



Bulheads.org

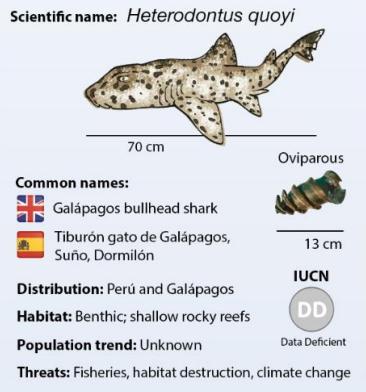


YOU CAN HELP!  
TÚ PUEDES AYUDAR!

TAKE A PHOTO AND  
UPLOAD IT HERE!

TOMA UNA  
FOTO Y SÚBELA  
AQUÍ!

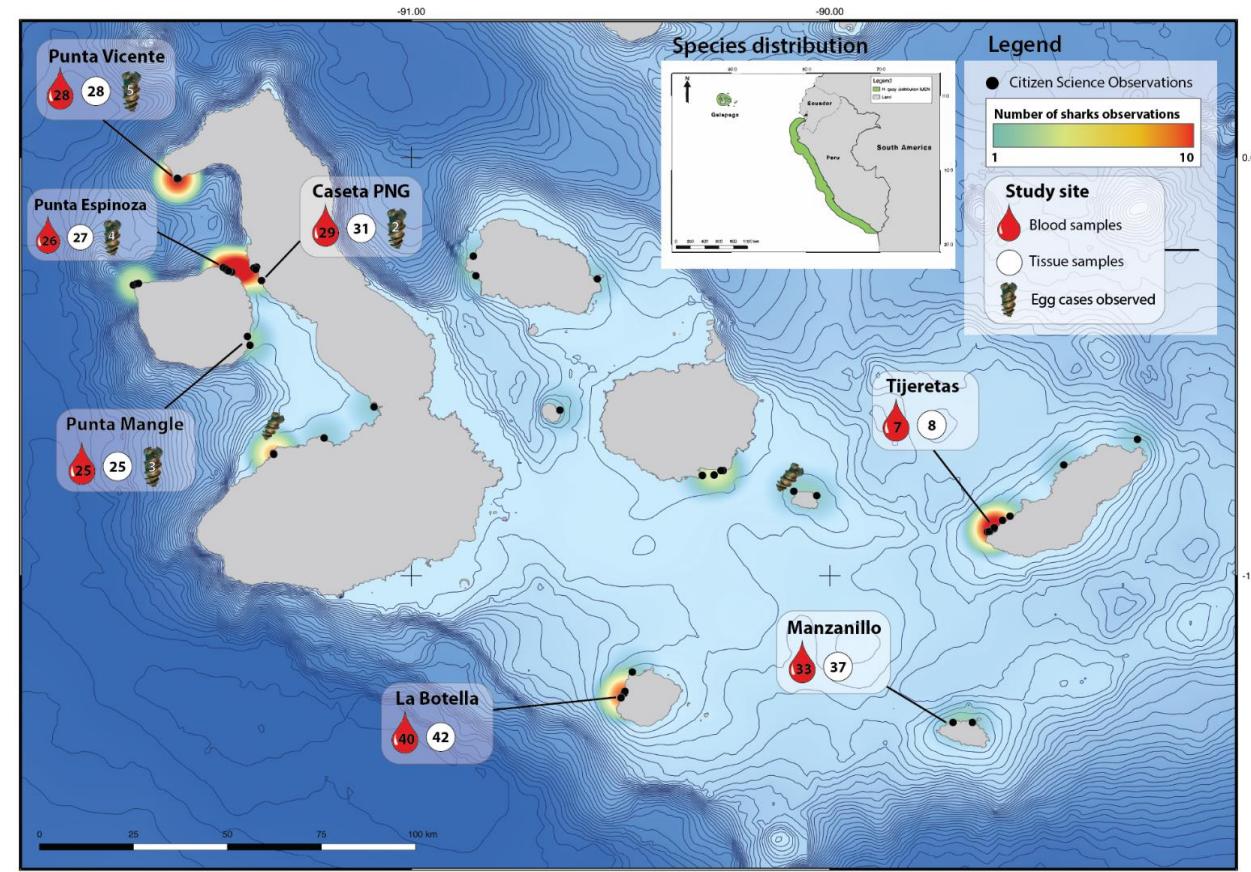
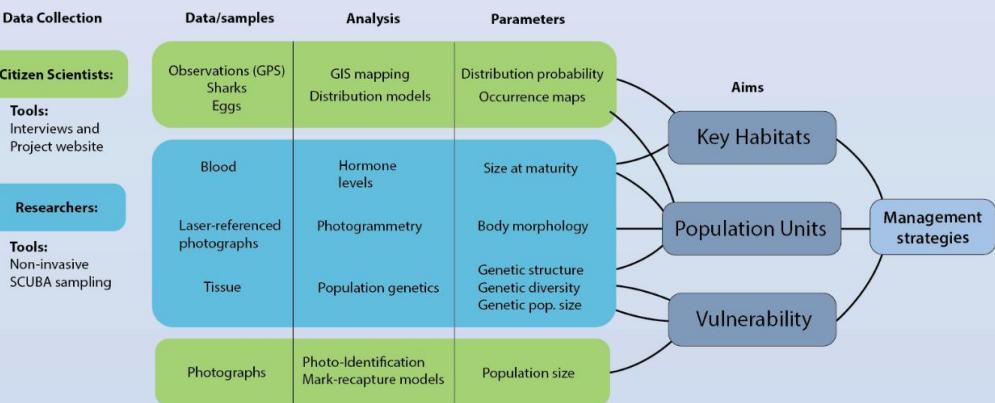
## Background



