



OSTIONAL-NOSARA
SUSTAINABILITY
CAMPUS

BUILDING A RESILIENT COMMUNITY
IN BALANCE WITH NATURE



**“WE CANNOT PROTECT THE WORLD’S WILDLIFE UNLESS
WE ALSO PROTECT THE NEEDS OF THE HUMANS THAT RELY ON IT.”**

—GAIA VINCE, “RESCUE OF THE OLIVE RIDLEY SEA TURTLE”

THE OSTIONAL NATIONAL WILDLIFE REFUGE

Costa Rica's Best Kept Secret



The Ostional Refuge is the best place in the world to see an olive ridley sea turtle nest.

In 2019, Ostional attracted over 10,000 visitors to witness this unique phenomenon that occurs at just a dozen beaches in the world and the Ostional Refuge has records of the **highest frequency** of events and **densest concentration of sea turtles** on Earth.

The smallest of the **sea turtles**, olive and Kemp's ridleys are the only marine turtles to exhibit mass-nesting behavior.

This fascinating phenomenon, known as the **arribada**, is considered one of the most amazing wonders of nature.

THE REALITIES OF A MIXED-USE REFUGE

Communities and Geographic Scope



The Refuge was established in 1983 as a government-owned protected area, under the administration of the National System of Conservation Areas (SINAC) of the Ministry of the Environment.

The Refuge spans **8,054 hectares of marine** protected area **and 510 hectares of terrestrial** protected area, with the particularity that **59% of the terrestrial portion** is registered as **private property**. Due to this, the Refuge was changed from a government-owned to a Mixed-Use Refuge by law in 2016.

The Refuge is surrounded by a 5 km buffer zone, highlighting the importance of neighboring communities for the integrative conservation of the area.

The Refuge includes **four beaches**: Ostional, Nosara, Pelada and Guiones and hosts **three communities** within its limits: Ostional, Pelada and Guiones. The communities of San Juanillo, Nosara, and Garza are also closely tied to the Refuge.

THE REALITIES OF A MIXED-USE REFUGE

A Growing Tourism Destination



The existence of communities within the Refuge presents a challenge and an opportunity for the administration which is constantly looking to reconcile its conservation objectives with the economic and social activities that are carried out.

For years now, the Nosara area and the beaches of Guiones and Pelada have become a **tourism destination**, offering a variety of activities such as surf, yoga, and wellness tourism

The fishing communities of Garza and San Juanillo, neighboring the Refuge, also offer **fishing and diving** experiences.

The community of Ostional, located entirely within the Refuge, is characterized by the **extraction and commercialization of sea turtle eggs**, making it the primary economic activity of this town.

OSTIONAL'S IDENTITY

An International Example of Community-based Conservation

Since 1987, the Integrative Development Association of Ostional (ADIO) has been **legally authorized** to extract and commercialize olive ridley sea turtle eggs.

This activity is conducted under strict **regulation with scientific data**, allowing the extraction of eggs **only** at the start of the arribada which would otherwise be destroyed by natural causes.

Ostional is recognized internationally by an exception made by the **Interamerican Convention for the Conservation and Protection of Marine Turtles**, which recognizes the exceptionality of the management and conservation model in Ostional, making it a reference for the world.

Thanks to economic support from this activity, the community of Ostional through ADIO, assumes the responsibility and commitment of protecting the nesting habitat, keeping the beaches clean, providing protection and security every day of the year, and protecting hatchlings during mass hatching events, a great example of a **nature-based solution**.



OUR CHALLENGE IN 2020 AND INTO THE FUTURE



For decades, Ostional and Nosara have **adapted to tourism and development while protecting the environment**. These efforts established a welcoming, integrative, and sustainable community.

However, with the passing of years and **increasing interest in the area**, the community now finds itself increasingly threatened by **fast-paced development and unrestrained tourism**, which are burdening the fragile ecosystem and widening social and economic inequality between the local and expat communities.

The impact of the pandemic on an economy largely based on tourism brings to light new challenges for development and conservation.

WHAT ARE OUR CHALLENGES?

SOCIAL



- Economic inequality: 2,600+ people have applied for monthly food subsidies due to the COVID-19 crisis
- Seasonality: high levels of unemployment during the low season, which coincides with the largest arribadas of the year

ENVIRONMENTAL



- Fast-paced tourism-driven development and lack of planning with a high impact on the environment:
 - 42% increase in the footprint of construction from 2017 to 2018 in the Nosara district
 - First signs of salinization in the coastal aquifer in Guiones.
 - Open air landfill at risk of contaminating aquifers

ECONOMIC



- Tourism does not generate direct income for the Refuge to support the efficient management needed given the impact it has on the environment.
- Limited institutional, operational, human, and financial resources: 2 park rangers on average for the supervision of 510 hectares of terrestrial protected area and 8,054 hectares of marine protected area.

A large crowd of tourists is gathered on a beach, many of whom are looking at and taking photos of numerous sea turtles resting on the sand and in the shallow water. The scene is set against a backdrop of palm trees and a hazy, mountainous landscape. The text is overlaid on a semi-transparent dark grey box at the bottom of the image.

