

#2 No Butterflies w/o Caterpillars | Human-Wildlife Encounters In SG

00:00:00 Xiaoyun

Hello and welcome to *That's Wild!* I'm Xiaoyun, a nature guide and environmental educator, and I'll be your host for this podcast series. We will be talking to a variety of special guests about some wild and wonderful topics surrounding nature conservation in Singapore, our City in Nature. *That's Wild* is brought to you by the National Parks Board. If you like our content, don't forget to show your support by hitting that follow button and giving us a five-star rating.

For this episode, we are very excited to have Choon Beng, who is in charge of Wildlife Management in NParks, as well as Ing Sind and Ingg Thong, who are reptile and amphibian enthusiasts. We will be speaking about encounters with wildlife in Singapore, how human wildlife relations are managed here and what it really means to live in a City in Nature.

00:00:48 Choon Beng

Hello, I'm Choon Beng and I'm working in National Parks Wildlife Management.

00:00:52 Ingg Thong

Hello everyone, I'm Ingg Thong, I'm a Zoology graduate and also a big lover of reptiles and amphibians.

00:00:57 Ing Sind

Hello, I'm Ing Sind. Again, I'm also a Zoology graduate. I enjoy looking for snakes and other amphibians in our nature reserves in my free time.

00:01:05 Xiaoyun

So to start us off, maybe we can go around the table and speak about close encounters with potentially dangerous or scary animals.

00:01:14 Ing Sind

So this was very very early on when we started herping. We were down in the mangroves, catching snakes. And that night was very weirdly dry so I had not seen any snakes at all. The first snake I saw was this snake covered in mud on the ground and I was really excited to catch it because that would be the first snake of the entire survey. So I reached down, almost grabbed it, then I saw the head. It was almost like a lanceolate shape, so like a lance head, and that was a mangrove pit viper. I was lucky that I saw the head, because some of the bites from the

mangrove pit vipers can be exceptionally nasty, like you would need a lot of medical intervention.

00:01:55 Ingg Thong

Personally I think I should say for this particular question, I wouldn't necessarily say 'scary' because scary is a personal opinion and I don't think any animals are scary. For potentially dangerous, I do agree that a lot of animals can be dangerous. But it also depends on the situation in which you encounter them. You know, whether or not they are disturbed, or whether or not you are encroaching on their space.

I think I was giving a guided walk a couple of months ago, might have been last year. And there was just this very very huge Malayan water monitor, but this one was exceptionally large and was sleeping across the path. And the thing is because I was guiding, I didn't see it. So, one of the spotters, he actually told me, "you're about to step on it". But thankfully it wasn't angry or anything. It was very chill. For those of you who don't know, monitor lizards have a very strong tail. And if they are disturbed or cornered, they can use it as a whip. And I can tell you the tails are very hard. And I would not like to get hit by one, definitely.

00:02:50 Choon Beng

I've come across a number of animals and most of them avoid you. But the only one time when an animal charged at me and it was really aggressive and it was vocalising, bristling, and all that. It was just that one time.

00:03:05 Xiaoyun

What animal was that?

00:03:06 Choon Beng

It was someone who lost his koi to otters.

00:03:13 Ingg Thong

So I assume he was very upset with it.

00:03:15 Choon Beng

She doesn't get it.

00:03:16 Xiaoyun

I got it. I got it. I got it. So yeah, we did speak about how wildlife management is more about people management.

00:03:25 Choon Beng

Yeah, totally.

00:03:27 Xiaoyun

In that sense, we can also think about how we humans are also perceived by the animals as dangerous. To be honest, most of the time when animals react in so-called violent ways, it's actually in defence.

Maybe we can talk about how human wildlife conflicts and relations are managed in Singapore. There are very recent cases and quite a number. For instance, the crocodile that appeared in East Coast was put down for public safety. So maybe this is where we turn to Choon Beng and we think about what are some of the factors that NParks took into consideration when deciding on the final approach and the recommendation for managing the crocodile.

00:04:09 Choon Beng

So ultimately the objective of what we do is to promote co-existence. But co-existence is often, I think, not clearly defined. What does it mean to co-exist? Everybody appreciates nature. You have all these YouTube videos playing sounds of running streams and all that, right?

But a lot of these people, when they want this greenery, they want it filtered. I want the fresh air, but make sure the fresh air doesn't come with any flying insects. Oh, I love butterflies, but can you make sure that there are no caterpillars that come with it? So we really got to know our nature better and know that this is a package deal, this comes along with it. And then once you have that package deal, then there are some things that are going to be inconvenient and we got to learn how to deal with it. And that's our job actually, to make sure that everybody is brought together and understands how they can co-exist with the nature that we have in our midst.

