

Entering the Mediterranean Sea for the first time, these baby green turtles won't return to breed for up to 30 years.

# AGAINST ALL ODDS

If you think your life's stressful, consider the prospects of a baby turtle. Our environment editor James Fair travelled to North Cyprus to investigate the work being done to help them survive.



Volunteers with the Society for Protection of Turtles know exactly when the eggs in every marked turtle nest are due to start hatching.

## THE AUTHOR

**JAMES FAIR** is a fan of any country in the world where you can stand up your spoon in your coffee – and North Cyprus passes this test with flying colours.



Imagine, just for a moment, that you are a newly hatched baby turtle. Together with up to 120 of your siblings (mostly sisters, in fact), you spend the first day or so of your life under perhaps 60cm of sand – the equivalent, for a human, of being buried alive to a depth of about 15m. Eventually, you dig your way towards the surface and, as night falls and the temperature drops, you emerge, blinking, into the big, wide world for the first time.

You're looking for light on the horizon – the moon, perhaps, or stars – that will guide you down to the sea. But if your nest is close to a beach bar or hotel, you could find yourself distracted by their counterfeit brightness and be lured inland, where you will be eaten by a feral dog or fox – or simply dehydrate and die when the sun rises.

Even assuming you are going in the right direction, ghost crabs lie in ambush. They disable baby turtles by severing their flippers, then drag them into their holes to consume at leisure. And if there is any sunlight, gulls will pluck you from the beach or the surface of the water.

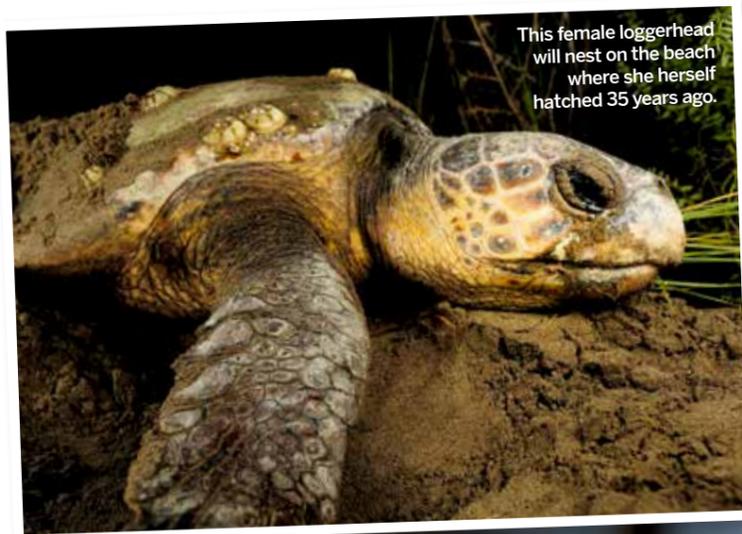
After all of this, once you're enveloped by the warm and comforting embrace of the ocean, the place where you will spend your life, your chances of making it to adulthood – to breed, to reproduce, to keep your 100-million-year-old turtle line going – are just one in 1,000.

## BEACH BABIES

The 100 or more tourists who have gathered on Alagadi Beach in North Cyprus in the eastern Mediterranean probably haven't considered too deeply the hazards facing baby turtles, but, as the first hatchling is dug out of the nest by volunteer conservationists, a resounding cheer goes up.

Most newly 'born' animals are sweet and vulnerable, of course, but baby turtles are, if not unique, then unusual among vertebrates in not receiving any parental care whatsoever. Even mother crocs are present when their youngsters hatch; a female turtle, though, lays her eggs

Turtles: Tim Graham/Getty Images; volunteers: James Fair



This female loggerhead will nest on the beach where she herself hatched 35 years ago.



All of the eggs (and the turtles that hatch from them) are counted, and the success rate of the nest recorded.



Baby green turtles are kept in a dark, secure 'hatchling box', to simulate the environment of the nest, until night falls and they can be released.



This tiny green turtle is hard-wired to fight its way out of its shell.

