

Goosey blob has boffins quivering with delight

by Seanna Cronin

THEY have eyes, take naps, have sex, and some can swim faster than us. Jellyfish are no longer seen as gooey blobs haphazardly floating with the currents – they play a much bigger role in the oceans than everyone thinks.

The world's top marine scientists are converging on the Gold Coast to discuss the myths, facts and hopefully the causes behind increasing jellyfish blooms that seem to be wreaking havoc on the world's coastlines.

Griffith University will host the second International Jellyfish Blooms Symposium over the next four days, which includes a free public talk on Tuesday by world fisheries expert Daniel Pauly.

"It's an opportunity to discuss some of the latest research and debate whether or not jellyfish blooms are on the increase," explained Griffith jellyfish researcher Dr Kylie Pitt.

Dr Pitt and box jellyfish expert Dr Jamie Seymour from James Cook University, brought the symposium to Australia to raise awareness about jellyfish and understanding of blooms – short-lived population explosions.

"The thing with jellyfish populations is that they boom and bust, so it's really hard to say if we seeing a long-term increase or if it's just part of a natural cycle," said Dr Pitt.

Rising water temperatures, overfishing, pollution and excess nutrients in the water are all suspects in the blooming debate.

Unfortunately for scientists, placing blame is harder than it seems.

"Trying to identify the

causes is difficult because we're dealing with entire ecosystems," said Dr Pitt. "I think it's a funny thing how everyone wants to be able to say there is an imbalance in the oceans, but oceans are really dynamic systems and they're never in balance; it's not actually that simple."

But there are a few places where scientists do know jellyfish are blooming and doing it more often.

Consistent information from commercial fishing over the past 25 years allows scientists to confidently say that the Bering Sea, the northern Gulf of Mexico, southwest Africa and Japan are all having jellyfish blooms.

In the Gulf of Mexico white spotted jellyfish, native to Australia, have drifted over to join forces with moon jellies, which eat prawn larvae before they can grow into tasty and lucrative adults.

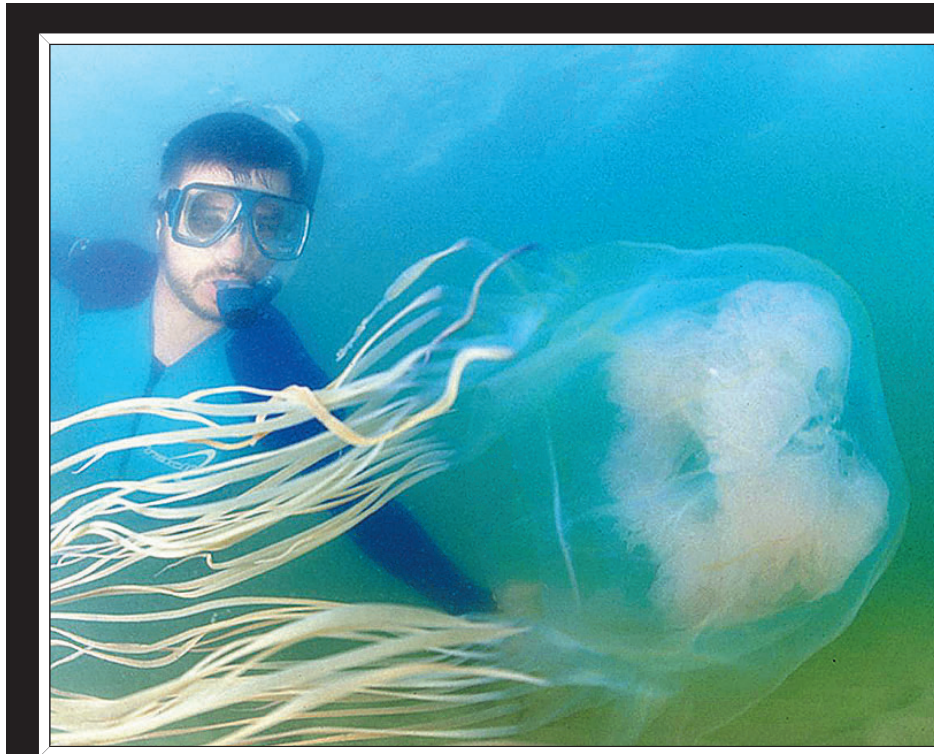
Japanese fisherman lost nets by the metres because of hauls of massive *S. nomurai* jellyfish, which can weigh up to 200kg each, instead of yellow tail in the 1990s.

"You can just imagine how hauling up a fishing net with that kind of weight just destroys it," said Dr Pitt.