## Aims

- Identify key habitats
- Delineate population units
- Estimate vulnerability

## Methods



## Results to date

Citizen Scientists:	● Observations with GPS positions: 64 sharks 10 egg cases observed
Researchers:	● 198 tissue samples (87 females and 111 males) ● 188 blood samples (79 females and 109 males) ● 6 egg cases observed

Between 2015 and 2018 tissue samples and blood samples were collected from **7 locations** on **5 islands** and all sharks were photographed with a laser reference to measure their body morphology. Tissue samples have been sent for genomic sequencing in Australia and the blood samples are being analyzed to determine blood hormone levels.

## Next steps

### Research:

- Run species distribution models
- Population genetic analysis
- Determine size at maturity by combining hormone levels and body morphology

### Outreach:

- Annual Shark Day
- Galapagos Shark Conservation Hero Campaign

## People

**Project leader:**  
Maximilian Hirschfeld

**Supervisors:**  
Adam Barnett, Marcus Sheaves, Christine Dudgeon

**Collaborators:**  
Jaime Chaves, Cynthia Awruk

**Research Assistants:**  
Alice Skehel  
Martin Carrera  
Brittany Morse  
Nataly Guevara

**Volunteers:**  
Thank you to all the volunteers that have supported this project

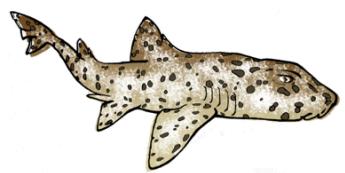
## More Info

**Project website:**  
[www.bullheads.org](http://www.bullheads.org)  
**Conservation Photography website:**  
[www.enphocus.net](http://www.enphocus.net)  
**Twitter:**  
[@Shark\\_Islands](https://twitter.com/Shark_Islands)

