Matt Moran: Hi, I'm Matt Moran and I'm here in the beautiful Northern Territory. My work as a chef and restaurateur has taught me a lot about the importance of keeping Australia's farming food scene safe from biosecurity threats. Let's face it, we have the best produce in the world; let's keep it that way. High quality produce is a cornerstone of many Australian businesses and all of that depends on keeping Australia free from pest and diseases that affect production in so many other countries.

We all have a part to play in maintaining Australia's biosecurity status so we can continue to enjoy the high quality agricultural products well into the future and the next generations. We have a uniquely beautiful country here in Australia and we all want to keep it that way. Not only does good biosecurity help our farmers, it also protects our incredible food scene all over the country. Our economy, our way of life, and of course, our beautiful native wildlife.

There's something I'm really passionate about and that seasonal, good quality Australian produce and local produce. So it doesn't matter where I am, I always try and source out the best produce in whatever town I am. I love that theory of paddock to plate or in this case, it might be ocean to Rachel Seafood. How are you, Rachel?

Rachel: I'm very well. Thanks, Matt. How are you?

Matt Moran: I'd say you've got a beautiful store here. I love Northern Territory seafood. Barramundi has to be one of the best fish in the world, especially that beautiful sort of saltwater barramundi. Beautiful mud crabs. You know, if there's nothing sweeter than a mud crab in the world, I don't know what is. I just, there's one of my favourite things now.

Now, we've been talking a lot about biosecurity and you know, if any sort of exotic disease got into the border, what would it do to your store and what would it do to Darwin?

Rachel: Eventually, it would be catastrophic, due to the fact that we're surrounded by water. If our waters get diseased or contaminated, it's going to affect a very broad spectrum of the fishing industry straight through to the customer and also the recreational fishermen. It would destroy our seafood experience.

Matt Moran: It's a really good point you just made. You know, it's not only the fishermen that are going out and then obviously it's affecting the customer that are actually eating the fish though, you know, the restaurants would obviously be suffered, but also the guy the guy that goes out in his tinny every weekend.

Rachel: Every weekend. That whole lifestyle, that whole experience, it would definitely just disappear because regulations would have to come in and yeah, this Australian, especially at the top end, lifestyle would soon disappear.

Matt Moran: I suppose tourism would play a bigger part in that. People wouldn't be coming up here fishing for that beautiful barramundi, wouldn't they?

Rachel: Well, they definitely wouldn't because that barramundi wouldn't be attainable.

Matt Moran: So I'm really keen to find out a little bit more about our exotic pest and diseases in our beautiful coastline up here in Darwin. We've got Katherine here from the Northern Territory Seafood Council. Can you tell us a little bit about the exotic pests and diseases that we might find in our waters?

Katherine: Aquatic pests and diseases could be a whole range of different types of critters. It could be mussels, could be crabs, fish, or they could be diseases that some animal has brought in as well, so it could be anything.

Matt Moran: How would they get here?

Katherine: So one of the main ways that aquatic pest or disease could make their way into Australia is through ballast water or on the hulls of boats as biofouling, as the term we use there. But they could also drift in on currents or on discarded foreign, illegal fishing nets so there's lots of opportunities for them to get here and we've got such beautiful pristine waters, we just don't want them here.

Matt Moran: What would happen if one of these diseases actually got into our waters? What could it do?

Katherine: Oh, a lot of harm. It would be just devastating. Devastating for economic reasons and devastating for environmental reasons as well. Basically, the animals that can thrive, they're invasive, so they take over, they eat the food, they take the habitat, they can spread diseases as well. Think of like the cane toad in the water, basically. They just, you know, they can populate really quickly but they could also ... of course they can grow so quickly, sometimes block pipes on boats so there's increased maintenance costs. And then just the inconvenience. If we do have something here in the Northern Territory, then other states in Australia wouldn't want our boats to travel there because of the risks that they bring in with them.

Matt Moran: And has it happened before? We actually had foreign things come in?

Katherine: Yes, so we still get incursions and we've got monitoring and management in place. But yeah, we had a breakout of black striped mussels here in Darwin in the late 1990s.

Matt Moran: Right. And got rid of them?

Katherine: We did. Everyone got on board. Government, commercial industry, everyone got on board. To manage the vessel movements, to stop the movement, and then also to treat the invasive species to make sure that they were all killed and not going to be a problem.

Matt Moran: So we're talking to Katherine and she was telling us about aquatic, exotic pest and diseases and the incursion that happened in Darwin Harbour. Now I've got Richard here. You're an expert. What's your role here, Richard?

Richard: Hi Matt. I'm senior curator of marine biology, particularly shellfish molluscs at the Museum and Art Gallery of the Northern Territory.

Matt Moran: It's a big title. So tell us a little bit about these ones that were found in the harbour? And when was that?

Richard: Yes, it was found in 1999. It caused major panic because this was the first case of a serious marine pest anywhere in Australia. The panic was well justified, but ultimately, after a big campaign involving lots of copper sulphate, it was removed. So this is the first example in the world of the eradication of a serious marine pest.

Matt Moran: Well. So what damage would they have done if they actually, you know, obviously, lived and stayed in the harbour?

Richard: The damage would've been massive. Firstly, the damage would've been for infrastructure. Things like navigation buoys would have sunk. Any cages, like up here, there are pearl oysters grown in cages. They would have gone to the bottom as well. But also the environment. With bivalves this numerous, they would have outcompeted the native species and they would have probably become extinct.

Matt Moran: So how do these little guys actually get into the waters?

Richard: They can't get here naturally. Australia is totally an island. They need to get here assisted by humans. They come in on boats. The classic way of coming in boats was on the outside under the hulls where they form great densities. It's called fouling, marine fouling. These days, boats are very ... they're like sponges. They're very porous. They have cavities which they carry water, lots of water. This is called ballast water, and so they can get an either way.

Matt Moran: So is that the only way a pest can get in, through on boats?

Katherine: No. Pests in fresh waters can get through, introduced another way. Unintended release of aquarium fishes, for example. Instead of flushing it down the toilet, I can put the prickly coloured guppy or a swordtail into a body of water, and the same things as the marine pests, they multiply up. They outcompete native species.

Matt Moran: We are so lucky to have an amazing country free of exotic pests and diseases that could devastate our agricultural industries. Help keep Australia safe by keeping a top watch for biosecurity threats. For more information, check out the Department Of Agriculture, Water and the Environment website. Remember, biosecurity is everyone's business.

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