## WILDLIFE SPOTTER LOGGERHEAD TURTLE

- ▶ **NAME** *Caretta caretta*
- ▶ **IDENTIFICATION** Medium-sized turtle; carapace grows up to 1m.
- ▶ **BEHAVIOUR** Found in coastal waters. Solitary and highly migratory.
- ▶ **DIET** Largely carnivorous; uses powerful beak to crack open crabs and other crustaceans, but will also eat sponges and jellyfish.
- ▶ **REPRODUCTION** Females may not reach sexual maturity until they

- are 20. They nest up to six times during the breeding season, laying 100 eggs each time.
- ▶ **DISTRIBUTION** Found throughout the world in both tropical and temperate waters. The commonest turtle in the Mediterranean.
- ▶ **STATUS** Endangered; problems include bycatch by commercial fisheries and, more significantly, destruction of nesting beaches.



The loggerhead is the most abundant turtle in the Mediterranean.

and scarpers. These tiny, perfectly formed replicas of their parents emerge covered in sand, defiantly waving their front flippers like standard-bearers marching into battle.

At least at Alagadi, the turtles – both green and loggerheads, the two species that breed in the Mediterranean – are getting some help to offset the human dangers. The Exeter University-based Society for Protection of Turtles has been working here since 1992 to boost hatchling survival rates, by protecting nests from dogs and foxes, and by digging up newly hatched young (otherwise some die within the nest) and releasing them at night.

As Lauren Ambrose, one of many students from Exeter University working as a volunteer, says, “When this project started, the predation rate of nests was 90 per cent. Now it is almost zero and the number of nests is increasing every year, so we may be seeing a return on our conservation work.”

Later, under the cover of night, a smaller group gathers to release their turtles. We each have one to hold and, when the word is given, we let them go. My baby, Scarlet (we were encouraged to give each one a name – and this was the first that came to mind), soon disappears into the dark, but in patches of watery moonlight I glimpse other hatchlings scurrying across the last metre or so of sand before they disappear into the Mediterranean for 20 years or more.

### FISHING FOR ANSWERS

The natural predatory threats to turtle hatchlings have always been present. But adults now face dangers that belong firmly to the modern era. Added to the loss of nesting beaches, claimed by hotel and other developments,

is the increasing problem of juvenile and adult turtles becoming entangled and drowning in fishing nets. Robin Snape, who until last year ran the Alagadi project, is trying to quantify this threat, and identify solutions, for his PhD.

Cyprus has a small, artisanal fishing fleet of about 400 boats. Catches are pilfered and nets damaged by both bottlenose dolphins and pufferfish, and fishermen may be responding to the problem by changing the types of nets they use. Pufferfish are not native to the Mediterranean, but arrived via the Suez Canal a decade or so ago. Many of them harbour a fatal neurotoxin and, though the Japanese eat some species as sushi (with toxic parts removed), pufferfish cannot be commercially exploited in the Mediterranean.

The nets the fishermen are now adopting appear to kill more turtles: certainly, hundreds of dead individuals (particularly juveniles) are washed ashore every year, though no one is exactly sure why this is happening. Part of Robin's work involves trialling 'pingers' to deter the dolphins, so that fishermen can use more turtle-friendly methods.

Something needs to be done: it is estimated that no more than 400 female green turtles and 2,000 loggerheads breed each year in the whole of the Mediterranean. Though this doesn't represent the total adult population – females only

breed every two to five years – it is a reminder of how low numbers have sunk. It doesn't help the conservationists of North Cyprus that the state, if not the pariah that it once was, is still recognised by only one country in the world – Turkey.

Robin – who also works part-time for the North Cyprus bird-conservation group Kuşkor – is my wildlife guide for the week. After a few days around Alagadi, we head south-east to a small wetland site outside Famagusta, where lustrous glossy ibis stalk the shallows and squacco herons roost in a bare tree, hunched up like hobos on a park bench.

There's plenty of bird life in and around the wetland, but there are also four feral dogs patrolling the shore. Though not a threat to adult birds, they may have been taking chicks during the breeding season or – at the very least – disturbing nesting attempts.

But it's not just the dogs that concern Robin. The menace of unrestricted development casts a dark shadow over this bird haven, as it does over the turtles' nesting beaches.

