



The Christmas Island Crab Migration

As many as a third of the island's famed large red crabs have been lost to aggressive yellow crazy ants which have swarmed across much of the exotic speck in the north west Indian Ocean in the last three decades. So Christmas Island National Park's chief ranger Rob Muller, is ecstatic to report that he's just witnessed the best crab return in at least 25 years.

"When the roads and the beaches and the cliffs turn red with the huge numbers of them, you know that in comparison to other years that it's a big one."

Crab babies

The red crab return is the less well known and much rarer culmination of Christmas Island's famous red crab migration.

It's a wonder of nature that none other than Sir David Attenborough reportedly regards as one of the most "astonishing and wonderful" sights, and he's seen the best of them. Roads, rocks and beaches are encrusted with red when tens of millions of large crabs emerge from the forests of Christmas Island to spawn and release their eggs into the sea.

"The crabs all start to come out and it just builds up and builds up and builds up from there over a couple of days. And before you know it you're running around closing roads and everybody's out with their cameras," says Mr Muller.



Even with the estimated loss of over ten million crabs to the yellow crazy ants, the remaining red crabs have been migrating to the shoreline each year. But while the ants have been reduced in number through regular poisoning, biologists have been concerned by the low numbers of baby crabs returning from the sea to repopulate the forests.

Despite the dependability of the migration of adult crabs, the return of baby crabs is far more elusive. A [2010 report to the federal environment minister](#) stated that a good return of baby crabs from the sea, back to the forest, hadn't been seen since the yellow crazy ant numbers soared in the late 1980s.

Mr Muller says the fate of the microscopic crab larvae remains a mystery.

"No one really knows. We assume it's conditions in the sea, but we don't know whether it's water temperature, currents, wave height, how many predators are in the sea - because we

get [whale sharks come up around the island](#) at this time of the year and a lot of the fish and eels in the sea all like this migration time."

The 2010 report concluded that "without adequate recruitment, red crabs are likely to decline to extinction."

Keystone species

The island has always been a remote speck in the North West Indian Ocean since it first rose above sea level about 60 million years ago.

The lack of other wildlife allowed crabs to evolve and fill many of the niches on land more typically occupied by birds, mammals and reptiles. The red crabs are actually just one of twenty species of land crab living on Christmas Island, making it the home of more land crab species than anywhere else in the world.

But it is the all dominating red crab that is thought to have the biggest influence in shaping the island's ecology. They're vegetarians mostly eating dead leaves, but also snacking on seeds and seedlings.

With an estimated 45 million of them, the forests of Christmas Island are kept strangely tidy with often not a single leaf littering the floor, and few smaller plants surviving under the largest trees. When crabs started disappearing due to attack by yellow crazy ants, the entire forest changed appearance with leaves and bushes filling the open spaces.

The red crabs are also becoming key to the human population of Christmas Island as the spectacle of the migration grows in popularity and the fortunes of Christmas Island's other big employer, the island's immigration detention centre, ebbs and flows.

"With the winding back of the detention centre...that's had a bit of economic impact on the island... So nature-based tourism is another opportunity for the economy of the island," Mr Muller says.



Strong future

So a lot rests on the carapace of red crabs, and the 2015 return has gone a long way to reassure the future of both Christmas Island's forests and tourism industry.

"After a return like this year where more than millions and millions, it's got to be some billions of little crabs have come out around the island...the population has been well renewed," says Mr Muller.

It's also a different kind of spectacle to the migration of adult crabs down to the beaches. The baby crabs are each just a few millimetres across, but as they emerge from the sea in their tens of millions they appear as a moving red carpet gliding over rocks and up cliff faces and anything else in their path.

"Literally millions start making their way from the beach. And then they cross the road; the road becomes red with the crabs. Then they bump into the buildings, the paths around the buildings and the walls where they climb up become red with the crabs as well," Mr Muller says.

Roads are closed and buildings are kept shut to try and minimise crabs getting squashed and lost.

"They got into the supermarket; that was a big impact for the guys who run the supermarket here. And the houses along the front of Flying Fish Cove, they certainly get a big impact from the crabs going around their doors," Mr Muller says.

It's a temporary imposition that signals a return to what Rob Muller hopes will be the normal order of Christmas Island, where crabs are a force of nature that all else must make way for.

"You can see at times where the little crabs are walking through some of these colonies and the ants just grab them and it's all over pretty quickly. But this year the tables were turned, for a short while anyway.

While the baby crabs were going through they were just swarming; the yellow crazy ants had to turn and run this time, rather than the other way around."

Courtesy of ABC North West WA

