



DO IT FOR YOUR PLANET

Turtles



YOUR ADOPTION UPDATE · SUMMER 2018



GREEN GIANT

THE FASCINATING NESTING EXPLOITS OF A BEAUTIFUL GREEN TURTLE

ALSO INSIDE

HOW CLIMATE CHANGE AFFECTS GREEN TURTLES

HAVE YOUR SAY AND WIN A PRIZE!

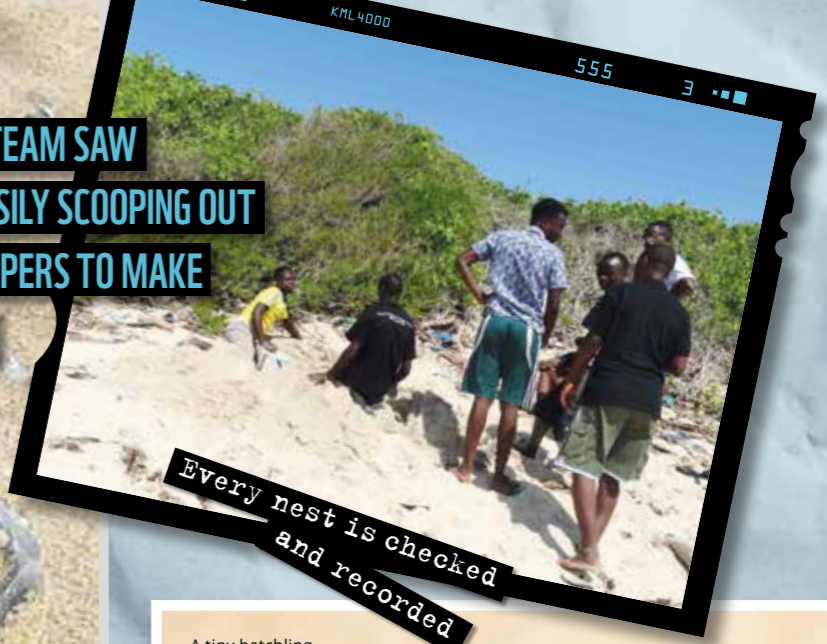
FAB FACTS YOU'LL WANT TO SHARE

MARINE TURTLES



The team marks a turtle nest

“ THE FIRST TIME THE TEAM SAW THE FEMALE SHE WAS BUSILY SCOOPING OUT SAND WITH HER HIND FLIPPERS TO MAKE A NESTING CHAMBER ”



