

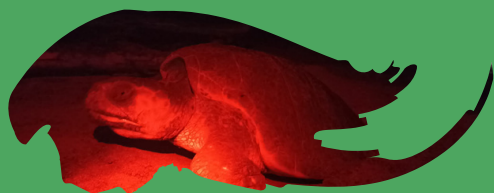
# SEA TURTLE PROTECTION AND CONSERVATION CENTER



## Santuario Playa Teopa



# CELEBRATING 40 YEARS OF SEA TURTLE CONSERVATION



## Did you know?

On certain stormy nights, Olive Ridley sea turtles will nest in large numbers on our beaches, **up to 218 turtles in one night!**

**For 40 years now**, sea turtles arriving to nest in Careyes have been protected by the Brignone family, Careyes residents and a dedicated team of locals. In 1983 a preservation program to increase their chance of survival against predators officially began with the help of biologist Alejandro Peña de Niz.

**Only 10 nests were protected in the first year.** To date, we have **protected 30,619 nests and released 2,155,401 hatchlings** from four different species — **Olive Ridley, Black, Hawksbill, and Leatherback** — back into their natural habitat.

We are one of the only places on the Pacific Coast of Mexico where the Hawksbill sea turtles, which usually prefer islands, come to nest. In 1986, the **Teopa Sea Turtle Sanctuary** was established, creating 37 hectares of federally protected habitat.

For the last 10 years, we have protected on average 1,800 nests and released 130,946 hatchlings per season. Protecting so many nests requires more resources, which is why the Careyes Foundation is seeking to expand the conservation facilities in Careyes, ensuring that these endangered sea turtles continue to have a safe place to nest.

Both locals and visitors are encouraged to **participate in collecting nests and releasing hatchlings**, acquiring unique insight and appreciation for **some of the world's oldest surviving species.**

## Over **2.1 million hatchlings** released since 1983





# SEA TURTLES OF CAREYES

## Olive Ridley Sea Turtle

*Lepidochelys olivacea*, Tortuga Golfina

IUCN: Vulnerable, Mexico: Endangered

The world's most abundant sea turtle species. Historically hunted for their skin, this species has made a significant recovery in the last few decades.



98.51%  
of nests

## Black Sea Turtle

*Chelonia mydas agassizi*, Tortuga Prieta

IUCN/Mexico: Endangered

A subspecies of the Green sea turtle which has a darker coloured shell and smaller head. They keep crucial carbon-sequestering algae, seagrass and mangrove ecosystems healthy through grazing.



0.79%  
of nests



0.51%  
of nests



0.17%  
of nests

## Hawksbill Sea Turtle

*Eretmochelys imbricata*, Tortuga Carey

IUCN: Critically endangered, Mexico: Endangered

These rare sea turtles, still hunted for their unique shell pattern, play an essential role in keeping coral reefs clean and healthy by eating sponges.

## Leatherback Sea Turtle

*Dermochelys coriacea*, Tortuga Laúd

IUCN: Vulnerable, Mexico: Endangered

Leatherbacks play an important role in regulating multiple marine species populations as predators of jellyfish, consuming up to 200kg a day per adult.



# OBJECTIVES



## CONSERVE LOCAL SEA TURTLE POPULATIONS AND THEIR NATURAL HABITAT

by adhering to the Mexican Secretary for the Environment's National Sea Turtle Program.

### BIOLOGICAL

1. Prevent depredation of sea turtles and their nests
2. Detect and report mortality associated with fishing bycatch
3. Ensure the survival of local sea turtle populations

1. Conserve sea turtle nesting and feeding areas
2. Implement best practices in handling turtles, nests, eggs and hatchlings
3. Estimate abundance of adults, nests, and hatchlings

### ECOLOGICAL

### SOCIAL

1. Sensitize local communities to sea turtle rescue and conservation
2. Detect resource use and impact of local communities on sea turtles
3. Recruit local participation in sea turtle conservation workshops

1. Disseminate information on sea turtle protection and conservation
2. Involve the public in sea turtle conservation activities
3. Organize cultural activities to promote sea turtle conservation

