



Maximizing Impact for Marine Wildlife Conservation



21th century: Rising up...

Population

Environment Pollution

Temperature

Species
Extinction

Migration

Environmental and
Ecological Damages



What we put in

What we take out



Credit: Christophe Launay

Pollution

We treat it like a dump



Credit: Pierre Glezée/Greenpeace

Overfishing

We deplete fish stocks to the point they cannot recover



Credit: AFP

Acidification + Climate Change

We add carbon to the atmosphere that increases water temperature and acidity



Credit: Steve Ringman/Seattle Times

Habitat Loss

We urbanize watersheds and nearshore ecosystems



Credit: Alan Niles

Noise

We run loud ship engines that interfere with animals that use sound to hunt



Credit: NOAA

Energy

We extract oil and gas and allow leakage into the water column



Credit: ARCGIS

Eutrophication + Hypoxia

We allow agricultural runoff that causes algal blooms and fish kills



Credit: GNY

Deep Sea Mining

Uncharted territory.
If we do this poorly,
we will destroy deep seafloor ecosystems

STELLER SEA LION

Eumetopias jubatus

Its population has declined by more than **60%** due to natural & human threats since the 1960s.



KEMP'S RIDLEY SEA TURTLE

Lepidochelys Kempii

It is endangered by the **rarest and smallest** sea turtle.



FIN WHALE

Balaenoptera physalus

The global population of Fin Whale ranges from below

~75,000



HECTOR'S DOLPHIN

Cephalorhynchus hectori

the estimated population of hector's dolphins are

55



HAMMERHEAD SHARK

Sphyrna Mokarran

This species of sharks are critically endangered with population around

200



10 ENDANGERED OCEAN SPECIES & MARINE ANIMALS

HAWKSBILL TURTLE

Eretmochelys Imbricate

Their population has declined by **80%** over the last century.



HAWAIIAN MONK SEAL

Monachus schauinslandi

Only **1,400** Hawaiian Monk Seal remains on the Islands.



GREEN SEA TURTLE

Cheloniemydas

The **loss of sandy beaches and careless fishing** have reduced their population.



BLUE WHALE

Balaenoptera Musculus

The largest living mammal on earth with global population

10,000-25,000



VAQUITA

Phocoena Sinus

They are the world's smallest and critically endangered cetaceans. **There are fewer than 10.**



Key factors

	Factor	Can we influence it?
1	Climate change	✗
2	Human behaviour	✓

PRINCIPLES

Education

Awareness

Community engagement

Citizen science

Story telling

ESG



OUTCOMES

Habitat protection

Pollution control

Sustainable fishing

Ocean acidification reduction

Energy consumption optimisation

Deep sea mining regulation

Climate change mitigation

Marine protected areas

Technology

Education
Awareness
Community engagement
Citizen science
Story telling



Data & Content

Sensoric data
Scientific data
Meta information
Crowdsourcing



Engaged users

Branded web apps
Embeds
Mobile apps

**Increased impact
in the real world**

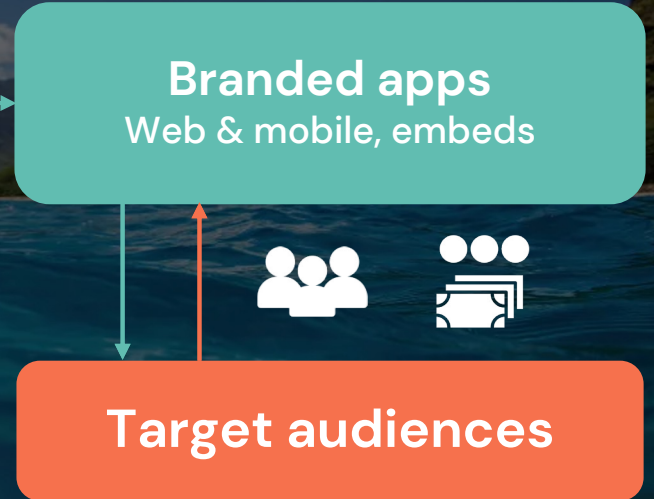
Data sources



Mapotic



B2B2C





Google
Sheets



WORDPRESS



Firebase



amazon
web services

API's, partners...