So we were talking about wildlife management, right. And whilst I did say that we will try to get everybody to appreciate and learn more about our wild neighbours, there are certain criteria that we actually must stand by – the safety of our citizens, members of the public has to be foremost. And then when it comes to that, when we're talking about animals like crocodiles and wild boars, that's a chance that we cannot take, and hence the management of these animals will be different from how we manage other species.

00:05:32 Ingg Thong

I think to add a bit more on that, it's not only important to protect the people who are interacting with these wildlife, but it's also important for the conservation of those animals as well. Because if someone is attacked by crocodiles or gets mauled by a wild boar or something like that, the public perception will turn against those animals. It works against the efforts that NParks has been doing, that a lot of other NGOs have been doing to promote some coexistence with wildlife.

00:05:55 Ing Sind

Also to chime in on crocodiles especially – I know for a lot of wildlife advocates, we try and advocate for awareness of the animals, so we can actually give them a wide berth. I don't think that's very possible with a crocodile, especially in muddy waters. Because you don't see it. It's an animal that has evolved very cryptic colours, very cryptic behaviour to hunt mammalian prey. So I think we have to balance that with maybe signages and stuff.

And especially when some of these animals disperse outside of their natural range, like one of them turning up at Marina East – nobody expects it to be there. Even like East Coast Park, some of these urban areas, nobody would expect a crocodile to be there.

00:06:36 Xiaoyun

There's a bunch of comments online about why don't we just try to do some other methods or some other solutions, such as putting a tracker on a croc.

00:06:43 Choon Beng

What we're afraid of is a false negative. Meaning you think that the croc is not there, but actually it's there. And that's because of the failure of equipment to detect it. Because no equipment is going to be 100%.

00:06:54 Xiaoyun

Maybe we can spend a bit more time thinking about if there were other ways the management of crocs can be handled, especially going into the long term. Or is the long term solution still kind of the same? Meaning if there are red zones, whereby in the name of public safety, they will always have to be put down?

00:07:11 Choon Beng

Crocodiles are a part of our native fauna. However, the reality is that we cannot allow crocodiles to be in areas where there is high urban concentration of people, high usage, high recreational activities, that kind of stuff.

So one way we are doing it is – you have zones where you actually don't allow crocodiles to be in. There's like zero tolerance. If there's a crocodile there it has to be removed. And then there are places where you will actually allow a crocodile to be there, under watch. And then there are places where the crocodile should be and are allowed to be. But these places, you don't need to actively manage unless there's a problematic animal that is causing potential danger to people nearby. Maybe a place like that would be Sungei Buloh. However, even if a crocodile is removed, the first consideration is to see whether we can actually relocate or rehome it. And then if that's a possibility, yes, we'll do that. But if there are no places where it can be placed in, then it will be put down.

00:08:08 Ingg Thong

Yeah, I think another thing that's important to consider when talking about how crocodiles can be managed long term is definitely the education aspect. Because you can only go so far with managing a population of wild animals. And I think there are people in Singapore who don't even know we have crocodiles. And then there are those groups of people who think crocodiles are only found in Sungei Buloh and not anywhere else. So I feel people, members of the public, look at the world with a certain dichotomy, right? They're either in nature or they're not. So they don't realise that nature is all around them, especially in Singapore, which is quite a unique space because we live so close to our forests and our shores to the point where you're almost always interacting in some form with wildlife or nature around you. And I think public perception has to change, where people need to be aware or more aware of their surroundings and what they are interacting with.

00:09:05 Xiaoyun

Before we continue, let's take a pause here for a fun mid-episode break. In the spirit of our podcast title, That's Wild, Ing Sind and Ingg Thong will now share something cool or bizarre or interesting about an animal or a plant that you guys may not have known before. Take it away.

00:09:20 Ingg Thong

There's this frog called the Limb's Sticky Frog in Singapore. And it's actually been known to lay its eggs and have its tadpoles swim around in pitcher plants. When people talk about pitcher plants, you just think about insects getting trapped in there and getting digested and whatnot. And then here you have a frog literally just leaving its offspring in the pitcher plant. And actually

the reason why they can survive is they choose a species of pitcher plant that doesn't have very acidic or very concentrated digestive enzymes within their pitchers, which is very cool.

00:10:00 Choon Beng

I've got a fun fact. You know, if we take our blood and we analyse the chromosome, we know whether you took blood from a guy or girl, right? You can't do that with crocs. Because the sex of the crocodile is determined by the temperature at which the egg was hatched. So it can go either way.

00:10:13 Ingg Thong

So how would you then determine the sex on the crocodile? Just have to be visual is it?