Every nest is checked and recorded

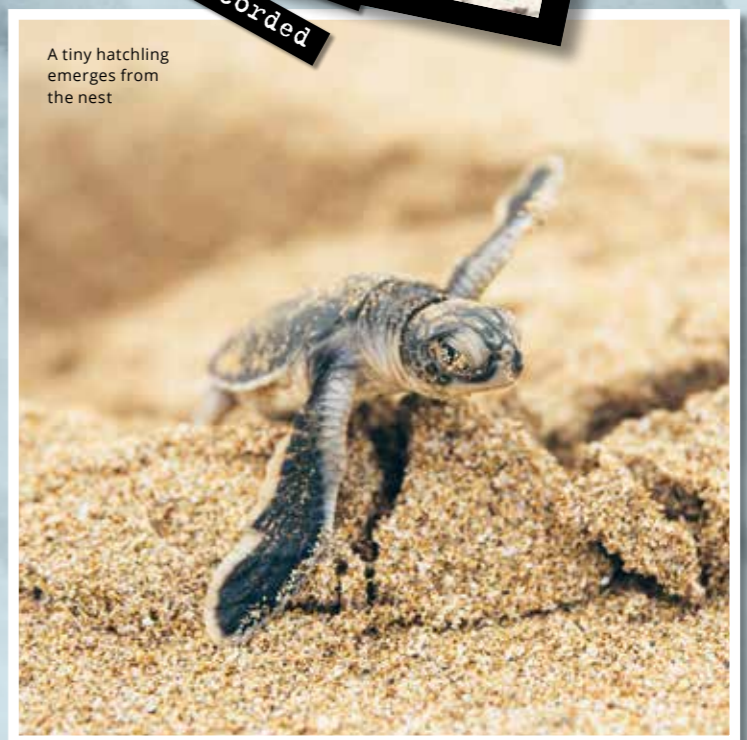
YOUR FIELD REPORT



COMPILED BY MIKE OLENDU, WHO COORDINATES WWF'S MARINE PROGRAMME IN KENYA, WHICH YOUR ADOPTION SUPPORTS



Putting the eggs in a safer place



A tiny hatchling emerges from the nest

© JONATHAN CARAMANUS / GREEN RENAISSANCE / WWF-UK

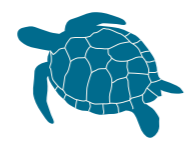
It was 4.30am, still dark and very cold, but the Kiunga Turtle Conservation Group were already hard at work

There's a very special reason why the intrepid marine turtle monitoring team you help support were out extra-early. They were on the lookout for a green turtle returning to nest on Kiwayu Safari Village beach. Green turtles nest three to six times each season, laying around 115 eggs each time. The team had seen this particular nesting female previously, and were keen to record her next endeavours.

BAY WATCH

The first time the team saw the female she was busily scooping out sand with her hind flippers to make a nesting chamber. They watched from a

68-181KG
AN ADULT GREEN TURTLE CAN WEIGH BETWEEN 68 AND 181 KILOGRAMMES



distance as she laid her eggs, covered them with sand and started heading back to the ocean.

As the female made her way towards the waves, the team carefully caught her and fitted her with a flipper tag to help identify her on future nesting visits. They also measured her beautiful greeny-brown shell in order to estimate her age. The shell was 105cm long and 97cm wide, making her around 40 years old. The average dimensions of a green turtle's shell are 114cm long and 83cm wide, so she was a healthy size.

After releasing the female and seeing her safely return to the ocean, the team headed straight to her nest. Unfortunately, the female had made it below the high-tide line where it was in danger of being flooded.

As they develop inside their eggs, marine turtle embryos breathe air through a membrane, and can drown if the eggs get covered with water. Determined not to let this happen the team set to work, painstakingly moving each precious egg to a safer place. They counted 122 leathery-shelled eggs in total, each about the size of a ping-pong ball.

BACK AGAIN

Fifteen days later, the monitoring team identified the same female through her new flipper tag – she'd returned again to lay another clutch of eggs. She's survived for 40 years, despite the huge challenges marine turtles face. Now she's doing her best to help the population increase. Thanks to adopters like you, we'll go on doing everything we can to monitor and protect these incredible green giants, and ensure their hatchlings make it to adulthood.

IMAGES © HASSAN MOHAMED / WWF-KENYA, INSET CENTRE © MARINE TEAM / WWF-KENYA

TURTLEY FASCINATING

It takes around 55 days for marine turtle hatchlings to emerge, but do you know what makes them male or female?



Amazingly, the gender of marine turtle hatchlings is determined by the temperature of the eggs in the nest, with a warmer nest typically producing more females and fewer males! On page 6, you can read how, in Australia's northern Great Barrier Reef, increasing temperatures linked to climate change are threatening to skew the population balance.

Mike



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FEELING THE HEAT

A NEW STUDY SHOWS THAT INCREASING TEMPERATURES ARE TURNING GREEN TURTLE POPULATIONS ALMOST COMPLETELY FEMALE IN THE NORTHERN GREAT BARRIER REEF

As you'll have read on page 3, the gender of hatchlings is determined by the temperature of the eggs in the nest, with higher temperatures typically producing more females and fewer males. This corresponds with the findings of a scientific study, led by our colleagues in Australia.

PROVEN PATTERN

More than 200,000 green turtles nest in the northern Great Barrier Reef, off the coast of Queensland. But increasing temperatures linked to climate change have led to mostly females being born there for more than two decades. If this continues, the green turtle population could eventually collapse.