MAPOTIC



ARGOS
SYSTEMS



esri



mapbox



MOVEBANK

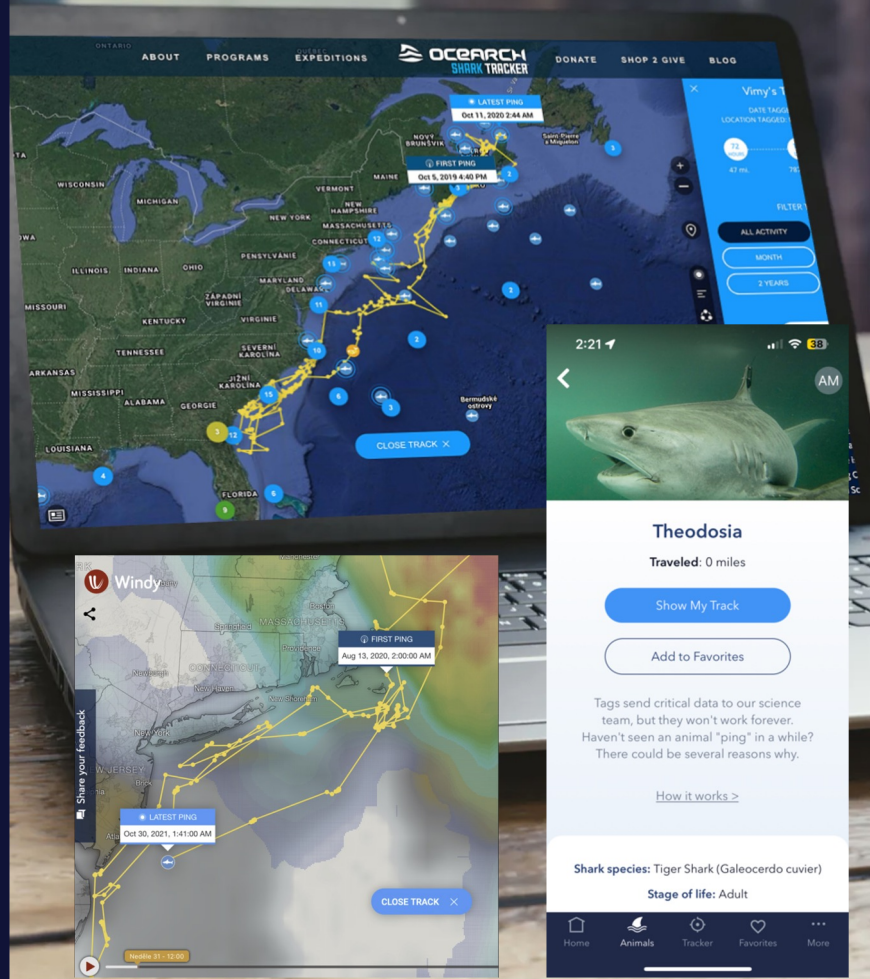


WILDLIFE
COMPUTERS

OCEARCH

Globally biggest shark tracking platform

- Tracking data coming from Argos satellite
- Meta information (bio, pictures, attributes) edited in CMS
- ESRI layers, weather data from Windy
- Reached 2M registered users in 12 months
- Publicity in FoxNews TV, USA today, Forbes
- Shark Mary-Lee had 100k followers on Twitter



TRACKING & TELEMETRY

Clearwater Marine Aquarium

- Tracking data via Wildlife computers
- Bios and images via CMS
- Weather data via Windy
- Scientific data and measures from the field via back office
- Hundreds of thousands views monthly

7th Sep 2021 7:30 AM

Chessie
The Florida Manatee

Share Show Field Notes

SPECIE
Florida Manatee (*Trichechus manatus latiorstris*)

TRACKING STATUS
Active tracking

RELEASE LOCATION
Belize

ABOUT
Opal was rescued as an orphan calf at TECO, Hillsborough county, Florida on November 12, 2019. She was 171 centimeters long and weighed pounds at the time of her rescue. Opal was transported to ZooTampa for care. She was released on February 18, 2021 at TECO in Hillsborough County. She was 217 centimeters in length and weighed 550 pounds. She will be monitored by Clearwater Marine Aquarium Research Institute.

Map labels: Jacksonville, Live Springs, St. Augustine, Palm Coast, Palatka, Cresce

Map features: A blue circle with a white manatee icon, a yellow tracking path, a green circle labeled 'START' at St. Augustine, and a timestamp 'August 26, 2021 9:32am'.

