data, 5/6/2008 through 1/07/2009*





# Gulf of Mexico

Name = Tica Rica  
Maturity = Adult  
Sex = Female  
SCL (cm) = 101.5  
Released = 9/30/08  
Days Transmitting = 234

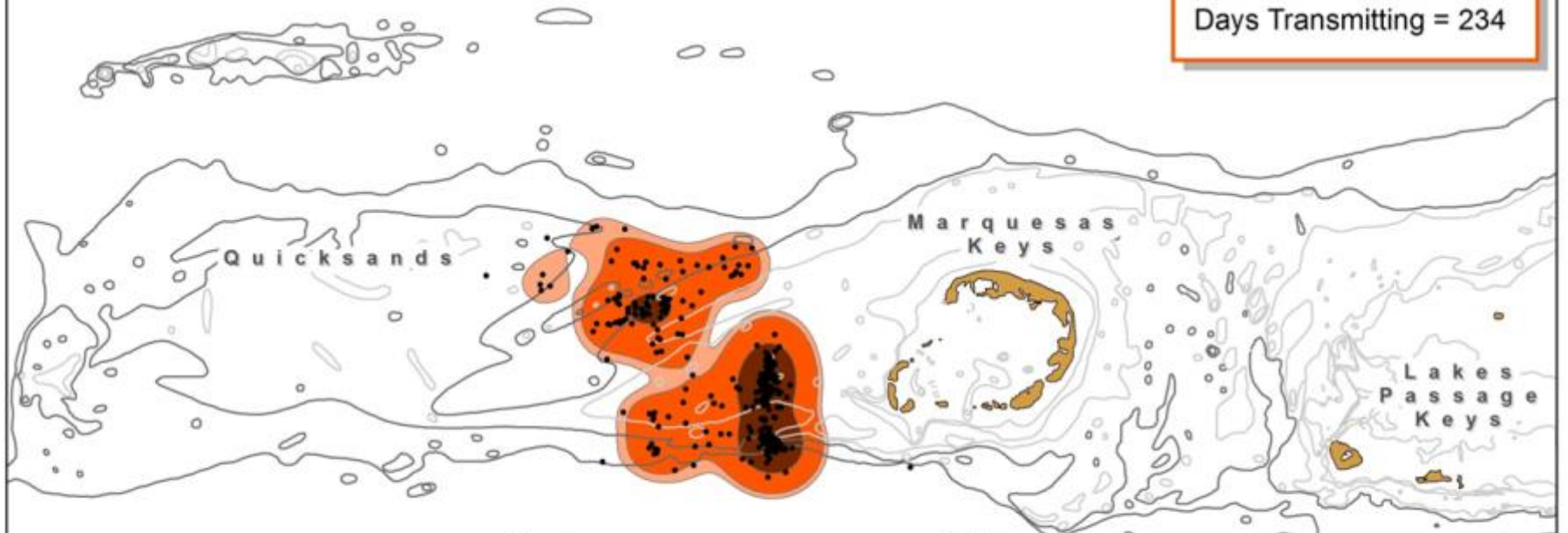
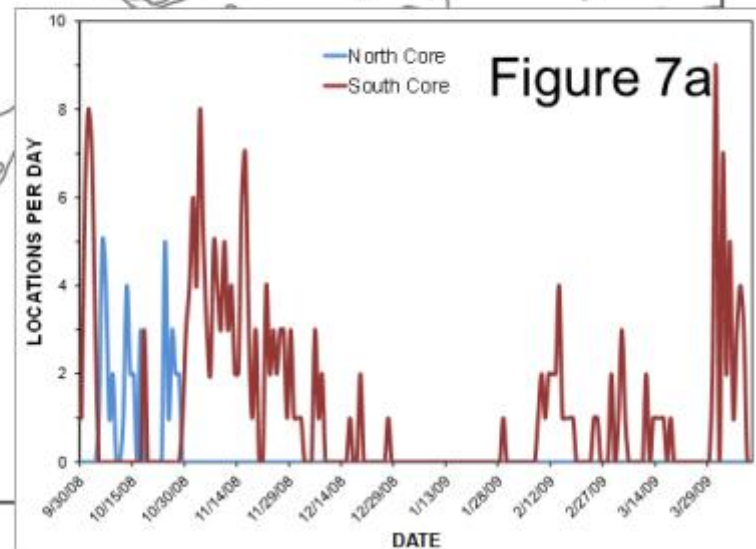
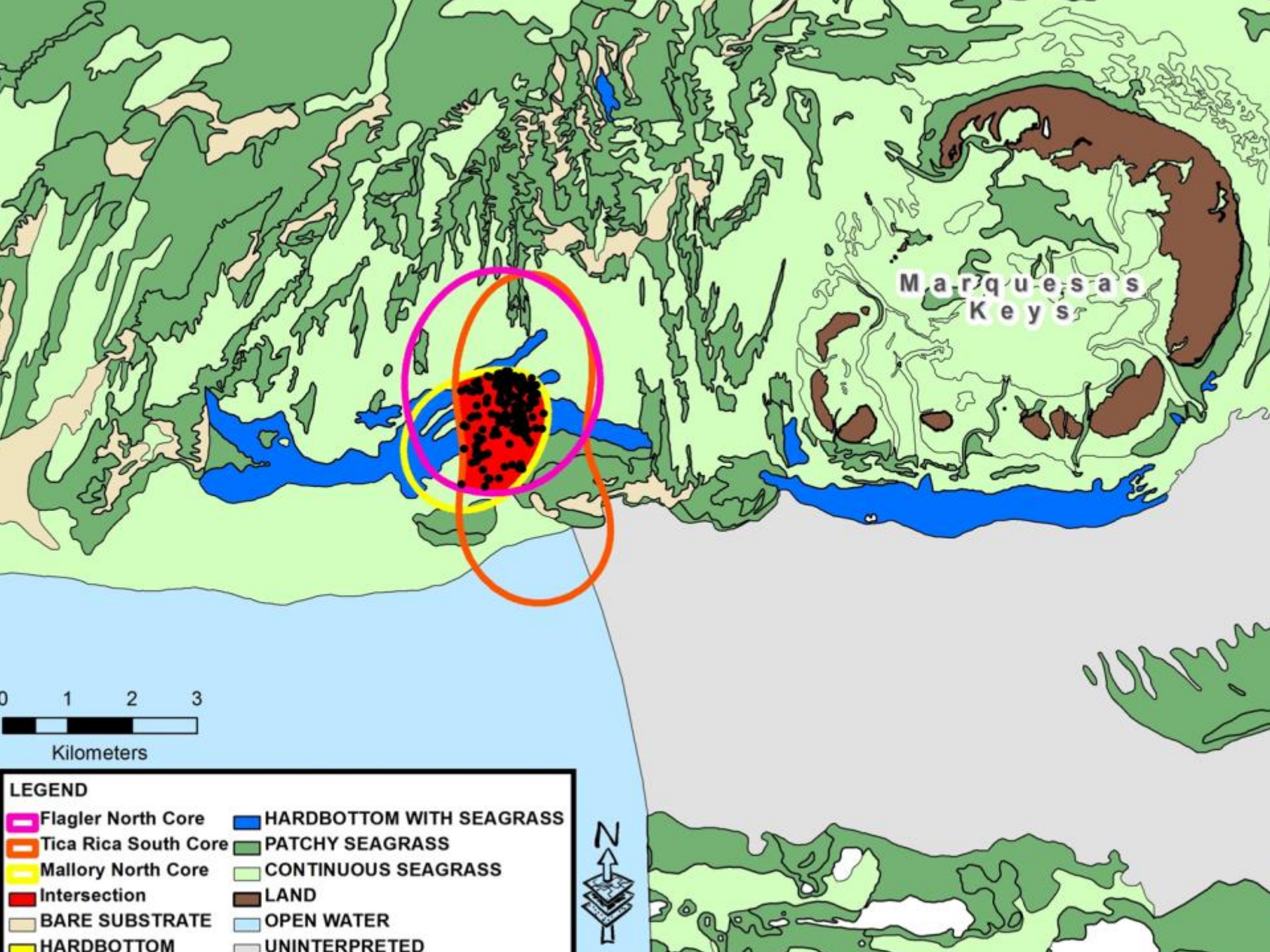
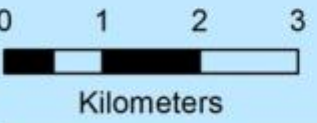