To carry out the study, scientists compared green turtles nesting in the southern Great Barrier Reef with those nesting on warmer northern beaches. They found that in the northern Great Barrier Reef, around 99% of juveniles, almost 100% of sub-adults, and about 87% of adult green turtles were female. Green turtles from the southern Great Barrier Reef showed a more moderate female percentage of 65 to 69%.



Main: Scientists studied green turtles on the Howick Group of islands, north Queensland
Inset: A gorgeous green turtle

CONCERNING TREND

WWF-Australia's Dermot O'Gorman is concerned at yet another impact on the Great Barrier Reef. "First back-to-back mass coral bleaching and now we find that virtually no male northern green turtles are being born," he comments. "These impacts show that the Great Barrier Reef really is on the frontline of climate change."

But all is not lost. In addition to global efforts to tackle climate change, scientists and wildlife managers are now looking at practical ways to help green turtles on the ground. "One possibility is to provide shading over key nesting sites, to help lower temperatures," says Dermot.

DID YOU KNOW?

Australia's Great Barrier Reef is one of the world's richest ocean environments. It's home to more than 1,500 species of fish, six of the world's seven species of threatened marine turtles, and more than 30 species of marine mammals



EARTH HOUR STAR POETS

WOW! YOU REALLY DAZZLED US WITH YOUR INCREDIBLE EARTH HOUR POEMS AND IT WAS GREAT TO SEE HOW MUCH YOU'RE INSPIRED BY NATURE

WITH SO MANY GREAT ENTRIES IT WAS HARD TO PICK A SINGLE WINNER, SO WE CHOSE TWO! CONGRATULATIONS TO LYLA, AGED 7, AND IMOGEN, AGED 8, WHO EACH RECEIVE A FAB PANDA T-SHIRT. AND A HUGE THANK YOU TO EVERYONE WHO ENTERED. WE ONLY WISH WE HAD THE SPACE TO SHOW ALL YOUR AMAZING WORK!



IMOGEN'S EVOCATIVE POEM

The owls swoop in the dark night
and don't like light
The bats follow on and go quite high
The hedgehogs crawl through
the midnight hall
The stars in the darkness shine bright
The moths fly into the sky
I see it all.

ALL THESE THINGS I LOVE, BY LYLA

The sunlight shines on the ladybug's wings,
While the snails come out and eat garden things.
Creepy crawlies sliding by
As birds fly high into the sky.
An owl comes out to search for his mice,
While frogs jump about in the moonlight.
Fish swim fast down rivers and streams,
And flowers pop open as if in dreams.
The leaves drop down from the oak tree I climb,
It gets colder, now it's wintertime.
Snow is freezing, the leaves are crunchy,
All these things I love,
The cleverness of nature's power
And to help protect it - we have Earth Hour.



WIN

£100 WORTH OF WWF GOODIES!

Our work to help protect the world's wildlife and wild places would not be possible without your support, and your feedback is hugely important to us

Please take our online survey to share your thoughts about your animal updates, so we can make them even better! It should take around 10 minutes and you could win your choice of £100 worth of goodies from the WWF shop! One lucky winner will be selected at random, so be sure to answer all the questions and enter your details by 27 July for the chance to win*. Children are also welcome to complete the survey with help from a parent or guardian.

You can take the survey now, at:
wwf.org.uk/yourself

* For full terms and conditions, visit:
wwf.org.uk/compterms



AMAZING FACTS

ABOUT MARINE TURTLES

ASTOUND YOUR FAVOURITE PEOPLE WITH THESE FAB FACTS, AND YOU COULD INSPIRE THEM TO BECOME ADOPTERS AND HELP MARINE TURTLES TOO!



TEMPTING TONES

THE COLOURS RED, ORANGE AND YELLOW SEEM THE MOST APPETISING TO MARINE TURTLES



BUILT-IN BUOYANCY

TURTLES HAVE LIGHT SPONGY BONES THAT HELP THEM FLOAT



CROAKY CALLS

MARINE TURTLES DON'T HAVE VOCAL CORDS, BUT MAKE SOUNDS BY FORCING AIR IN AND OUT OF THEIR LUNGS

As well as helping to safeguard marine turtles, you support our other vital work to help protect our beautiful planet and its wildlife. Thank you.



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