TRACKING & TELEMETRY

FAHLO

Globally biggest shark tracking platform

- Saving wildlife through partnerships with NGOs
- Hundreds of thousands users per month
- 10% of each sale goes to NGO

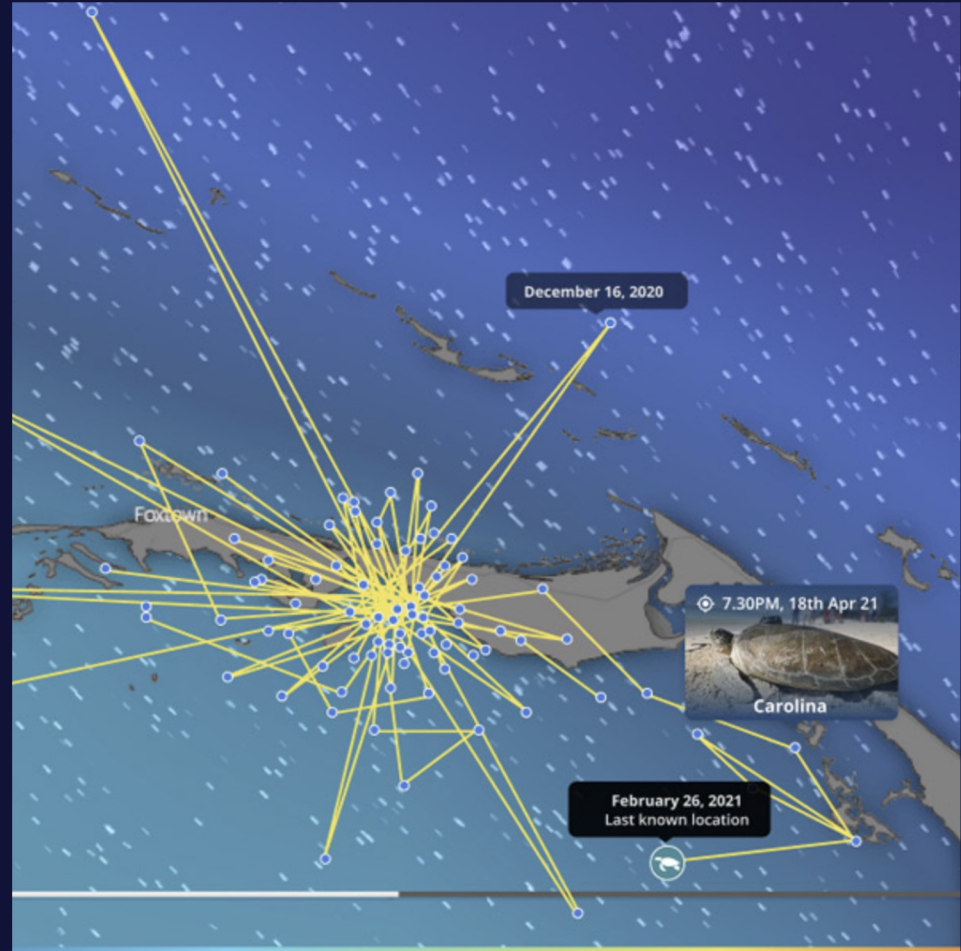


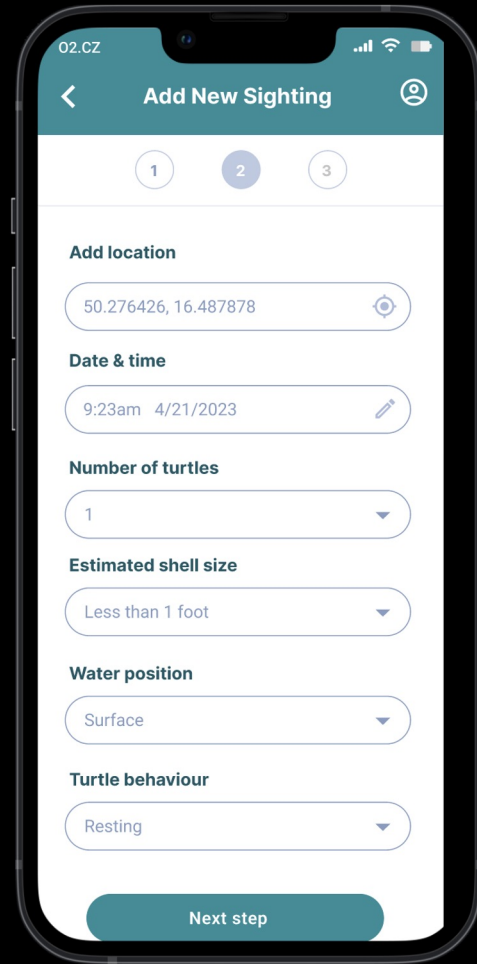
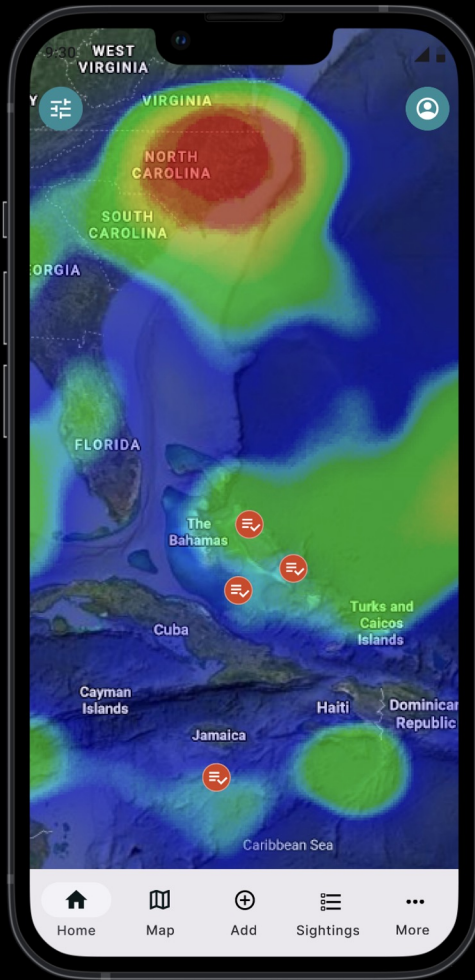
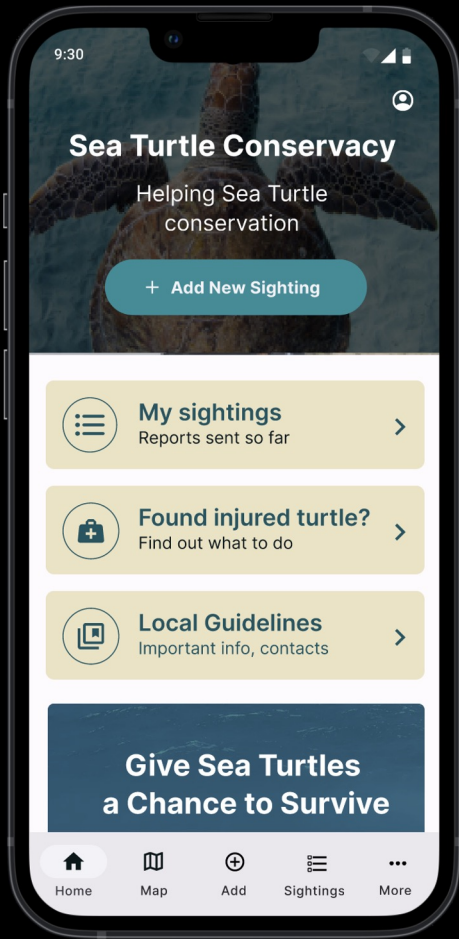
TRACKING & TELEMETRY

