

#conservation

# ON THE BRINK LEATHERBACK TURTLES

*Dermochelys coriacea*



## THREATS

**By-catch:** primarily entanglement in long lines, gillnets

**Destruction and disturbance** of nesting beaches

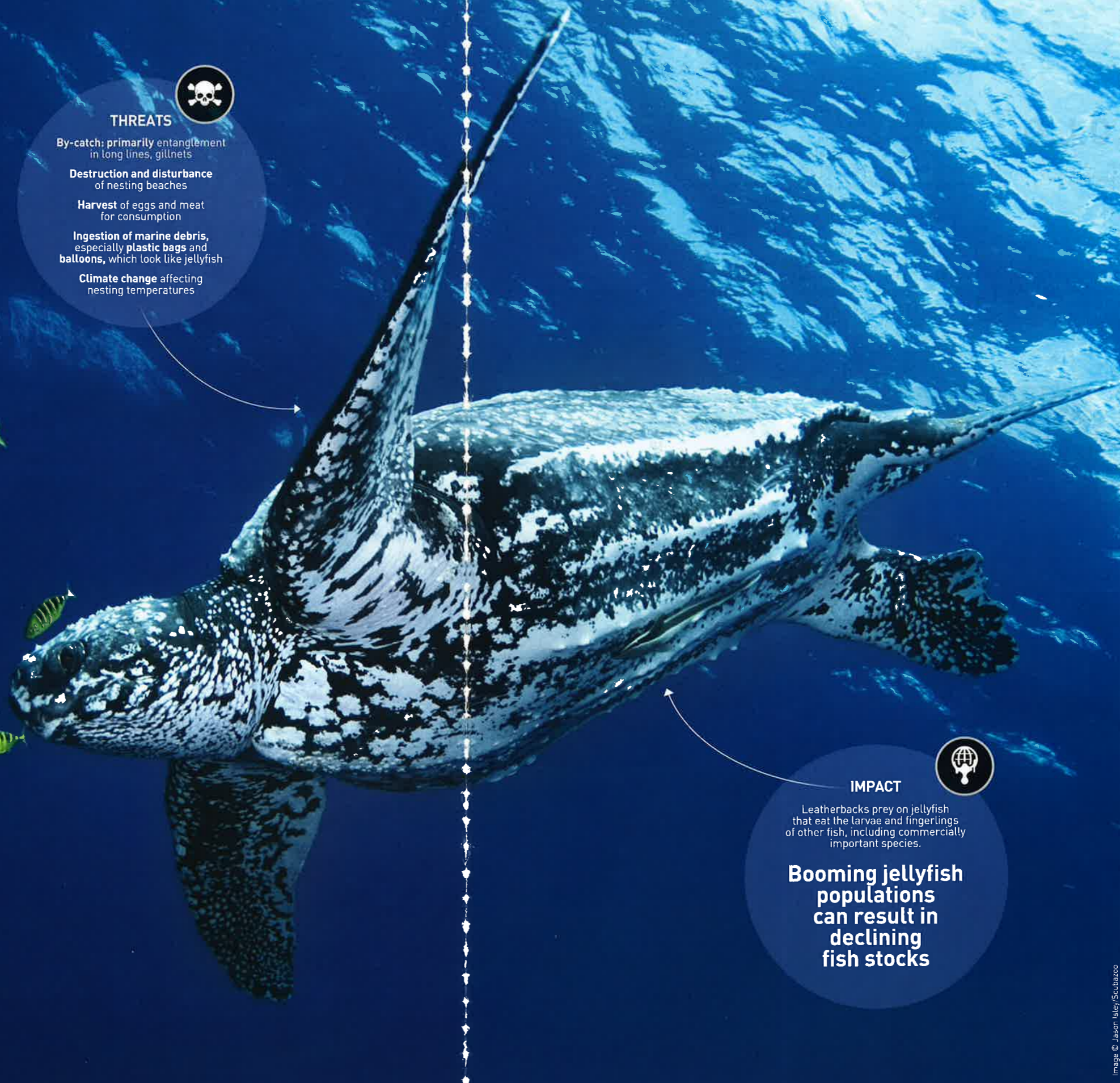
**Harvest** of eggs and meat for consumption