We set off for the Karpaz Peninsula, the island's spindly, easternmost finger pointing into the Med. On the way, we stop for a lunch of fresh amberjack at a restaurant owned by a fisherman with whom Robin works. The owner sells *poulia*, the notorious songbird dish served in Cyprus and other Mediterranean countries, so we ask to see some.

He digs two bags of plucked birds out of his freezer – blackcaps in one, thrushes in

This hatchling has just been dug out of its nest by volunteers. By engaging tourists with its work, the Society for Protection of Turtles hopes to show the value of these animals to local people.





Green turtles can navigate great distances to return to their natal beaches to nest.

## WILDLIFE SPOTTER GREEN TURTLE

- ▶ **NAME** *Chelonia mydas*. Some Pacific populations with dark carapaces are called black turtles.
- ▶ **IDENTIFICATION** Second only to the leatherback in size among sea turtles, this species grows up to 1.5m long. It is not green, however – the name refers to the colour of its fat.
- ▶ **BEHAVIOUR** Like the loggerhead, solitary and migratory.
- ▶ **DIET** Adults are herbivorous, eating seagrass and algae. Young are omnivorous, feeding on jellyfish and molluscs.
- ▶ **REPRODUCTION** May not sexually mature until about 20 years old. A female can nest up to six times in one breeding season, laying 100–150 eggs in each case.
- ▶ **DISTRIBUTION** Mainly tropical waters of Atlantic, Pacific and Indian Oceans, as well as the Mediterranean.
- ▶ **STATUS** Endangered. Its meat is highly prized in some parts of the world (but not in the Mediterranean). Incidental capture by fisheries and the loss of nesting beaches are also significant problems.

Glossy ibis bred at Famagusta Lakes for the first time in 2010, when 10 pairs produced 46 chicks. The species is not resident, returning to sub-Saharan Africa for winter.

the other. Stripped of their feathers, they are tiny and bug-eyed, with monstrous black beaks, like something out of a horror film. You eat them whole, apparently, heads and all.

The birds are caught either via limesticking – a method in which a natural sticky gum is applied to twigs, to which birds become glued – or mist-netting. Both the trapping and the dish are illegal, though you wouldn't guess that from our host's demeanour. I shudder to think of the toll that this old Venetian tradition exacts on the island's songbirds, but it's difficult to be too judgmental of our genial and generous host.

Karpaz feels far removed from the rest of North Cyprus. Famous for its feral donkeys, it is rustic if not exactly wild. We pause to admire a pair of rollers and a rabble of bee-eaters chasing painted lady butterflies before reaching the peninsula's eastern tip, where two huge flags – one Turkish, the other representing North Cyprus – wave in the steady breeze. We're going for a snorkel.

Robin doesn't hang around, leaping into the sea from a rock about 2m above the surface, and it's only when I am cautiously lowering myself in that I realise why he was so carefree. This isn't the English Channel, it's the Med in August and the temperature of a lukewarm bath.

Almost immediately, Robin spots a large loggerhead turtle about 10m below us. He fins down towards it, and the mini leviathan heads off into the murky blue, flying through the clear water using its front flippers like the wings of a cumbersome bird defying logic and gravity. There are plenty of

## THE TURTLE USES ITS FRONT FLIPPERS LIKE WINGS, AS IF IT WERE A CUMBERSOME BIRD DEFYING LOGIC AND GRAVITY.

fish around the rocky reef, too, though few that I recognise – pipefish, certainly, and something that I later identify as a rainbow wrasse. Large shoals of silver fish with forked tails are some kind of jack, Robin tells me.

I'm hooked, and not for the first time, on the sheer sensuousness of snorkelling, and the next day I find a long finger of reef beneath water as clear as glass. At one point I swim through a shoal of thousands of tiny fish shimmering a translucent silver-blue. Emerging from the sea for the last time, I catch the electric flash of a kingfisher zipping over the surface of a preternaturally calm lagoon.

### PLANNING FOR THE FUTURE

At Ronnas Bay on the Karpaz Peninsula, the government of North Cyprus has its own turtle project, run by a formidable woman called Hasibe Kusetogulari. Though Ronnas is an important turtle nesting beach, the main focus of the work here is protection of nests, with no data being collected. Hasibe is clearly frustrated by the scale of the task facing her. People in Karpaz don't appreciate conservation, she tells me, nor do they understand that the turtles could be valuable as a tourist attraction. "There are no planning controls here," she adds. "People just want to get rich quickly."

