shark tales

# An Unusual Nurse Shark

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Text by Ila France Porcher

**Shark ethologist Ila France Porcher shares perspectives and insights gained from the observation and study of sharks in Tahiti.**

At the time of this story, the blacktip reef sharks I was studying were being finned for the shark fin trade. Those who were missing and those who were still alive were the subjects of my concern, so I went out to see them whenever I could. I was so distressed about their slaughter, for just one soup recipe in just one of the world's many cultures, that I began writing down their story in the form of my first book, ***The Shark Sessions: My Sunset Rendezvous***.

This excerpt describes an episode in which one of the very large nurse sharks in the area began to display unusual behaviour, which was never explained.

## Observations

The weather turned windy on the day I got some shark food. The sky was a hazy grey, and confused waves beat against the kayak as I struggled out to the sharks. Underwater, a crowd of blacktip reef sharks encircled me, and many more were zooming out of the deep blue distance. Most were juveniles, safe in the lagoon, while the adults, who visited the ocean, were swiftly vanishing. Many had hooks stuck in their faces and jaws, and two were trailing metres of fishing line. A favourite swam in slowly and unsteadily as if infinitely tired. She had clearly just escaped being finned.

All of the females were barrel-like in pregnancy. Those who had been finned had died with their pups.

While the sun slowly sank, I turned in the darkening waters, watching, drifting and writing down the names of those present. I swam with each one, for I had a profound feeling of foreboding about them.

One of the three-metre nurse sharks swept down in slow motion to munch on the scraps, and billows of sand drifted as he writhed. More nurse sharks came, and the clouds they raised lent an air of mystery to the twilight scene.

## Newcomers

By the time night fell, I had been watching for over an hour and was in that dreamlike state that comes from bobbing around in cold water for too long. Suddenly, a large black shark zoomed up to my nose. She was a completely different colour from the other sharks present, yet when I had seen her just two weeks before, she had been her usual light brown. Another long-missing shark was with her, and she circled the lazing nurse sharks in her forthright fashion.

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Nurse shark with remoras attached underneath

# Nurse Shark

As I looked over the newcomers, trying to plumb the meaning of this extreme colour change in a shark outside of the reproductive season, I realised that one of the very large nurse sharks was always drifting near. Whenever I turned my head, I glimpsed him at the periphery of my vision. I was so accustomed to being surrounded by sharks, and the big nurse sharks moving in the site, that I had paid no attention. But finally, it became impossible to ignore the way this draft-horse-sized fish was always with me, both of us circling in slow motion.

The biggest nurse sharks were the most cautious and shy, arriving as darkness fell, and withdrawing if I moved around, to float gracefully back later. Never had a nurse shark, or any shark, followed me persistently in this way. Many sharks expressed curiosity briefly, but this relentless, slow and peaceful following was new.

## Tagging along

Then another of my favourite blacktips appeared, dragging fishing line. She seemed weak. Repeatedly, I dived down to look at her injured mouth, but it was too dark to see in detail. And throughout these manoeuvrings, the huge nurse shark followed me like a pet chicken. Once, I grabbed the kayak as I passed it to make sure that, if he grabbed me, he would not pull me under. He glided past just centimetres beneath my body. How strange it was that he was unconcerned with me and the kayak just above him. He seemed to know what he was doing!

More blacktips arrived and I moved with them, looking them over. It was a startling sight when I looked back to see the nurse shark flowing along behind me like a blimp with frills, his long tail slowly waving. Surely he had met me before, given how very shy the big ones usually were.

When darkness came, I picked up the anchor and got back into the kayak while the enormous creature drifted beneath. Then, slowly, he vanished into the shadows.

That night, I sat looking out to sea while the waves lapped gently upon the beach—a trill of sound, a pause of silence, another trill—measuring the time. Outside the reef, lights slowly passed by. Always there was a tension. I never knew who would die next.

My husband, who shared my concern over the shark massacre, came with me to the next session, but no nurse sharks appeared that time.