### EDUCATIONAL

WE ORGANIZE ANNUAL EDUCATIONAL VISITS FOR STUDENTS FROM **12 LOCAL COMMUNITIES.**



# ACTIVITIES



1. **Nightly Patrol** along 6 km of coast 3 times a night to protect nesting females and their eggs.
2. **Nest Relocation** to our hatchery within 4 hours of deposition. The eggs are carefully re-buried to complete the incubation period, which varies from 45 to 60 days depending on the species. Nest temperatures are monitored to estimate sex ratio of hatchlings and make adjustments as necessary.
3. **Protection of nests** on site or in our hatchery with a 2m tall predator-proof mesh fence that extends 50 cm below the surface. The nursery location is changed regularly to reduce disease.
4. **Immediate release of hatchlings** if conditions are favorable. Hatchlings are deposited on the beach and protected from predators as they make their way to the sea. Release locations are varied along the beach to reduce predation.
5. **Preservation** of the natural vegetation and coastal dynamics, prohibition of any introduction of exotic species.
6. **Maintaining** the beach **clean** and free of trash, natural barriers or any other possible obstruction that could trap or injure sea turtles or their hatchlings.
7. **Elimination or redirection** of any **artificial light** source that would illuminate the beach or vegetation along the coast.
8. **Prohibiting vehicles** on nesting beaches (with the exception of STPCC patrol vehicles, which weigh <300 kg, move at less than 20 Km/h and maintain tire pressure <5 psi to limit site compaction).
9. **Recruiting and training** local residents in nest relocation to join our **On Call Nest Relocation Team**.
10. **Inviting local students** to participate in educational activities and hatchling release.
11. **Collaborating** with national and international researchers to increase understanding of Sea Turtle ecology.
12. **Installation of signs** and training of staff at Playa Rosa on what to do when nesting turtles are seen.
13. **Monthly and Annual Reporting** of data to the Mexican National Parks Commission (CONANP) and the Secretary for the Environment (SEMARNAT - Vida Silvestre).

**JUST ONE IN A THOUSAND  
HATCHLINGS TYPICALLY  
SURVIVES TO ADULTHOOD.**

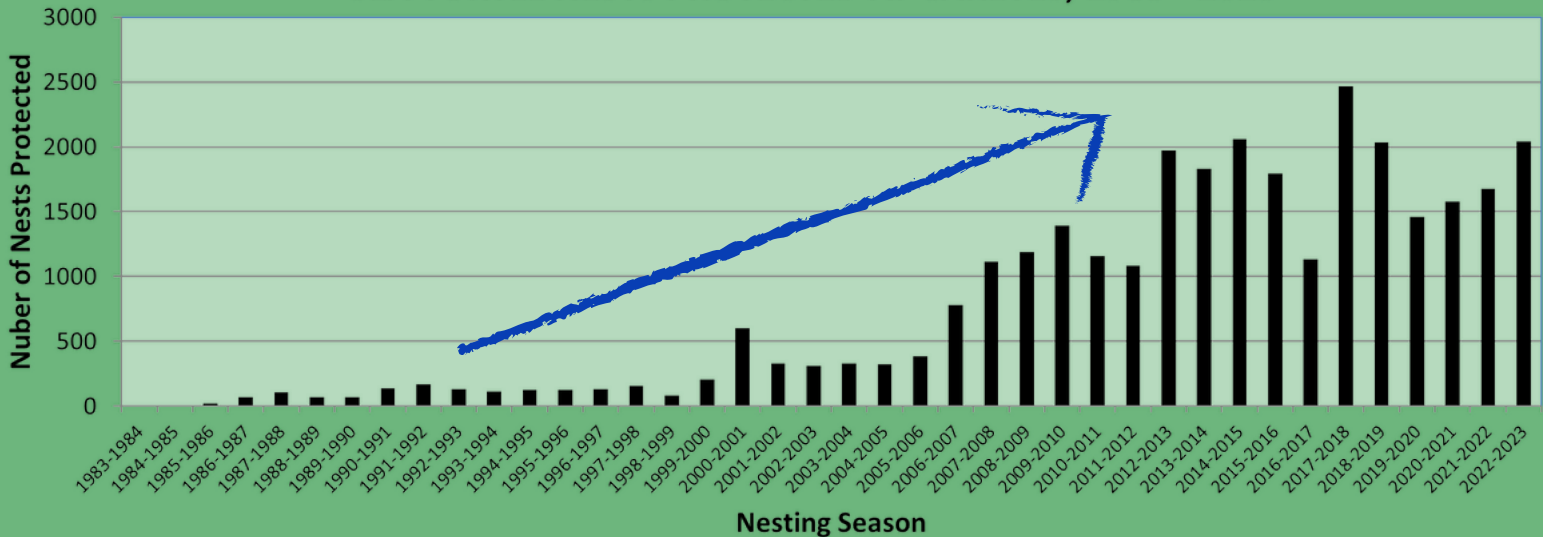


# RESULTS



## BIOLOGICAL AND ECOLOGICAL ACHIEVEMENTS

SEA TURTLE NESTS PROTECTED AT CAREYES, 1983 - 2023



1983

About **half** of nests at Teopa were poached.

