

Turtles dying from eating trash show plastics scourge in UAE

February 8 2022, by Isabel Debre



A dead green sea turtle washes up on the beach in the Khor Kalba Conservation Reserve, in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili

The hawksbill sea turtle lay belly-up on the metal autopsy table, its shell ashen and stomach taut.

A week ago, the adolescent turtle washed up on a beach in Kalba, a city on the east coast of the United Arab Emirates. Once unspoiled, the coast of mangrove trees is now fouled by piles of trash dragged from nearby landfills. Strewn across the shore are [plastic bags](#), packages, bottle caps—and far too often, dead [turtles](#).

At first, Fadi Yaghmour, a marine expert who has examined some 200 turtles for the first research on the subject from the Middle East, extracted typical fare from the carcass—squid beaks and oysters.

Then, a culprit for the creature's demise became clear: shriveled balloons and [plastic](#) foam, some of the last things the turtle ate.

"It's probably malnourished," Yaghmour told The Associated Press last week as he worked. Plastic clogs turtles' intestinal tracts, he said, and can cause them to starve.

This turtle is one of 64 retrieved from the shores of Kalba and Khor Fakkan, in the wider emirate of Sharjah, to be analyzed in Yaghmour's lab. His team of researchers have published a new study in the *Marine Pollution Bulletin* that seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris.



A dead green sea turtle is collected from the beach at the Khor Kalba Conservation Reserve, in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili

When discarded, plastic clogs waterways and chokes animals—not just [sea turtles](#) but whales, birds and all sorts of life.

A staggering 75% of all dead green turtles and 57% of all [loggerhead turtles](#) in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, the study found. The only other research

from the region, published in 1985, found that none of the studied turtles in the Gulf of Oman had eaten plastic.

"When the majority of sea turtles have plastics in their bodies, you know you have a significant problem," Yaghmour said. "If there's ever a time to care about turtles, it is now."

Turtles may have survived the mass extinction that killed off dinosaurs millions of years ago, but today they're disappearing around the world.

Hawksbills are critically endangered, according to the World Conservation Union, and green and loggerhead species are endangered. The three species are found in the Persian Gulf's warm, shallow waters, as well as the Gulf of Oman on the other side of the Strait of Hormuz.



An educational information board is displayed at a viewpoint of Khor Kalba Conservation Reserve in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili

Skyrocketing amounts of litter pollute the world's environment, with a seminal study in Science Advances five years ago estimating that 12 billion metric tons will pile up by 2050.

That's just one of the manifold threats that humans have created for sea turtles—including rising sea temperatures that bleach coral reefs, coastal overdevelopment and overfishing. But it's perhaps the most visible, as shown by the gruesome scene in the Kalba lab.

A massive amount of debris was found inside the dead turtles in Sharjah—325 shards in one turtle, and 32 pieces of fishing net in another. They can cause deadly blockages, lacerations and gas to build up in the digestive tracts.

The study also found that green sea turtles were most inclined to eat drifting plastic bags and ropes, which resemble their diet of cuttlefish and jellyfish. Loggerheads ate bottle caps and other small pieces of hard plastic mistaken for tasty snails and other marine invertebrates. The youngest sea turtles, not as discriminating, ate the most plastic.



An employee holds a green sea turtle with an amputated flipper, after it was rescued from entanglement in marine debris, at the Khor Kalba Conservation Reserve in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili

Conservationists in the UAE, including Yaghmour's team and others at Sharjah's Environmental and Protected Areas Authority, are seeking to protect the country's turtles from the threats. Community officers respond to constant reports of turtles in distress, rescuing the sick

reptiles for rehabilitation.

"If we lose these turtles, the ecosystem will die," said Abdulkarim Vettan, Al-Qurum Mangrove Center's operational manager, pointing to one turtle whose flipper veterinarians amputated because it became caught up in a net.

The environmentalists face a daunting task in the oil-rich federation that's one of the world's highest carbon-dioxide emitters and trash producers per capita. Over the past decades, plastic use and waste surged as the UAE transformed at warp-speed from a parched desert pearling towns into a super-modern business hub known worldwide for its culture of consumerism.



A rescued Green sea turtle swims in a pond at the Khor Kalba Conservation Reserve in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili

Carbon-intensive desalination has driven much of the growth. The construction of Dubai's colossal artificial islands a decade ago dredged up sediment that destroyed the natural reef and turtle nesting sites along the coast, according to environmental studies from the time.

"Everything points toward major degradation and stress on the marine ecosystem of the Persian Gulf," said Christian Henderson, a Middle East political ecologist at Leiden University in the Netherlands. "The development of car-dependent urban regions has been extremely fast, without any kind of environmental consideration at all."