## Rare visitors

When again I received some fish scraps, it was a rare blue day, without a cloud or breath of wind. So, when the sun was low, I went out to the sharks. They were excited, moving fast and spread out over a wide area. From far off, a fighter plane formation of dark sharks came soaring together—a group of rare visitors. I drifted, watching as they socialised with the residents, flying through the vast grey space in the dying light. And as the twilight deepened, the great nurse shark began turning with me.

More blacktip sharks came, and I watched them, writing and diving down to examine their injured mouths. Every time I turned around, the nurse shark was right behind me, much closer this time than he had come before.

## Alarming encounter

When an unknown male shark appeared, I followed him to draw his dorsal fin. The nurse shark moved with me. After so long in the water, and possibly due to the cooling of my brain, it dawned on me, but slowly, that maybe my priorities were mixed up and that it was the nurse shark I should be watching. For at least fifteen minutes, I had been catching glimpses of him behind me when I turned, now within a metre. The previous time, he had been twice that distance away. When his face approached my right arm, I tried an evasive movement, doubling back past him. He flexibly turned with me at the same snail's pace to resume his position in my wake.

As I saw the absolute dedication with which he was following my every motion, I became alarmed. It was well after sunset, and shadows were swiftly enveloping the scene. I was quite far from my boat, and without changing my swimming pattern, I moved towards it and flew into it like a dolphin. The huge shark moved on, just under the kayak, his frills undulating around him.

As I drifted away across the glimmering sea, the full moon rose over the mountain.

## Unfathomable behaviour

The nurse shark's behaviour grew more unfathomable the more I mused over it. Two other big nurse sharks had been present on the occasions he had followed me. If I moved around very much, they disappeared down-current and returned later, which was their usual behaviour. To follow me uninterruptedly for so long, during two sessions, seemed extraordinary

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Nurse shark with pair of pilotfish, also known as golden trevally (right)

for such a large individual of a species with a preference for lying languorously, munching on the lagoon's floor. And he had remained hidden during the intervening session when I was not alone.

Although many nurse sharks normally attended my sessions, not one appeared if I brought someone else. What could it mean? That they knew me and not the other? That two people were too many, but one was all right? They certainly seemed more perceptive than they looked. It was another unsolved mystery that these languid sharks were so fussy about the presence of a second person that they would forgo an easy meal to remain invisible.

No matter how I thought about the nurse shark's behaviour, the essential point that no other shark had ever followed me in a similar fashion returned to the fore. Furthermore, the sharks were clearly aware of frontal views; the blacktips who knew me always came up to my face on meeting. But the nurse shark remained behind me as if he were deliberately remaining out of my view.

## Insights and warnings

I described the situation to a friend and shark ethologist, Professor Arthur Myrberg. He pointed out that, in species that learn from experience, it is the younger, and not older, individuals who investigate novel things. He noted that the shark was deliberately keeping a distance from me, if a short one. He felt that the most obvious explanation for his behaviour was that he was attracted to a scent I was trailing. He also suggested that the shark might have impaired eyesight.

He warned, "Nurse sharks can do damage, especially large ones. They can bite, and they do not let go. Their weight prevents one from dragging them, so a large nurse shark is extremely dangerous if it bites and hangs on!"