## NOW YOU DO IT

### GETTING THERE

▶ **Turkish Airlines** flies Heathrow to Ercan Airport (Nicosia) via Istanbul. 0844 800 6666; [www.turkishairlines.com](http://www.turkishairlines.com)  
▶ **Direct charter flights** are also available.

### WHEN TO GO

▶ The majority of turtles of both species come ashore to lay their eggs in **June and July**.  
▶ Most nests hatch in **August and September**.

### TURTLE TOURISM

▶ The **Society for Protection of Turtles (SPOT)** is run from the village of Alagadi. There are **nest excavations**, which anyone can observe, most days in August and September. If you want to participate in a **hatchling release**, visit SPOT's website: [www.cyprusturtles.org](http://www.cyprusturtles.org)  
▶ **Volunteers** must commit to the project for

at least a month. The work is demanding and living conditions are basic; find out more from SPOT.

### ACCOMMODATION

▶ **Arch Houses** (below), in the village of Dipkarpaz, is near the government-run turtle conservation project at Ronnas Bay on the Karpaz Peninsula. [www.karpazarchhouses.com](http://www.karpazarchhouses.com)



### FURTHER INFORMATION

▶ **North Cyprus Tourism Centre** 020 7631 1930; [www.simplynorthcyprus.com](http://www.simplynorthcyprus.com)  
▶ **Cyprus** (Lonely Planet, ISBN 9781741048032, RRP £13.99, reader price £12.99, subscriber price £11.99, code W1111/13).  
▶ Buy this book on p91.



# THE INFORMATION

**NORTH CYPRUS** The Turkish republic encompasses the top third of the island, including the Karpaz Peninsula.

## THE NAVIGATOR

### Kyrenia Mountains

The Kyrenia Mountains are a narrow range of hills running 160km parallel to the north coast. Also known as the Pentadaktylos Mountains, they are home to resident Bonelli's eagles, as well as the endemic Cyprus warbler.

### Karpaz Peninsula

The spindly finger stretching north-east, Karpaz is a good place to look for birds arriving from North Africa during the spring migration. It has many turtle nesting beaches, including Ronnas Bay.



### Akrotiri Salt Lake

One of the top birding sites in the Republic, Akrotiri is home to thousands of greater flamingos and assorted wildfowl in winter, and is a stopover point for common and demoiselle cranes during the autumn migration.

St Hilarion Castle provides spectacular views over the Kyrenia mountain range.



Turtle: Peter Atkinson/NHPA; castle: Michael Runkeel/Robert Harding; ibis: M Schaefer/Photolibary.com

We head down to the beach, along with four tourists who are staying in the area. As the sun sinks, the sage bushes and Turkish pines glow under a gentle evening light, and a tiny orange-and-brown hawkmoth no bigger than a bumblebee feeds on nectar through an improbably long proboscis. Volunteers – German students from Berlin this time – are excavating a turtle nest on the surface, first scraping away the fine, loose sand then digging the softer, wetter grains from a cylindrical well 50–60cm deep.

### THE STAR ATTRACTION

As the sand is swept aside, turtles materialise like stars appearing in the night sky, and are scooped up and placed in a bucket. Some still have their yolk-sac attached to their belly and are hunched from being curled up in the shell, while others are poking just a single flipper out of their eggs, which are the size, shape and colour of ping-pong balls.

The volunteers take the buckets down to the sea and tip them out over the sand. There's still quite a glow on the horizon, and two gulls swoop over the surface of the water in search of a snack. Though they don't appear to catch anything, it's a reminder of just how vulnerable baby turtles are to opportunistic predators.

A young Cypriot man who works with Hasibe is shepherding the hatchlings towards the water. He's wearing a t-shirt bearing the legend 'Let them survive' and smoking a cigarette. In the half-darkness, amid the chaos of more than 100 baby turtles scurrying to their destiny, he seems to represent all that is contradictory about this beautiful yet tarnished island. 🐢