Lionfish Roundup

Organized derbies might help contain this invasive species in the Caribbean ▸▸BY TERRY WARD

In the Caribbean and all along the U.S. east coast, divers are on the hunt for lionfish; below: filleting lionfish.

Seahorses. Yellow-head jawfish. Fairy basslets. Juvenile angelfish. Cleaner wrasse. Baby parrotfish.

What has turned up in the seemingly bottomless stomachs of lionfish in seas where they do not belong could more than fill both sides of a Caribbean fish identification card.

In other words, everything.

Invasive lionfish are a threat not only because of their voracious appetite but also because of their prolific breeding — in one month, a single lionfish can lay 30,000 eggs; in three months, 8.1 quintillion.

Some researchers point to 1992 — when Hurricane Andrew caused aquariums to shatter, releasing captive lionfish into the Atlantic Ocean off Florida — as the origin of the invasion. Lionfish were first spotted in the Bahamas in 2004 and in the Florida Keys in 2009, and sightings that were initially along the lines of "one lionfish here, one lionfish there" quickly amplified. Lionfish now range all the way from North Carolina down to South America and across the Caribbean and the Gulf of Mexico.

"Here, lionfish are brand new and in a system that has not experienced them before," says Lad Akins, Director of Special Projects for the Reef Environmental Education Foundation in Key Largo, Florida. And while nature could very well work out its own system of checks and balances against lionfish as time progresses, Akins says there is reason to be concerned about invasive lionfish. "It could take a long time for that to work its way out here. And in that time, the impacts lionfish can have could be very extreme."

Commercially valuable fish species such as juvenile snapper and grouper have been found in lionfish bellies. "And some of the species they eat are ecologically important," Akins says, "like

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parrotfish that graze on algae and keep it from overgrowing the reef." Cleaner species — such as juvenile hawkfish and wrasse that take care of parasites — go down the lionfish gullet too. "Almost anything that moves and fits into their mouth, in excess of half their body weight, they'll consume," says Akins.

Scientists and divers are teaming up by organizing derbies (see "Ways to Join the Fight," below) where divers and fishermen are taught to systematically remove the animals from the reef.

"Our plan was never eradication — we knew that would be unattainable," says Scott Donahue, Science Coordinator for the Florida Keys National Marine Sanctuary. "Our plan is response and control. We're trying to get people trained so they know how to cautiously handle lionfish, helping us to control the population."

Lionfish have voracious appetites, eating virtually anything that moves.

"We knew back in 2008 that our allies were going to be the dive community," says Florida Keys National Marine Sanctuary spokesperson Karrie Carnes, stressing the importance of training as a way to not only make capturing lionfish as safe as possible (the fish are venomous) but also as a way to prevent misidentification of the species.

There is also a movement to introduce consumers to the fish's tasty flesh too, with tastings part of each derby's festivities. Lionfish taste similar to hogfish and grouper, says Carnes.

"Divers can make a difference — the ownership, engagement and stewardship divers are showing by getting out and helping with these science endeavors is helping to effectively remove those particular individuals from the system," says Donahue.

And in a battle that's roared onto our shores like, well, a lion, every victory — and lionfish entree — is worth savoring.

5 WAYS TO JOIN THE FIGHT

1 **BAHAMAS, June 15-16, 2012**
This year will mark the 4th Annual Lionfish Derby at Green Turtle Cay in Abaco. Thousands of dollars in cash prizes are awarded. There are lionfish-tasting stations too. Contact Brendal's Dive Center (**brendal.com**).

2 **UTILA, BAY ISLANDS**
The Centre for Marine Ecology and the Bay Islands Conservation Association (**utila ecology.org**) are planning derbies; or take the PADI Caribbean Lionfish Containment specialty course at Utila Dive Centre (**utila divecentre.com**).

3 **FLORIDA KEYS**
Reef Environmental Education Foundation and the Florida Keys National Marine Sanctuary have held regular derbies since 2009, with nearly 2,200 lionfish removed in 2010 and 2011. Check REEF's website (**reef.org/lionfish/derbies**) for dates as they're announced.

4 **BELIZE**
Hamanasi Adventure & Dive Resort (**hamanasi .com**), south of Hopkins, offers a new Lionfish Spear Fishing Adventure. You'll learn how to fire the spear, remove the fish and clean them. Back at the resort, your fresh catch will be cooked up for a feast. Price is $165 per person for two lionfish dives, not including gear.

5 **GRAND CAYMAN**
Head out with Ambassador Divers (**ambassadordivers .com**) on its Lionfish Safari, and you can wrangle the suckers on morning dives aboard a private charter, then tuck into a feast of your catch at Michael's Genuine Food & Drink Grand Cayman later that night. Price is $1,200 for up to six people, and includes boat, tanks, all dive gear, multicourse meal and a champagne toast.

FROM TOP: JIM PLATZ; COURTESY NOAA/FLORIDA KEYS NATIONAL MARINE SANCTUARY (2); OPPOSITE, FROM TOP: KAREN DOODY; COURTESY NOAA/FLORIDA KEYS NATIONAL MARINE SANCTUARY