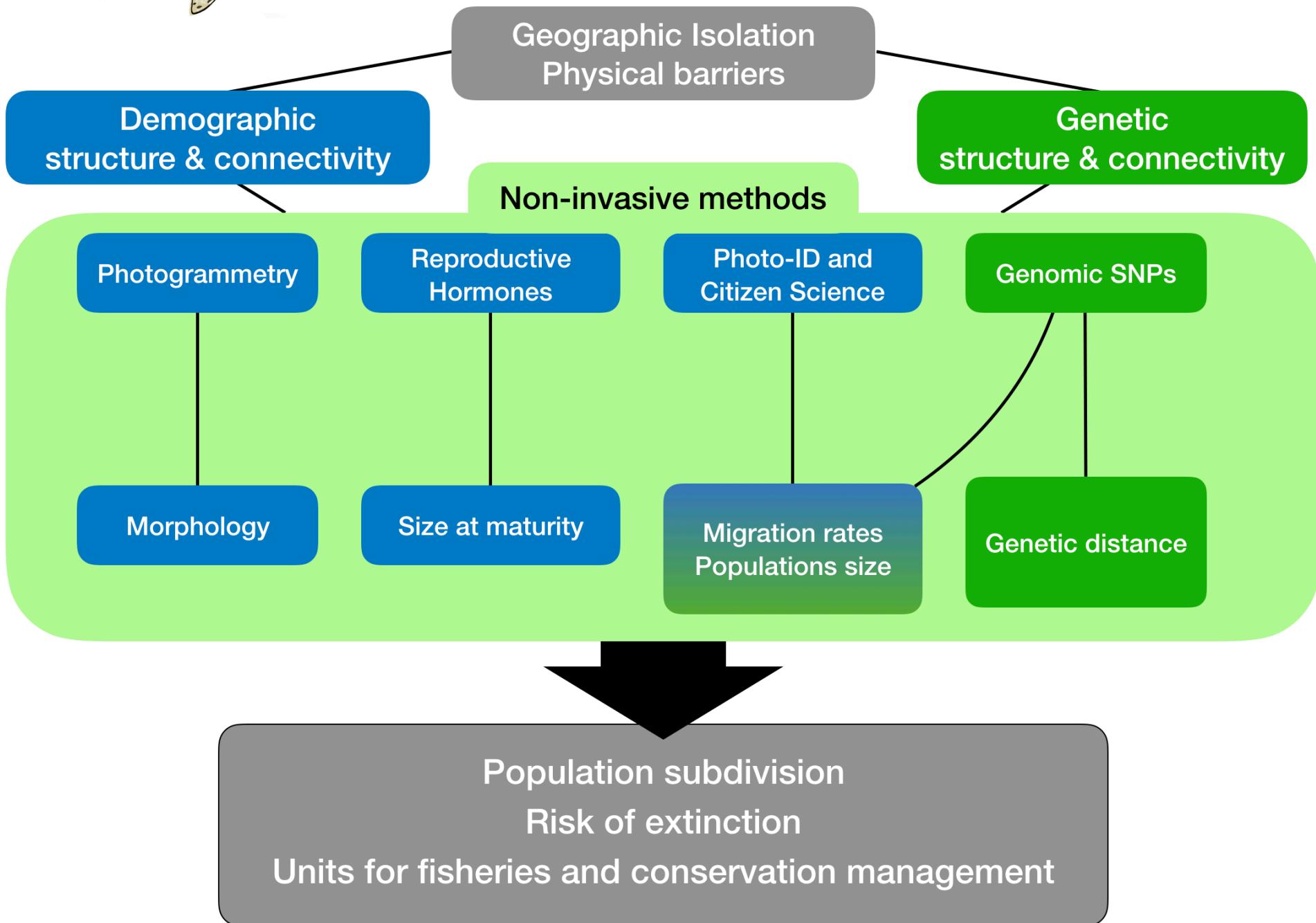
## Contact

Maximilian Hirschfeld  
Galapagos Science Center  
James Cook University  
[max@enphocus.net](mailto:max@enphocus.net)  
[www.enphocus.net](http://www.enphocus.net)

Please take a card!



## The Galapagos Bullhead Shark Project





icado  
er participado en el concurso Sh  
realizando acciones para desarrollar  
en las islas Galápagos, convirtiéndose  
guardián de la fauna marina.

# Certificado



A:

Por haber participado en el concurso Shark Hero 2019,  
realizando acciones para desarrollar ciencia ciudadana  
en las islas Galápagos, convirtiéndose en  
guardián de la fauna marina.

Puerto Baquerizo Moreno, 25 de junio de 2019

Carlos Mena, PhD

Co-Director Galapagos Science Center

Max Hirschfeld

Investigador GSC  
Autor Galapagos Shark Hero

Organizado por:



Auspiciado por:



Puerto Baquerizo Moreno, 25 de junio

Carlos Mena, PhD

Co-Director Galapagos Science Center

Max Hirschfeld

Investigador GSC  
Autor Galapagos Shark Hero

Organizado por:



Auspiciado por:



Auspiciado por:



Auspiciado por:

Max Hirschfeld

Investigador GSC

Autor Galapagos Shark Hero

25 de junio

2019

1. ¿Cómo te e  
a. Invitación p  
b. Sitio web G  
2. ¿Con qué s  
a. Turismo/c  
b. Conservac  
-Educación  
-Arias p  
-Pres  
-Cuál es  
6. ¿Qué te  
1. ¿Cómo