Figure 7





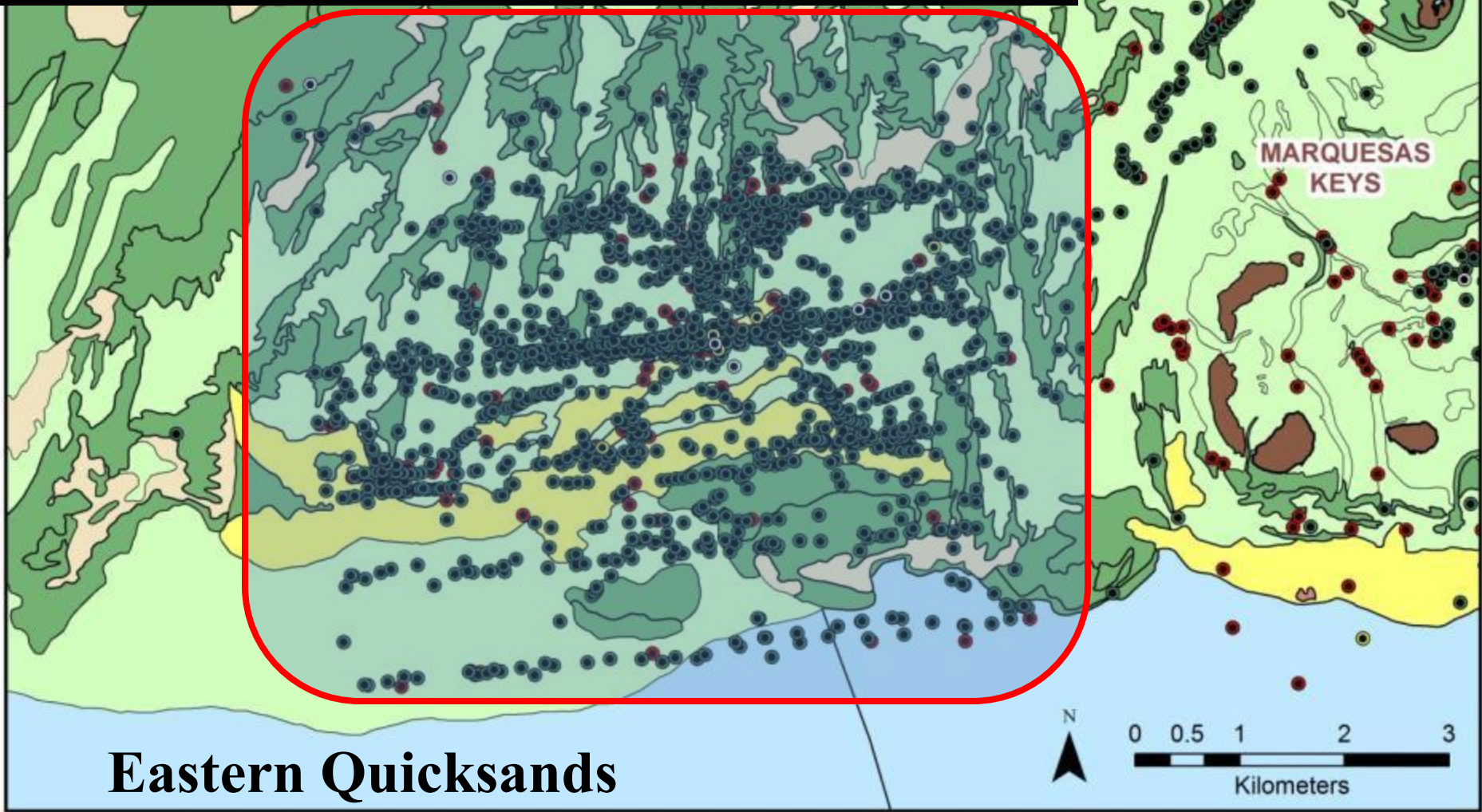
Marquesas  
Keys



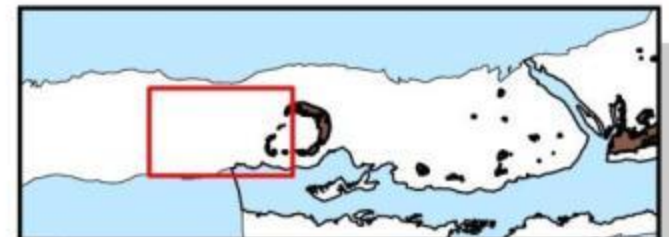
LEGEND	
Flagler North Core	HARDBOTTOM WITH SEAGRASS
Tica Rica South Core	PATCHY SEAGRASS
Mallory North Core	CONTINUOUS SEAGRASS
Intersection	LAND
BARE SUBSTRATE	OPEN WATER
HARDBOTTOM	UNINTERPRETED



Over 1700 green turtle sightings during 44 sampling days



● LOGGERHEAD	■ BARE SUBSTRATE	■ OPEN WATER
● GREEN	■ CONTINUOUS SEAGRASS	■ PATCH REEF
● HAWKSBILL	■ HARDBOTTOM	■ PATCHY (DISCONTINUOUS) SEAGRASS
● KEMP'S RIDLEY	■ HARDBOTTOM WITH SEAGRASS	■ PLATFORM MARGIN REEF
● UNKNOWN	■ INLAND WATER	■ UNINTERPRETABLE/UNINTERPRETED
	■ LAND	



