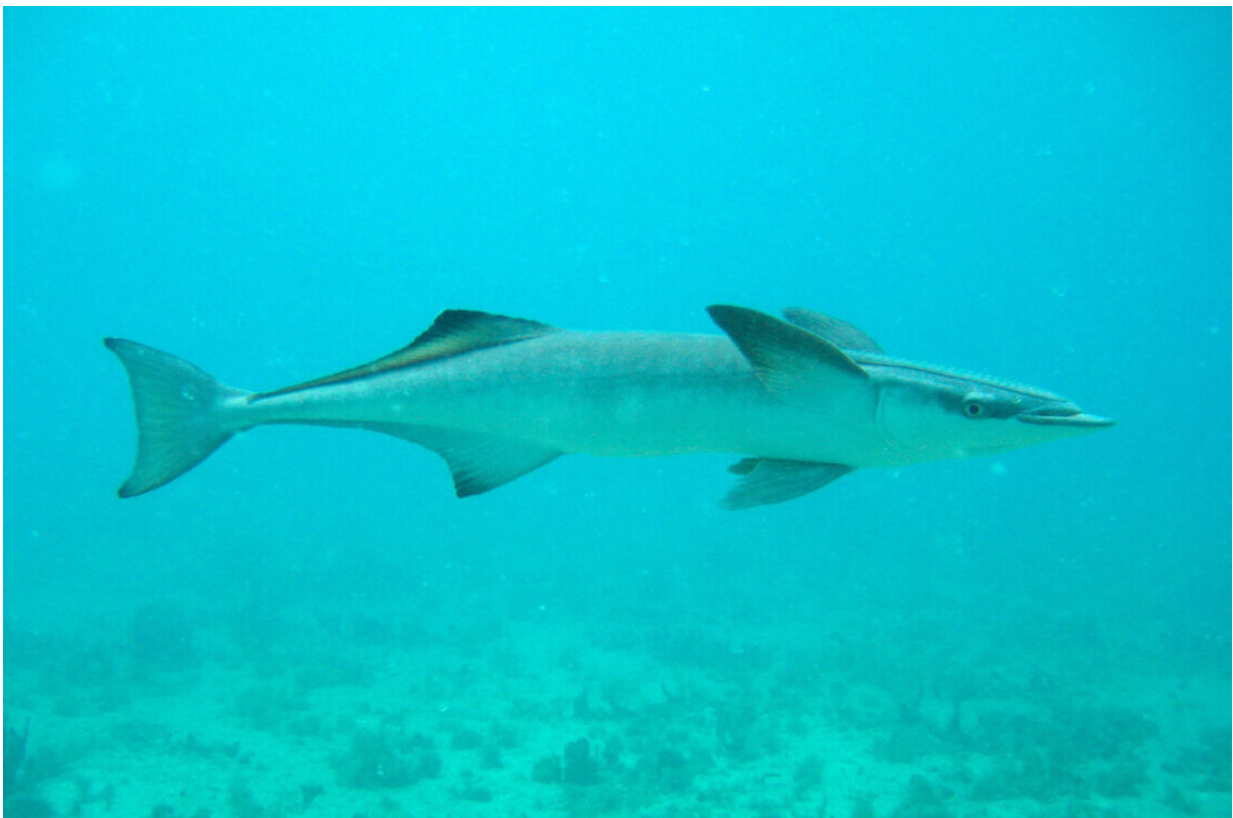


Are remoras the ocean's weirdest hitchhikers? These suckerfish invade manta rays in the most intimate of places

May 12 2026, by Paul Arnold



Common remora, (*Remora remora*). Credit: NOAA CCMA Biogeography Team / public domain

Remoras (family Echeneidae) are ray-finned fish that are known to

attach themselves to large marine animals, such as whales, sharks, and turtles. They get a free ride and sometimes food, and in return, often provide cleaning services to their hosts. New research [published](#) in the journal *Ecology and Evolution* suggests their interactions with manta rays are of an even more intimate nature. They hide themselves in the animal's rear end.

In their study, a team of researchers describes how they discovered this behavior after reviewing more than a decade of underwater footage from several locations, including Florida and the Maldives.

"These observations add important documentation to the growing knowledge base on Echeneidae-host associations and offer insight into additional drivers that may explain the ecological dynamics underlying this cryptic symbiotic relationship," commented the study authors in their paper.