**Ingestion of marine debris,** especially **plastic bags** and **balloons**, which look like jellyfish

**Climate change** affecting nesting temperatures

## 10 LEATHERBACK BASICS

- 1 The **only species** in its genus
- 2 The oldest turtle species; leatherbacks have been around for **150 million years**
- 3 The largest of all living turtles; the biggest can grow up to **2.5 metres** long and weigh around **900 kilos**
- 4 **No bony shell;** their carapace is covered by rubbery, leathery skin
- 5 **Prey on soft-bodied invertebrates,** predominantly **jellyfish** (high in protein) and **tunicates**
- 6 Can consume **twice their body weight in food** per day
- 7 Unique among reptiles for their ability to **maintain high body temperatures** using metabolically generated heat (gigantothermy)
- 8 One of the most well travelled of all turtles, they make **trans-Atlantic** and **trans-Pacific crossings**
- 9 Can dive to depths of **1,270 metres**, remaining submerged for up to **85 minutes**
- 10 The **fourth heaviest** modern reptile



## IMPACT

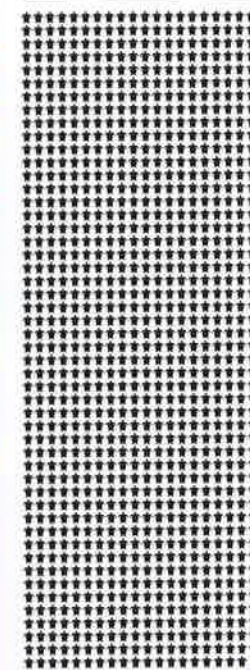
Leatherbacks prey on jellyfish that eat the larvae and fingerlings of other fish, including commercially important species.

**Booming jellyfish populations can result in declining fish stocks**

## BREEDING

- Females return to the beaches on which they hatched to lay their own eggs
- Females lay eggs **4 to 5** times a season, every **2 to 3** years
- Around **100** eggs per nest
- A nesting temperature of around **29.5** degrees Celsius results in a mix of male and female hatchlings
- Cooler temperatures produce males, and warmer temperatures produce females
- Eggs incubate for about **60** days

Only one hatchling in **1,000** will survive to adulthood



## POPULATION

Around **20,000** to **30,000** nesting females



A number of subpopulations are critically endangered with only about **2,300** West Pacific leatherback nesting females



Image © Jason Riley/Scuba2000

## FRONT LINE GOING S.O.L.O.

On a mission to help save leatherback turtles from extinction

Text by Bonnie McKenna  
Images by Various Contributors

**SITTING ON A DARK**, lonely beach in Irian Jaya, watching the stars move across the sky, waiting to photograph a leatherback turtle, Larry McKenna began to wonder if one would ever appear. Then, almost imperceptibly, a break in the surf line signalled a leatherback hauling herself out onto the beach.

### In search of the leatherbacks

It was during a dive trip to Raja Ampat, Indonesia more than 13 years ago that a discussion about photographing and videoing a leatherback turtle led to a meeting with the chief of a nearby village. The chief told Larry that there used to be hundreds of these giant turtles nesting on the village beach; so many piled over each other that the sand was hard to find. "Now", he said, "We see very few. Can you help us?"

"I had a real desire to photograph this gigantic turtle; I asked the captain of the boat I had chartered to take us to that beach. He flat out refused," Larry said.

Undaunted, Larry returned to Sorong alone, and rented a small boat with four outboard engines and several drums of fuel. After a rough

ⓘ A leatherback captured for meat in the Maluku Islands, Indonesia

ⓘ Females will return to the beach on which they hatched to lay their eggs. Coastal development can be a threat their survival

eight-hour journey around the "Birds Head", Larry reached what they thought was the right destination.