**Marquesas Keys**

**2 Adult green turtles  
Over 600 km**

**Adult green turtle  
from Costa Rica  
Over 1800 km**



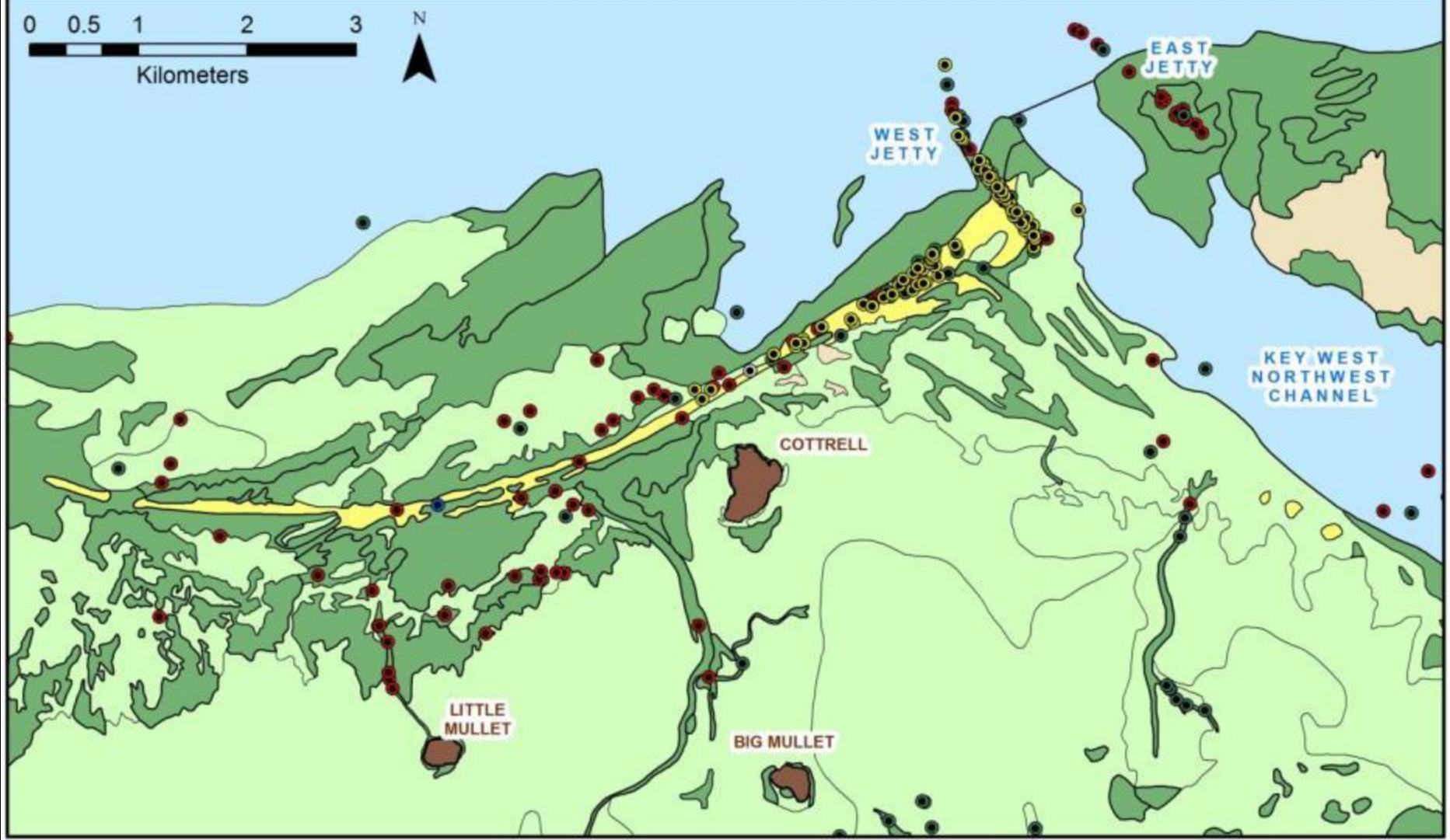


# North Region

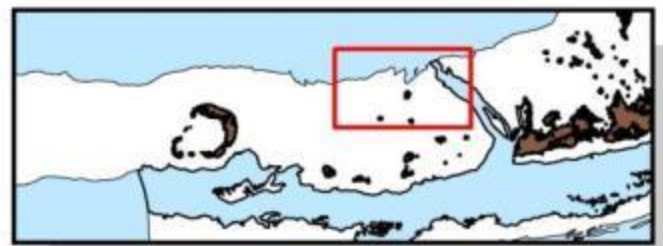


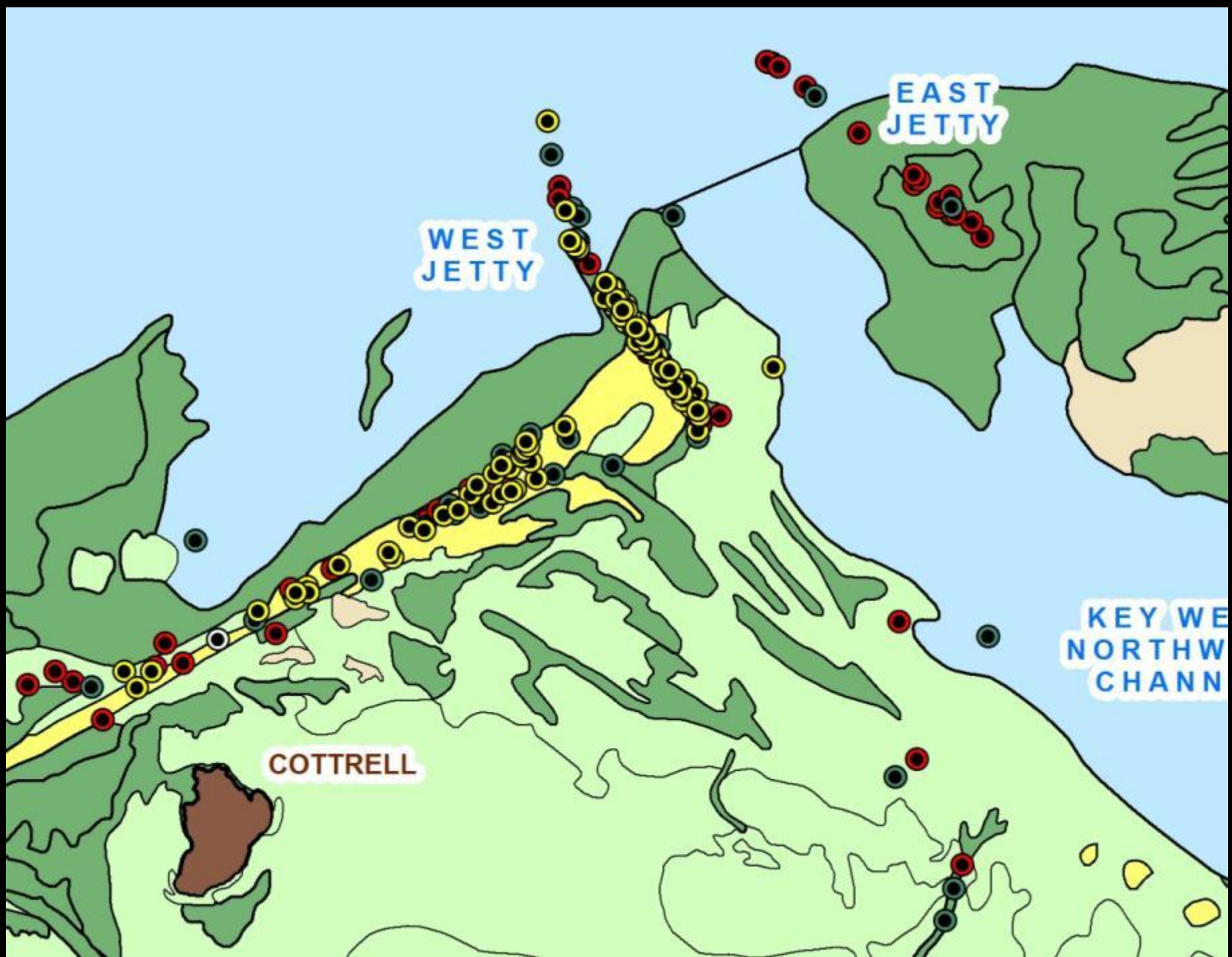
00.00.0000





● (Red)	LOGGERHEAD	■ (Light Tan)	BARE SUBSTRATE	■ (Light Blue)	OPEN WATER
● (Green)	GREEN	■ (Light Green)	CONTINUOUS SEAGRASS	■ (Pink)	PATCH REEF
● (Black)	HAWKSBILL	■ (Light Purple)	HARDBOTTOM	■ (Dark Green)	PATCHY (DISCONTINUOUS) SEAGRASS
