# TROUBLED TIMES FOR THE MED'S ANCIENT SURVIVORS

CONFLICT, THE ECONOMIC CRISIS AND MASS **MIGRATION ARE CAUSING PROBLEMS FOR** MEDITERRANEAN TURTLES. SO HOW CAN WE PROTECT THEM? JAMES FAIR REPORTS.

33 THE AGE AT WHICH A **FEMALE GREEN TURTLE MAY BREED FOR THE** FIRST TIME IN HER LIFE.



beginning to understand is that many of these areas are crucial to the survival of the region's green and loggerhead turtles.

A recent study tracked 34 green turtles from their nesting sites in Cyprus, Turkey, Israel and Syria. More than half ended up in foraging grounds off Libya, with many migrating via Syria, Israel, Lebanon and Egypt to get there. The Gulf of Sirte could be so important that it should be designated as a Marine Protected Area, the authors say.

Libya's turbulent political climate makes it a tricky place

loggerhead turtle arriving to lay her eggs at Güzelyali on the coast of North Cyprus this summer is unlikely to have been deterred by the two huge breakwaters built there in the past year. But that, says Robin Snape of local conservation group the Society for the Protection of Turtles, is not the point - the breakwaters were put there by the Turkish state-run body DSI, which is responsible for Turkey's water resources, and they were

needed to enable engineers to bury a pipeline that will transport drinking water from the mainland to the island.

The point is this: DSI ignored the fact that Güzelyali was used by turtles and did no impact assessment, Snape says. It is also questionable whether the pipeline would have been built had Turkey not intervened in the Republic of Cyprus in 1974 and set up North Cyprus as a de facto state. "I cannot imagine that the

pipeline would have been

implemented had Cyprus never been partitioned," says Snape. "The island surely has enough water overall with the resources in the Troodos Mountains."

# **UNKNOWN IMPACT**

It's difficult to say what the impact of the breakwaters will be, but they take up valuable space on a small but crucial beach and may affect the accumulation of sand, which the turtles need to lay their eggs in. This sort of habitat

loss takes place all over the Mediterranean, leading to a steady decline in populations. At least the island of Cyprus

is now at peace with itself, something that cannot be said for other parts of the Mediterranean. There is civil war in Syria, ongoing hostilities between Israel and Palestine, a lack of governance and a refugee crisis in Libya, and Greece is going through an unprecedented financial crisis. And what conservationists are



Greens are the less

common of the two

in the Mediterranean.

turtle species that breed

# **AGENDA** ANALYSIS



**SOME** REPORTS SUGGEST THE **CONSUMPTION OF MARINE TURTLES HAS INCREASED IN NORTH AFRICA** 

for conservationists to operate. "The socio-economic situation in the region makes it harder

for authorities to launch or continue conservation activities such as monitoring," says Vassilis Stamogiannis, director of the Mediterranean sea turtle conservation group Medasset. "Conservation is deprioritised and fieldwork is more dangerous."

This is confirmed by Abdulmaula Hamza, a Libyan lecturer in marine science who worked on turtle projects in his native country until 2008. He returned briefly in 2014 but says it was too dangerous to leave the main cities of Tripoli and Benghazi. "There are criminal gangs looking to steal your car, or if

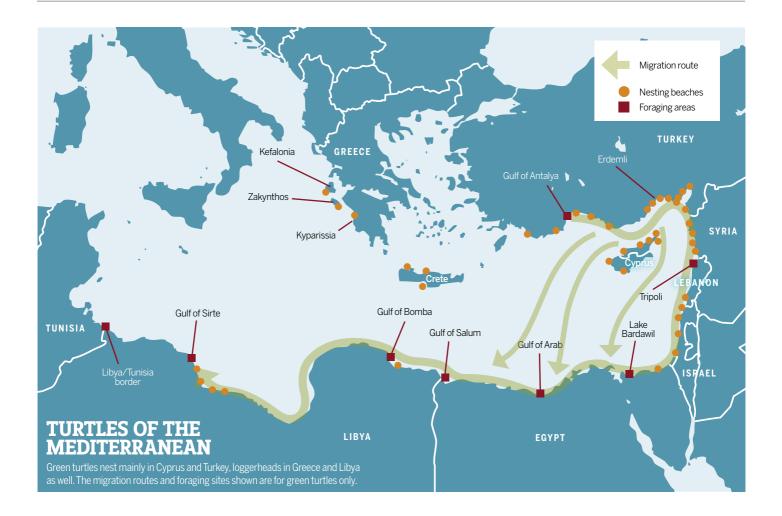
you are from a wealthy family, to kidnap you for ransom," he says. "As a turtle researcher, you have to drive 200km between sites, and goodness knows what could happen in those 200km."

The impacts could be more direct with more people possibly turning to turtle meat, warns Luis Cardona, the organiser of a conference on Mediterranean sea turtles. "Some reports suggest that the consumption of turtles has increased in North Africa," he says. "Regulations making this illegal used to be strongly enforced, but we have information that they have been relaxed. There are a lot of refugees and this may have increased the pressure on turtles."

### **CAUGHT IN A NET**

But any impact refugees may be having pales into insignificance compared with the longstanding issue of bycatch – illegal drift nets and legal longlines both snare turtles, but the biggest problem is small-scale fleets setting fixed nets on the seabed. Robin Snape says 1,000 turtles are caught by local fishermen in North Cyprus alone every year, with 60 per cent mortality. He has trialled using LED lights to deter turtles from the nets, which seems to help.

# AGENDA ANALYSIS



"There are fewer turtles washing up with broken skulls, and many fishermen now alert me when they catch them, thanks to the outreach work we have done over the years," he reports. A solution whereby fleets regulate themselves not to fish in particular areas and at certain times of year to avoid foraging turtles could work, he believes.

### **GREEK TRAGEDY**

But North Cyprus is just one country, and nobody knows how great the problem is across the Mediterranean as a whole. One estimate is that 132,000 green and loggerhead turtles are caught every year, of which 40,000 die. Economic and political instability, Snape notes, may benefit turtles by limiting the ability of fishing fleets to expand and by slowing down the rate of loss of nesting beaches to tourist hotels and bars.

In Greece, however, local conservationists are worried



that the country's economic woes will precipitate a rash of ill-considered developments to stimulate growth and create jobs. Kyparissia is one of the country's most important areas for nesting turtles, but Stamogiannis says the government is coming under pressure to permit beach-front developments that could have far-reaching impacts. "We have managed to postpone any building activity in part of the core nesting area in Kyparissia for one year," Stamogiannis adds. In Zakynthos Marine Park, he says, there is a lack of state funding to employ guards, while the coastguard has only one boat.

Meanwhile, says Abdulmaula Hamza, the importance of Libya as a foraging ground may be partly thanks to its relative lack of development, resulting in more pristine seagrass beds on which green turtles depend.

"One seagrass expert has called the Gulf of Sirte 'The Garden of the Mediterranean', and it's a nursery for other species, as well as being crucial for turtles," he says.

Kim Stokes, who co-authored the paper tracking green turtles to Libya, says that half of the Mediterranean population may be resident in the Gulfs of Bomba and Sirte, showing how critical they are. "But we know very little about what is going on in either of them, and the humanitarian crisis means that conservation is unlikely to be a priority for a long while," she adds.

## + FIND OUT MORE

Learn about the conservation of turtles in North Cyprus: www.cyprusturtles.org