Water intakes of nuclear power plants have been clogged by blooms in Japan and the Philippines while blue blubbers prevented a cruise ship leaving Brisbane in 2004.

Australia has yet to have unnatural jellyfish blooms, but according to Dr Pitt the problem instead lies with potential changes in distribution if ocean temperatures continue to rise.

"You can't now say the waters through Fraser Island are jellyfish safe," said Dr Seymour after his spotting of

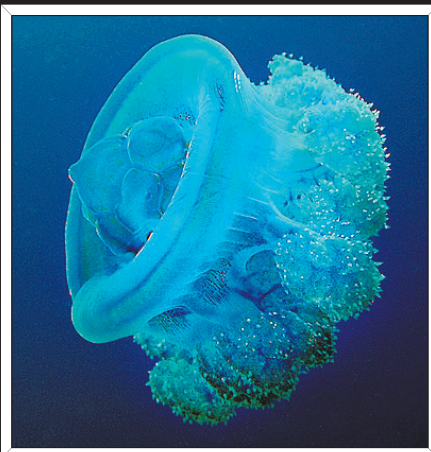


Dr Jamie Seymour watches a deadly box jellyfish

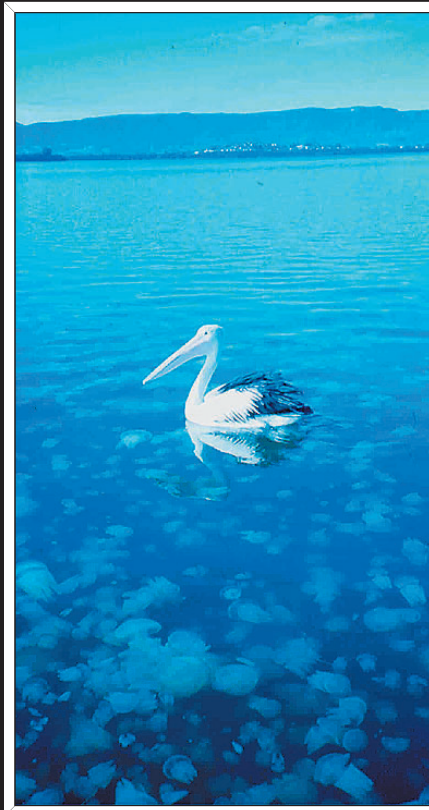
● Picture: Paul Sutherland



A dense school of jellyfish



An up-close view of one of the fish



A pelican bobs among the jellyfish

irukandji jellies interrupted filming of *Fool's Gold* there.

Deadly species like the irukandji and box jellyfish that have inhabited the warmer waters of north Queensland could call more southerly waters home if warming continues.

After sightings at Fraser Island and an irukandji sting

at Hervey Bay in April this year, Dr Norman Duke from the University of Queensland told *The Gold Coast Bulletin* marine animals would be marching south as waters warm.

"It's inevitable, I believe, that creatures like the irukandji will make their way south," he said.

Dr Pitt said that irukandji sightings and gelatinous blooms washing up on the Gold Coast would have a major impact, on one industry in particular.

"If you've got large numbers of jellyfish in the water it would obviously be detrimental for tourism and you see that already with

Cold jellyfish salad

*Ingredients:

dried jellyfish
soy sauce
sesame oil
vinegar
sugar
sesame seeds

*Directions:

Rinse several times with cold water.
Blanch jellies in boiling water for two minutes or until tender.
Rinse again with cold water.
Blot dry with paper towels.
Cut into bite-sized pieces.
Toss in soy sauce, sesame oil, vinegar and sugar.
Sprinkle with sesame seeds.

blue bottles," he said.

Ironically, jellyfish off China are actually in decline. Jellyfish there have been so overfished that Chinese scientists are now culturing jellyfish, then releasing them to grow for harvesting.

"They release something like a billion jellyfish a year, so it's going to be quite interesting to hear about their work," she said.

The major hurdle Dr Pitt and other jellyfish researchers are working to overcome is the lack of a basic information about what makes jellyfish tick.

Until recently, jellyfish were considered nothing more than dead ends in the food chain.

"It had been assumed that nothing eats them because why would anything want to eat a jellyfish?" said Dr Pitt.

Underestimating jellyfish as both a food source and a predator of plankton and larvae is the price now being paid by communities and industries hit by blooms.

It is now known jellyfish can survive in an incredible range of temperatures, salinity and even oxygen depleted waters.

"They're bloody tough little animals," said Dr Pitt.

Professor Daniel Pauly's free public lecture begins 7pm on Tuesday in G17 lecture theatre at Griffith University's Gold Coast campus.

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