00:10:17 Choon Beng

So you have to make sure that the crocodile is sedated and you put the finger into the cloaca.

00:10:22 Ingg Thong

Oh, so to see if it's hemipenes or the... Do crocodiles have hemipenes?

00:10:28 Choon Beng

So there will be a structure there. If you feel it, then it's a male. But usually if it's more than like three and a half metres, for saltwater... It's male. The females don't grow that big.

00:10:45 Xiaoyun

We want to talk a bit about human-snake conflicts, you know, from the ones that are really commonly encountered, from house wolf snakes and oriental whips to some that are potentially more dangerous. For instance, king cobras, blue corals.

00:10:58 Ingg Thong

The last time anyone was killed by a venomous snake in Singapore was in 1995. So I think the idea that snakes are dangerous or they're out to get you and they're out to kill you is a misconception and it's a misunderstanding that many members of the public actually have due to the portrayal of these animals in the media and how they are. Of course, everyone knows an uncle's friend's daughter who got attacked by a snake or something back when she was living in the kampung or something like that. So it's never first-hand experience that makes people scared of snakes. It's more of what they've heard or what they've seen. And of course, this can have disastrous effects on individuals as seen by the case earlier this year where the python was killed in Boon Lay. And the python didn't actively attack anyone. They actually had to

provoke it, and then the guy was bitten. So you very rarely, I would say, almost never get snakes actively attacking people. There's always a reason, like for example, someone accidentally stepped on the tail or someone grabbed it or someone disturbed it to the point where it actually felt like it needed to attack.

00:12:18 Xiaoyun

So apart from snakes, have you guys had any other personal encounters with other kinds of wild animals?

00:12:20 Choon Beng

When I was younger, we had a little piglet that was in a small enclosure. I was trying to guide it out but it was threatened by me, it charged at me and then it ran at me, nipped me, and then ran back, and I didn't even have time to react. And then we've seen, in Ubin times, we had a wild boar that just got panicked and there was a chain link fence, you know the green wire fence – bam. And then it created a hole. It was like a hot knife through butter.

00:12:45 Ingg Thong

It's actually interesting to see how large the wild boar population has gotten in Singapore. And again, it's because of the absence of predators.

00:12:53 Ing Sind

And in Singapore sometimes you get a lot of people feeding them. I think there was this famous wild boar in Pulau Ubin, near Chek Jawa. The van uncle, every time he drove by he would feed the wild boars. And this wild boar basically doesn't move anywhere else. He or she was always at Chek Jawa. She was very friendly to the point where the van driver could pet her and stuff. But it's also not very good for a wild animal to be that friendly. When people see this sort of thing, they are going to think that it's okay to go up to a wild boar and pet it. And that's how you get wildlife conflict. Because not all animals are going to react the same way. Not all people are going to react the same way also. And when you have these two very unpredictable situations coming together, you'll definitely have conflict.

00:13:40 Choon Beng

This is a problem with our understanding of wildlife. People think that something that looks furry and cute, it must be quite docile right? So people think that you can take close selfies with the otter. So the otters are really the dominant fellows in the ecosystem. So just because they are furry and cute people think that you can take liberties with it. And that's just not the way. But a

snake, it's just – forgive me, but – “uglier”, right? It's not so attractive and people attribute a lot of evilness to it. It's not founded.

00:14:14 Ingg Thong

And I think you brought up an interesting point by referring to how a snake looks. Because another reason why I think a lot of people are more wary or even hate snakes is because of how different they look from mammals. I think there were a few studies that showed that the closer something looked to a human or a mammal, the more we relate to that animal. And of course, snakes are very different. They're not even the same. They're reptiles. So there is that difference in biology that separates us.

00:14:45 Choon Beng

But if that's true, why do we have so many people grieving over monkeys? Really a lot of angst over monkeys.

00:14:50 Ing Sind

When the members of the public dislike macaques, they are only interacting with macaques when the macaques are not interacting in their natural behaviour; when they are getting fed and they are demanding food from people. This is not a natural behaviour for most macaques. If you actually go and see them in the nature reserves, rather than the road fringes where they expect food – when they are in the forest, they don't expect food. And they are foraging for fallen foods and stuff. And playing and sometimes just jumping into the reservoirs. It's actually quite endearing to watch.

00:15:18 Choon Beng

It's joyful, right?

00:15:20 Ing Sind

Yes, yes. When they are naturally behaving and when their behaviours are not impacted by humans.

00:15:23 Xiaoyun

I think this actually links to our discussion about public attitudes towards wildlife and nature, right? It all depends on the context that we're interacting or observing the wildlife behaviour in.