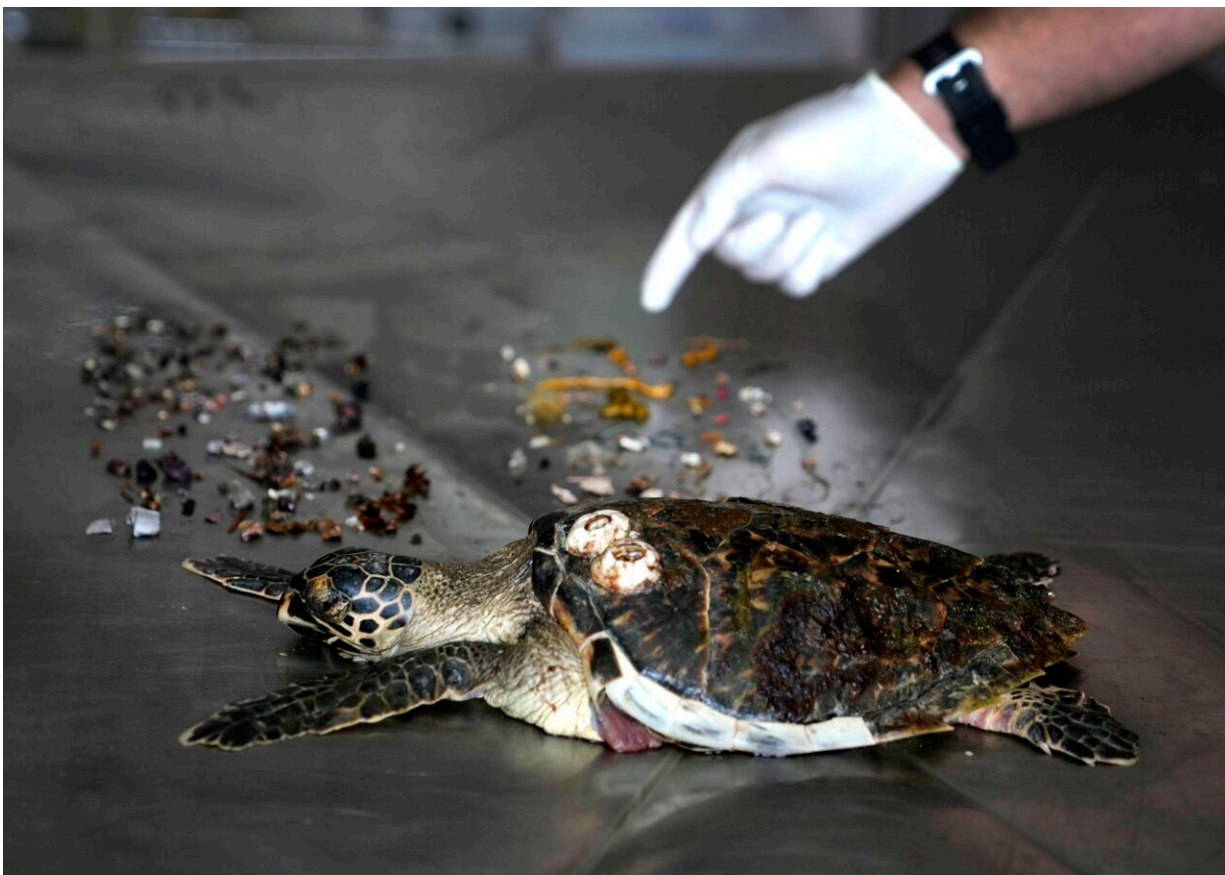
The UAE pledged last fall to have net zero carbon emissions by 2050, the first country among the oil-rich sheikhdoms to make the long-term commitment. The goal remains difficult to gauge and has met skepticism.



A Hawksbill sea turtle that was found on a nearby beach is displayed after an autopsy was performed along with trash mostly plastic materials, top, and food items, left, at the Al Hefaiyah Conservation Center lab, in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili



Employees measure the body of a Hawksbill sea turtle, that was found on a nearby beach, before performing an autopsy, at the Al Hefaiyah Conservation Center lab, in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili



A Hawksbill sea turtle, that was found on a nearby beach, is displayed after an autopsy was performed along with trash mostly plastic materials, top, and food items, left, removed from the turtle's stomach, at the Al Hefaiyah Conservation Center lab, in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili



Non food items, mostly plastic material, are shown in containers, that have been found inside a dead sea turtle, at the Al Hefaiyah Conservation Center lab, in the city of Kalba, on the east coast of the United Arab Emirates, Tuesday, Feb. 1, 2022. A staggering 75% of all dead green turtles and 57% of all loggerhead turtles in Sharjah had eaten marine debris, including plastic bags, bottle caps, rope and fishing nets, a new study published in the Marine Pollution Bulletin. The study seeks to document the damage and danger of the throwaway plastic that has surged in use around the world and in the UAE, along with other marine debris. Credit: AP Photo/Kamran Jebreili

On Monday, Dubai announced it will begin charging a 25-fil (about 6 cents) fee on plastic bags, with the aim of outlawing them entirely in two years over environmental concerns.

"The image of piecemeal environmental interventions is important politically, culturally and socially to the UAE," Henderson added. "But the kind of interventions that require genuine sustainability are not on the table because of the sacrifices that would be involved."

Meanwhile, experts say, the trash crisis grows and turtles pay the ultimate price.

© 2022 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Turtles dying from eating trash show plastics scourge in UAE (2022, February 8) retrieved 10 April 2024 from

<https://phys.org/news/2022-02-turtles-dying-trash-plastics-scurge.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--