"None of us knew exactly where the turtles would come out of the sea; we were going by the description the chief had given me. The sun was setting, so we picked a spot and stopped, hoping we were in the right place," Larry related. "As the night wore on, the boatmen wanted to return home, saying we would not see a turtle. I had to convince them that we would stay till morning. Not long after that, I heard someone say, 'There is a big turtle and it is headed directly for us'."

"I was transfixed as I watched this enormous turtle drag herself up onto the beach, begin to dig a nest and lay her eggs. I had goose bumps from the excitement. As I watched her, I named her

Sophie, and as she turned to return to the sea I walked with her, talking to her as we went. Before disappearing into the surf, she looked directly at me and nodded her head. This encounter sparked a sense of inspiration in me to see 'Sophie' and her eggs survive."

### An organisation is hatched

Following a rigorous funding campaign, and largely thanks to organisations including Disney World-Wide Conservation Fund (DWCF), DEMA, *Asian Diver*, *Aeris/Oceanic*, *Atomic Aquatic*, the Charles Knopf Family Foundation and many global volunteers and donors including artist Wyland and photographer Michael Aw, Larry's dream was realised: the founding of the Save Our Leatherbacks Operation, or S.O.L.O. [SDAA](#)

### S.O.L.O.'S THREE-FOLD MISSION:

**Educate** the public about the Pacific leatherback turtle and its plight

**Unite** people in a democratic fashion to elicit change

**Reverse** the declining population trend via a series of hands-on initiatives and projects at nesting beaches

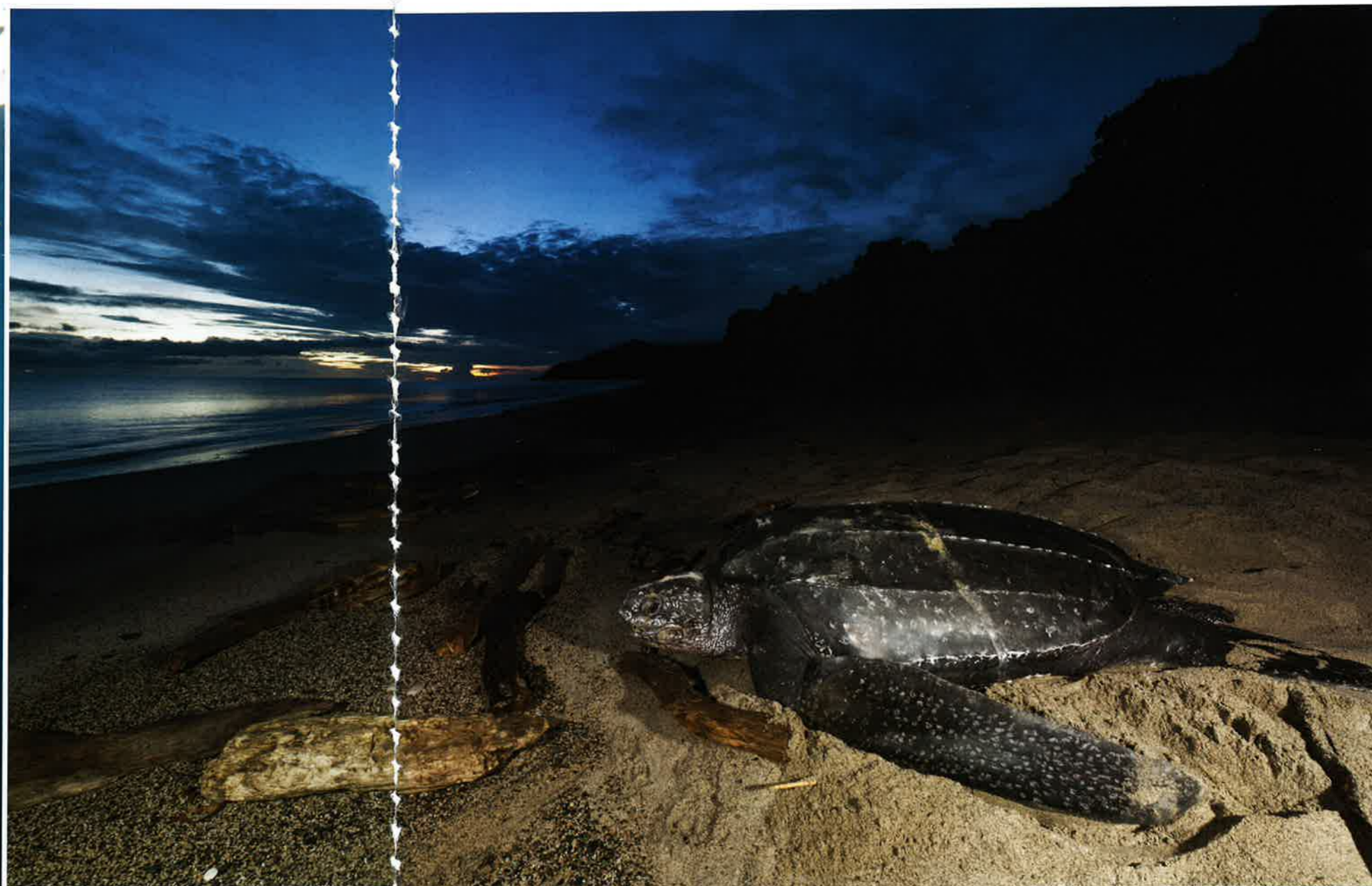




Image © Jürgen Feindthauer/Picture Library

## S.O.L.O. ACTIVITIES

Daily and nightly beach patrols

Fencing to protect nests from dogs and wild pigs

Nest relocation

Data collection

There is a widespread belief that if a man swallows a raw leatherback egg, it will enhance his sexual powers. Fortunately, these practices have mostly stopped. S.O.L.O. has also been successful at helping to discourage fishermen from digging up leatherback eggs to sell in the local markets.

A leatherback lays her clutch of eggs

Completely fuelled by the passion of volunteers and generous donations, S.O.L.O. is certified as a non-profit charitable foundation in the USA.