00:15:35 Choon Beng

Another thing about really learning to appreciate wildlife, it's not just, you know, oh you have so many species; oh, we got so many more than the next guy. Apart from all this, sometimes we also underestimate how intelligent they are. I'm not just talking about monkeys, otters, even crocodiles. Like wild boars, actually they are extremely intelligent animals. When I was in Ubin and when it was durian season, the wild boars would go after the durians. But being a wild boar, how are you going to open the durian? So maybe this is a challenge to you guys – if you are a wild boar now, you have strong teeth, you have a strong neck, you have strong hooves, you have tusks. How are you going to open the durian?

00:16:21 Xiaoyun

I would put it at my neck and squeeze.

00:16:23 Choon Beng

So now you know what I mean when I say that wild boars actually have higher intelligence than most people.

00:16:29 Xiaoyun

So what did the wild boar do?

00:16:31 Choon Beng

So the wild boar was observed to be actually scraping a depression in the ground. And then with its nose, it pushed the durian in. So the durian rolled into the depression, right? Now it's not rolling around anymore. And then it used its hooves to open it. Could you have thought of that, if you were a wild boar?

00:16:48 Ingg Thong

Probably not.

00:16:50 Xiaoyun

I think if I were to frame this, it's actually about how wildlife comes in a package. In our terms, we call it an ecosystem. We can't just have one without the other. You know, when I'm out looking for, let's say colugos, right? I'm not just looking for charismatic megafauna, or rather, charismatic fauna. I'm also on the way going to find many other animals that night. And if my guests ask me to look for a pangolin, I probably will not find a pangolin, but I'll find every other creature that is part of the ecosystem with the pangolins.

00:17:26 Ing Sind

I think you cannot pick and choose what you get in the ecosystem. And you will have the benefits and some of the inconveniences of living in a heavily, densely forested area. Like, you have very cool air, very nice shade, but you also have bees. You might have geckos on the walls and stuff like that. Again, these are actually quite minor inconveniences. But yeah, I guess it's up to public education – if you want to stay near forested areas, you have to deal with all this. You also have to deal with macaques. Actually, when I say deal with it, it's not like from a population management point of view, it's more like mitigation measures. So if you know there are going to be macaques in your areas, you should close your windows. You should clear your trash. You don't have foods lying out on the table with your window open. That's just inviting a macaque to come in. So it's all these measures that you can actually take to remove or lower these inconveniences for you, but a lot of people don't know that.

00:18:25 Xiaoyun

So thus far we've talked a lot about human-wildlife interactions and public perceptions of wildlife. Going forward, I'd just like to ask: what's your personal vision for Singapore as a City in Nature?

00:18:36 Ing Sind

What it means for Singapore to have a City in Nature, I guess is up to them to decide. But personally, my vision for City in Nature is where if a member of public sees a python sleeping in a forested area, maybe in Bishan Park, on a shrub or something like that, the first thing they do is to take a photo and upload it to Facebook and Instagram, with a happy comment like hey, I just saw a really cool sighting in Bishan Park. Rather than activate ACRES, activate NParks contractors to come and remove something that's just sleeping and is not actually even in any danger of affecting somebody.

00:19:08 Choon Beng

If you move into a HDB flat, you don't get to choose your neighbours, right? If it's brand new, you won't get to choose your neighbours. So, same thing. But you try to co-exist, and Singapore is multiracial and we have gotten to where we are so far because there's always been this amount of tolerance and understanding. And I think we can apply that same skill set to living with wildlife. I think if we all have a better understanding of wildlife, it will go a very very long way.

00:19:35 Ingg Thong

I think, personally, I'd echo the sentiments of the Choon Beng and Ing Sind, where to move forward it is very important for Singaporeans to understand what we have. Because a lot of them don't know what's in our forests. It's definitely very important to take the educational route,

and also to make people understand how much nature contributes to us as a country. And not only in the sense of cooling the country down, or providing us with fresh air and things like that, but more so, of mental health as well. Because being in nature, constantly seeing plants around you does have a great effect on boosting your mental health as well.

We cannot expect everyone in Singapore to love wildlife or love nature as much as us. But what we should strive towards is not inflicting harm, or undue harm on wildlife, or not disturbing them when they don't have to be disturbed.

00:20:26 Xiaoyun

And with that, we've come to the end of our episode. Thank you, Ing Sind, Ingg Thong, and Choon Beng for joining us today. Check out NParks' Wildlife Booklet on our website for more information about our wildlife companions in Singapore, and what we can do when we encounter them. Do share your thoughts about this discussion with us on NParks' socials, and give us a follow if you've enjoyed our content. My name is Xiaoyun, and thank you so much for listening to *That's Wild*. Stay tuned for more exciting conversations in the episodes to come!