

New mussel species invades Singapore shores



Observed in clumps of up to 10,000 individual shellfish, the invasive American brackish-water mussel has also been forming dense mats in the Kranji mudflats. PHOTO: LIANHE ZAOBAO

PUBLISHED MAR 3, 2018, 5:00 AM SGT



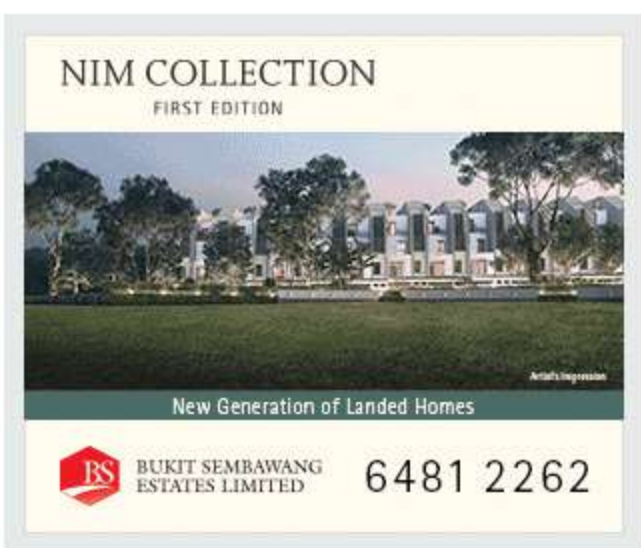
Studies being done on its impact amid fears that it may disrupt horseshoe crabs' breeding

Audrey Tan Environment Correspondent

A mussel calamity has befallen Singapore's northern shores.

Since 2016, a new species of mussel that could have come from as far away as the Americas has spread rapidly along the northern coast, clogging up nets in fish farms and displacing the Asian green mussel native to Singapore, as it competes with the local molluscs for space.

Observed in clumps of up to 10,000 individual shellfish, the invasive American brackish-water mussel has also been forming dense mats in the Kranji mudflats - home to rare horseshoe crabs - to the dismay of nature groups here.



Studies on the impact that the invasive mussels have on local ecology, including how they will affect the ancient horseshoe crabs, are ongoing. But there is concern that the appearance of the mussels in the horseshoe crabs' habitat in such dense numbers has made it difficult for the latter to burrow into the sand, where the creatures lay their eggs.

This is the first time the mussel *Mytella strigata* has been recorded in Singapore waters, said National University of Singapore (NUS) scientists at a media briefing yesterday.

The research was led by Dr Serena Teo and Dr Tan Koh Siang, both senior research fellows at NUS' Tropical Marine Science Institute.

According to the research paper, the mollusc could have come from Brazil, Colombia or Ecuador, where they are naturally found, or from the Philippines, where they have been introduced since the 19th century.

Spreading fast in Singapore
A new species of mussel – *Mytella strigata* – that could have come from as far away as the Americas has since 2016 been spreading rapidly along Singapore's northern coast.



WHERE ARE THE MUSSELS FOUND	
1 Gedong Buoy	8 Serangoon Buoy
2 Lim Chu Kang	9 Pasir Ris
3 Sungai Buloh	10 Changi Fish Farm
4 Kranji	11 CAAS Buoy
5 Sembawang	12 Sungai Jurong
6 Punggol	13 Republic of Singapore Yacht Club
7 Pulau Ubin	



ABOUT THE MOLLUSC

Wide variation in external shell colours – from almost entirely bright green to shades of orange, grey, brown and black.

The largest individuals collected from Singapore measured in excess of 5cm.

- Its presence in Singapore is likely to persist and spread to other similar habitats in the Singapore Strait.
- Singapore has the highest invasion risk among the world's ports.
- It is believed that viable and reproducing individuals were already present in the Strait of Johor in late 2015.
- The invasive nature of this species outside its native range was first reported in 1986 when a large population of *Mytella* was seen inside seawater intake pipes at a power plant in Florida.

WHY ITS PRESENCE IS OF CONCERN

- Observed in clumps of up to 10,000 individual shellfish (above), the invasive American brackish-water mussel has been clogging up nets in fish farms here, and displacing the Asian green mussel native to Singapore.
- It has also been forming dense mats at the Kranji mudflats – home to rare horseshoe crabs – and the appearance of the mussels in these ancient creatures' habitat has made it difficult for them to burrow into the sand.

PHOTOS AND SOURCES: ST JOHN'S ISLAND NATIONAL MARINE LABORATORY, TROPICAL MARINE SCIENCE INSTITUTE, NATIONAL UNIVERSITY OF SINGAPORE, RIA TAN/WILDSINGAPORE.COM, STRAITS TIMES GRAPHICS

Ad closed by Google

Stop seeing this ad

Why this ad?

ST VIDEOS

North Korea willing to denuclearise and resume talks with US

Malaysia's anti-graft agency to probe top cop over seized funds in Australia

UK warns Russia over ex-spy's mystery illness

Donald Trump's ex-aide Paul Manafort pleads not guilty again, faces July trial

Recommended by Outbrain

BRANDED CONTENT

ONE Giant Leap

The perks of living in an EC

Create new memories in Sydney

Don't sign a renovation contract without these important items

SPONSORED CONTENT

Putting universities to the test

Here's how to keep fit without breaking a sweat

UOB Asset Management: Strong growth cycle to benefit Asian stocks

Adopting a diverse investment approach to achieve returns