● (Blue)	KEMP'S RIDLEY	■ (Yellow)	HARDBOTTOM WITH SEAGRASS	■ (Orange)	PLATFORM MARGIN REEF
● (Black with dot)	UNKNOWN	■ (Light Blue)	INLAND WATER	■ (Light Blue)	UNINTERPRETABLE/UNINTERPRETED
		■ (Brown)	LAND		





A large sea turtle, likely a hawksbill, is swimming over a coral reef. The turtle's head and front flipper are visible in the foreground, showing characteristic dark spots on a lighter background. The reef below is covered in various types of coral and algae. The water is clear and blue.

**191 km of Visual Transects**

**172 turtles sighted, SPUE = 0.90/km**

**20 green turtles, SPUE = 0.10/km**

**50 loggerheads, SPUE = 0.26/km**

**102 hawksbills, SPUE = 0.53/km**

# Threats to Sea Turtles in the FKNMS

**Trap Lines (active and derelict)**

**Boat Strikes**

**Habitat Loss**









# Central Region

## Lakes Passage

Archer

Baracouta



Woman

Man









**2002 – 2007**

**231 km of transects**

**14 hawksbills sighted**

**SPUE = 0.06**

**2008 – 2011**

**310 km of transects**

**1 hawksbill sighted**

**SPUE = 0.003**

**93% decrease**



**Questions?**