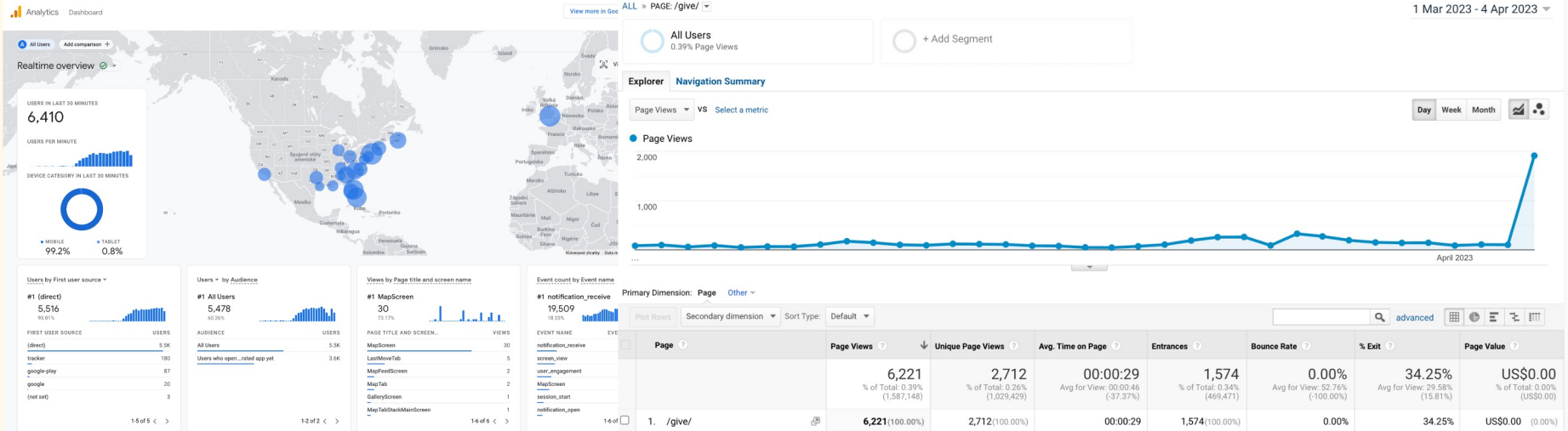
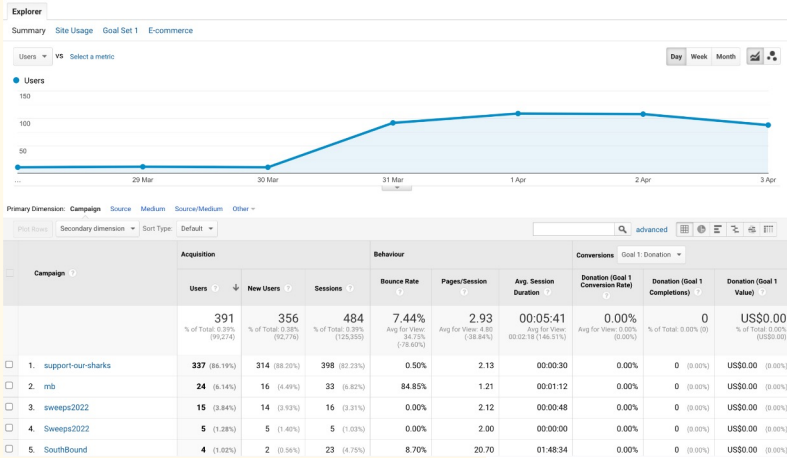
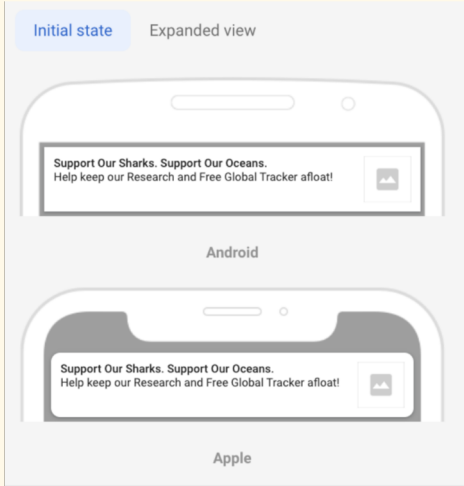
Sea Turtle Conservancy

Pioneering NGO founded in 1965
tracked thousands of Turtles

- Embedded maps and mobile app
- Weather data layers
- App helps increase fundraising and donations









Ivos Gajdorus, Founder & CEO

LinkedIn: <https://www.linkedin.com/in/gajdorus/>

Get in touch: ivos.gajdorus@mapotic.com

Maximizing Impact for Marine Wildlife Conservation: Geolocation Data Aggregation and Community Engagement

Ivos will discuss how geolocation data aggregation can help organizations engage communities, attract fans and donors, and make a positive impact on our oceans and the species living in them. We will explore how Mapotic's platform collects data from multiple channels, including IoT and sensoric hardware, and real-time weather maps to create attractive and easy-to-consume web and mobile applications for wildlife monitoring. These apps provide organizations with powerful tools to boost their engagement efforts, stimulate citizen science, promote environmental education, and attract funding for wildlife conservation. The ultimate goal is to help the scientific and environmental community spread their mission, gather more information, and engage more people in sustainability and environmental matters.

¹ Globally largest near-real-time shark tracking portal and mobile app www.ocearch.org

² Main mobile app for tourism in Czech Republic [App store](#), [Google play](#)