WE ARE A UNIQUE PROTECTED AREA IN THE WORLD WITH FAST-PACED TOURISM-DRIVEN DEVELOPMENT THREATENING THE EFFICIENT MANAGEMENT OF THE SOCIAL, ENVIRONMENTAL AND ECONOMIC SECTORS IN THE AREA.

THE OPPORTUNITY

Building a Resilient Community in Balance with Nature



FOTO: VOZ DE GUANACASTE

The current sanitary, economic, energy, and biodiversity crisis presents a very difficult situation for humankind.

The interruption in our daily lives caused by COVID-19 has forced us to **slow down**, observe the repercussions of our lifestyle to date and **reflect on the future we want** for the Refuge.

OUR PROPOSAL



OSTIONAL-NOSARA
SUSTAINABILITY
CAMPUS

MISSION



**CREATE AN INTEGRATED SYSTEM OF SPACES THAT
GENERATE PROFIT FROM THE NATURAL CAPITAL
OF THE REFUGE AND PROMOTE THE
CONSTRUCTION OF A RESILIENT COMMUNITY IN
BALANCE WITH NATURE**

SPECIFIC OBJECTIVES



1. Develop and implement a platform for research that generates data for the conservation of the Refuge

- Offer the logistical conditions for the development of scientific research
- Establish alliances with national and international universities and organizations
- Promote community involvement and participation in citizen science

2. Strengthen and diversify economic mechanisms to support the Refuge and its communities through its promotion as a sustainable destination

- Create new, high-value turtle tourism offers for visitors
- Establish volunteer, cultural exchange and rural tourism programs, among others
- Improve existing facilities and build others to provide services
- Create an electric mobility solution between different locations around Campus and the Refuge

3. Promote education through communication strategies and annual programming with an environmental and cultural focus

- Create interactive educational exhibits that educate and inspire visitors
- Design and implement workshops and trainings to offer residents and visitors
- Create an agenda of events with a cultural and environmental focus that promotes community integration

WHY A CAMPUS?



The concept of a campus is usually associated with universities, but it is much broader than this.

A campus is a system of integrated spaces, with allow for an **immersive experience for visitors**.

For our project, the campus will **inspire sustainable initiatives** with and for the communities that coexist with the Refuge.

Thus, the activities that will be carried out in these spaces are more important than the infrastructure itself.

IN ESSENCE
ONCAMPUS IS...



**INTERACTION AND
COLLABORATION**

**EDUCATIONAL AND
CULTURAL IMMERSION**

**RESEARCH AND
INNOVATION**

**MOBILITY AND
CONNECTIVITY**

**SUSTAINABLE DESIGN,
CONSTRUCTION, AND
OPERATION**

PROPOSED INFRASTRUCTURE



Visitors Center

TBD (Ostional)



Park Ranger Stations

Playa Guiones and Pelada



Community Park

NCA Parklands (Landfill)



Center of Operations

NCA Parklands (ASADA)

Mobility



The Campus and its different locations will be connected by trail systems and an electric bus will connect it to Guiones, Nosara and Ostional.

INFRASTRUCTURE DETAILS



VISITORS CENTER

- Reception & Ticket Desk
- Staging Area for Tours
- Educational exhibits
- Gift Shop & Cafeteria
- Public Restrooms
- Theater



CENTER OF OPERATIONS

- Guard House
- Reception Area
- Co-working space
- Research Facility
- Cafeteria



COMMUNITY PARK

- Recycling Center
- Compost Facility
- Botanical Garden
- Amphitheater
- Multi-purpose room
- Gift Shop
- Multi-Sport Court
- Playground
- Skate Park
- Dog Park
- Juice Bar
- Trail System
- Observation Tower



PARK RANGER STATIONS

- Locations in Pelada & Guiones
- Reception Area
- Public Restrooms & Showers
- Studio Apartment



HOUSING

- Dedicated space for volunteers and researchers
- Locations in Nosara and Ostional
- Lodging, Shared Space, Dining Hall



SIMILAR EXAMPLES



LOGGERHEAD MARINELIFE CENTER IN FLORIDA

Infrastructure for an Immersive Experience

- \$6.8 M income
- 300,000+ visitors
- 60,000+ participants in educational programming



GORILLAS IN RWANDA

High-value Tourism

- \$19.2 M gross income
- 5% of gross income goes to 300+ community projects



TORTUGUERO NATIONAL PARK

Costa Rica as a Sea Turtle Tourism Destination

- 26,000 visitors annually
- \$6.7 M gross income

With a nesting season of 4 months per year

CO-LEADING ORGANIZATIONS

This proposal is the results of a collaboration between the following organizations:



Ostional

Refugio Nacional
de Vida Silvestre
ACT - SINAC
Costa Rica



NCA

NOSARA CIVIC ASSOCIATION



**WILDLIFE
CONSERVATION
ASSOCIATION**

FISCAL SPONSORS

We have established the following international, national, and regional fiscal sponsors.



Fondo Comunitario
GUANACASTE
Community Fund



CRUSA



**AMIGOS OF
COSTA RICA**

An initiative of the Costa Rica - USA Foundation



ICFC International
Conservation
Fund of Canada

WHERE NATURE NEEDS US MOST



OUR FUTURE STARTS TODAY