Fishing of sea turtles was legal and common. **Nets were set directly offshore**, blocking female turtles from their nesting grounds.



2023

Just **1%** of nests at Teopa are poached.

Fishing pressure is **low** and limited to bycatch in shrimp trawling, **3-5 individuals** wash up within the sanctuary per year.

**IN OUR EARLY YEARS, STUDENTS WOULD OFTEN VISIT TO HELP PATROL FOR 14 NIGHTS DURING HIGH SEASON WITHOUT SEEING A SINGLE TURTLE. TODAY OUR HIGH SEASON AVERAGES 13 NESTS PER NIGHT.**





# RESULTS



## WE COLLABORATE WITH NATIONAL AND INTERNATIONAL RESEARCHERS TO INCREASE UNDERSTANDING OF SEA TURTLE ECOLOGY

By sharing our data and resources, we have helped explain the link between nesting and lunar cycles and recognize new epibiont species of sea turtles. A list of publications can be found at [www.careyesfoundation.org/stpcc/publications](http://www.careyesfoundation.org/stpcc/publications).

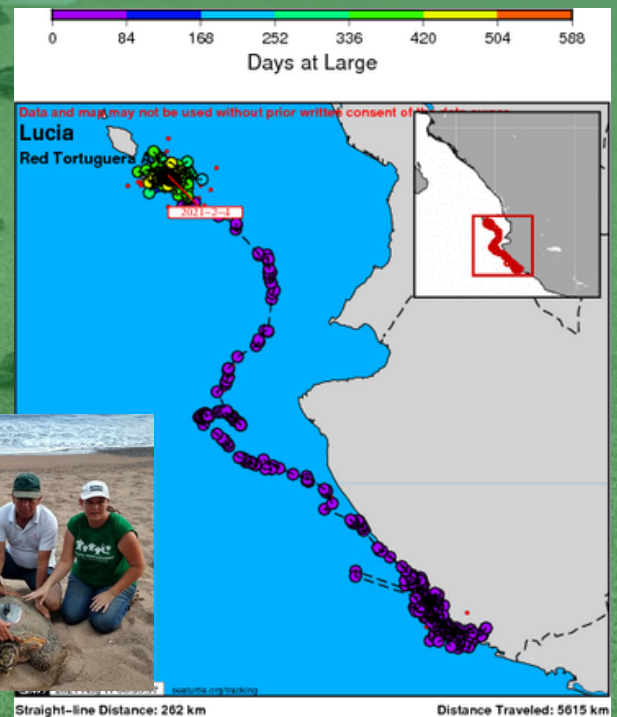
### Where do our turtles go?

In the summer of 2019, the Red Tortuguero, A.C. tagged and released two adult female Hawksbill sea turtles at Careyes to determine their movements after nesting.

#### "SOFÍA"



#### "LUCIA"



Sofía headed northward to the Sinaloan coast and Lucia headed northwest to the Marías Islands Biosphere Reserve. Both turtles remained at their respective destinations until their tags were lost, in both cases over a year. These destinations are likely important foraging areas for critically endangered Hawksbill sea turtles, and this study helps indicate where to focus conservation efforts.



# RESULTS



## COMMUNITY OUTREACH AND ENVIRONMENTAL EDUCATION

**We believe in** accessible conservation education for all, which is why we never charge local schools to participate with us.



Students of 12 communities learn to identify species



Regular talks in schools from kindergarten to high school

High schoolers camp overnight and participate in conservation



Careyes community members train to help re-locate nests

**"TO THINK THAT NOT ONLY ARE SEA TURTLE EGGS INEFFECTIVE MEDICINALLY, THEY ARE ALSO BAD FOR YOUR HEALTH"**

*- Community member from Juan Gil Preciado after participating in an educational hatchling release event for kids, December 2022*



# JOIN US

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## WE NEED YOUR HELP

We are always looking for support, be it financial, institutional or an extra pair of hands! Get in touch to find out how we can save more sea turtles together.



## SPECIAL THANKS TO OUR PARTNERS AND SPONSORS



**OPERTUR S.A. DE C.V.**

**AND THE DOZENS OF VOLUNTEERS  
OVER THE YEARS**

**FIND OUT MORE**

Contact us at [office@careyesfoundation.org](mailto:office@careyesfoundation.org)