Remoras are going in

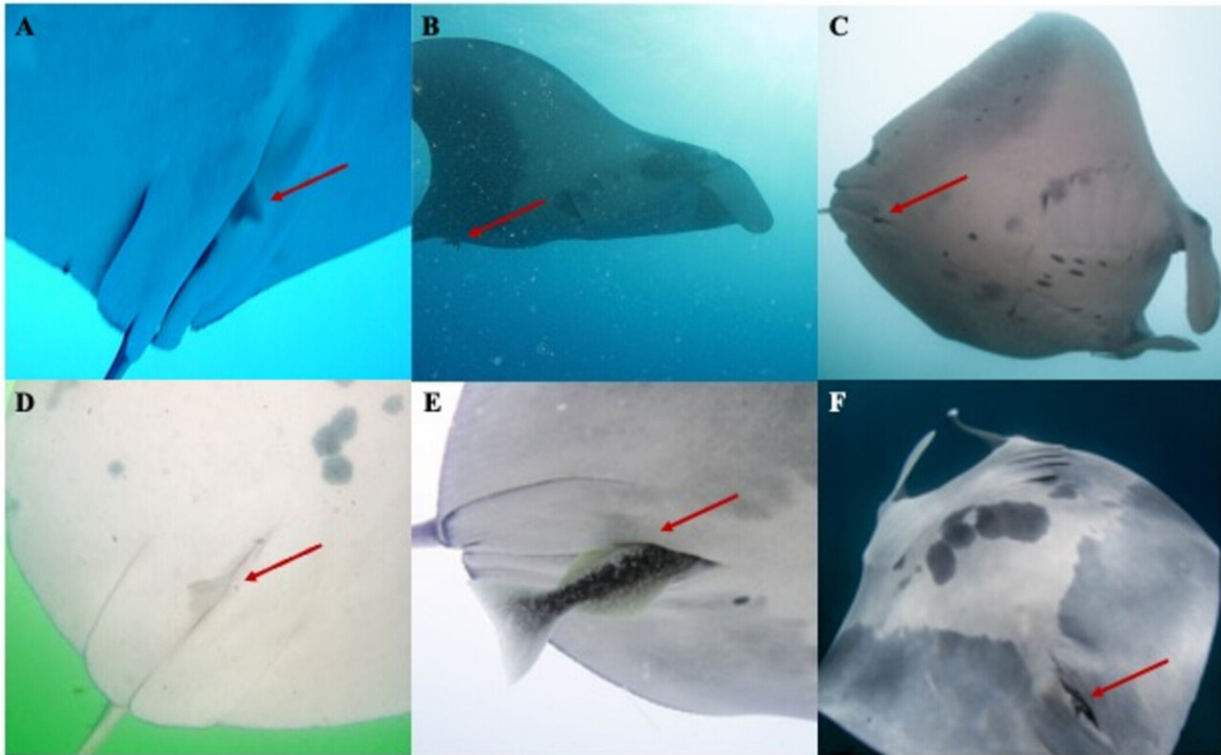
Typically, when a remora hitches a ride onto a host, it uses a specialized disk that acts like a suction cup. But here, the fish were seen diving into the cloaca (the opening used for waste and reproduction) of all three known manta ray species. Remora cloacal diving has previously been observed in sharks, but this is the first time it has been documented in manta rays.

The scientists conducted thousands of surveys between 2010 and 2025 and documented seven instances of cloacal diving and one instance of gill attachment. The behavior appeared in less than 1% of survey observations.

In some cases, the remora dives so deeply into the cloaca that only the tail is visible. In others, half of their bodies hang out of the cavity.

So why are the fish seeking safe passage where the sun doesn't shine? The researchers aren't sure but have several theories. These include using the host's body as a shield to [avoid predators](#) or feeding on the parasites or waste that the openings harbor.

Another explanation is that by tucking itself inside, the remora is out of the way of the rushing water caused by the ray moving through the ocean. Therefore, it expends less energy when attached.



Photographs documenting the presence of remoras within manta ray cloacal openings. Credit: *Ecology and Evolution* (2026). DOI: 10.1002/ece3.73548

Unwelcome behavior?

Whatever the reason, it appears the rays are no fans of this behavior. In one video, a manta ray briefly shuddered after a remora entered its cloaca. In some observations, the rays flicked their pectoral fins, which the scientists suggest could be an attempt to remove remoras. They add, "Although the exact mechanisms driving cloacal diving and gill attachment behaviors remain unclear, it is apparent that Echeneidae-host relationships are more physiologically and ecologically complex than previously understood."

More information: Emily A. Yeager et al, Hiding in Plain Sight: Evidence of Echeneidae Cloacal and Gill Diving Behavior in Manta Ray Hosts, *Ecology and Evolution* (2026). [DOI: 10.1002/ece3.73548](https://doi.org/10.1002/ece3.73548)

© 2026 Science X Network

Citation: Are remoras the ocean's weirdest hitchhikers? These suckerfish invade manta rays in the most intimate of places (2026, May 12) retrieved 12 May 2026 from <https://sciencex.com/news/2026-05-remoras-ocean-weirdest-hitchhikers-suckerfish.html>

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.