Specially important are S.O.L.O.'s partnerships with local communities, whose hard work and dedication is vital to the mission. On annual expeditions with Larry, S.O.L.O.'s volunteers work with villages, providing them with tools, provisions, and training, and working collaboratively to design and implement activities.

One of S.O.L.O.'s keystone fundraising and groundwork projects, Turtle Discovery Tours, allows participants to get firsthand experience in the operation's efforts, while enjoying a holiday of a lifetime. The 12-day tours include visits to the nesting beaches of five of seven marine turtle



11TH HOUR HERO  
**LARRY MCKENNA**  
Founder of the Save Our Leatherbacks Operation (S.O.L.O.)

- Larry has been given the nickname, "**Kaptain Leatherback**".
- He has been diving for around **45 years**.
- He fell **in love with the ocean** in high school, in the Atlantic off Virginia.
- He is a filmmaker, photographer, author, and **adventurer**.
- Larry is a former U.S. Air Force aviator who served for **26 years**.
- He has **experience** as an international banker, a real estate developer and a resorts operator.
- Larry's qualifications include **PhDs** in Environmental Science and Business Administration.
- He **lives in Texas, USA**, but is most often found in Asia Pacific working on leatherback turtle conservation.
- Larry has written a book, **Almost Gone**, about the decline of the Pacific leatherback, and is working on his second.
- He is driven by a lifetime of being **challenged** by people who saw his potential and who drove him to succeed.

**“PERSEVERANCE IS THE PRECURSOR TO SUCCESS”**

species, a visit to a turtle hatchery, traditional ceremonies and some diving.

"As a result of our activities, its non-paid volunteers and the villagers, S.O.L.O. has discovered ways to start to 'reverse extinction' of the Pacific leatherback turtle, by getting more hatchlings into the sea. This is being accomplished by ordinary people on both sides of the Pacific Ocean." When Larry is asked how, he slyly grins and says, "The turtles taught us." **SDAA**

For additional information on S.O.L.O., its future projects, expeditions, volunteer opportunities and a one-of-a-kind turtle boutique go to [www.saveourleatherbacks.org](http://www.saveourleatherbacks.org).