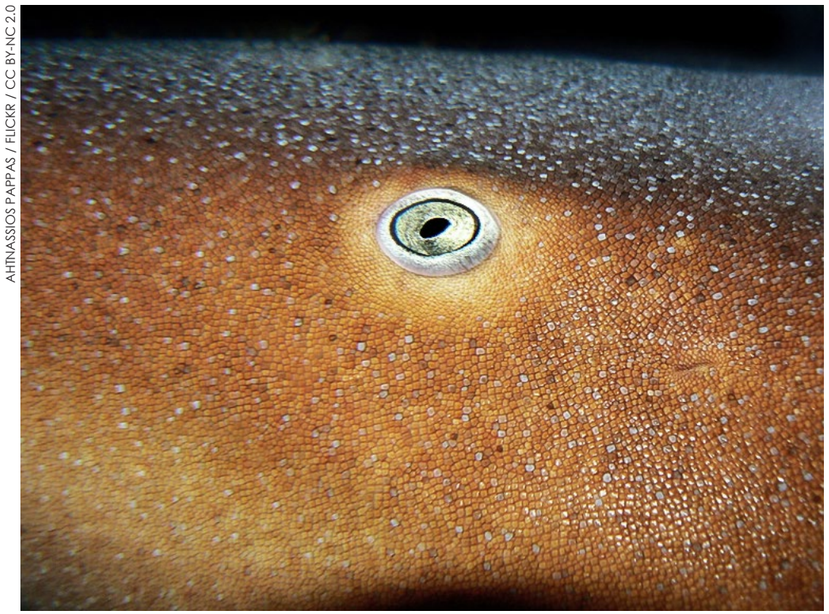
He suggested that if I returned to the area, I should take a shark stick and stay near the kayak, ready to put the end of the stick against the shark if he approached me again. This would prevent him from coming near. If I did that, he wrote, the animal would likely move away, in which case, I should remain still and continue to watch in all directions. (The purpose of a shark stick is to put a solid object between you and the shark so that it cannot approach. I was in the habit of using my arm for that purpose.)

Myrberg felt that I should take someone with me when I returned, and concluded: "You have a situation that is exceptional. Please be careful. Large nurse sharks are dangerous. Sharks are a peculiar bunch, and this one fits in well with that premise."

## Special session

I was sure that the shark was not following due to an odour from me—if any of my natural scents were interesting to sharks, I would have noticed long before. But perhaps his eyesight was poor. I decided to hold a special session just to observe this shark, to learn more and to look at his eyes. Then I would decide whether or not to continue to hold sessions there. Such a large animal was too much for me to cope with, and I did not know why he was following me. Since he was coming gradually closer, a certain danger seemed to be impending.

When the day came, I washed myself, my hair and my gear with unscented soap to cover the "interesting scent" theory. Then, I hauled the heavy kayak into the water, flung myself in and began the long voyage out to the lagoon. I forgot the stick and impa-



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Closeup of the eye of a nurse shark

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Nurse shark turning over the sandy sea floor

# Nurse Shark

tiently went back for it, shoving it carelessly up underneath the fish scraps. It had been windy all day, but each evening the wind had died down, so I expected it to die down as I paddled out to the site.

Instead, the wind rose. It beat me back with greater and greater force, as if it were a personal enemy engaged in an intensifying argument with me. As I pulled harder and harder to advance against its relentless attack, it yanked and jerked at the boat, blasted water into my face and tried to flip the paddle from my hands. It took all of my power just to keep the plunging kayak facing into it, and an endless time passed in which all my concentration was focused on just staying straight, while my concern about my predicament grew. Each wave rushed over me in snowy gushes, and I was blinded by the glitter of light in the spray flying from the wave-tops.

As I drew near the site, I was at the end of my strength. And then an overwhelming new blast from the sky swept the boat broadside and rapidly backwards. I threw the anchor in, snatching at my mask and snorkel as the rope shot out of the boat and nearly took them with it.

Weak and trembling, I sat there feeling done in, with the kayak leaping about. As I put on my gear, I saw, solid in the chaos of flying waters, a large, grey, triangular fin appearing and disappearing in the silvery uproar. And at that moment, my blacktips arrived and began swiftly circling the boat at the surface.

I watched, frozen with uncertainty. The battle with the wind had clutched hold of my mind, and the sight of the sicklefin lemon shark drifting by, accompanied by the arrival of so many thrilled blacktips, caused the underlying sense of danger from Arthur's warnings to leap to the fore. By chance, the fish scraps I had picked up had been unusually bloody, which no doubt explained the presence of the lemon shark and the delighted cavorting of my favourites around me at the surface.

I did not know what to do. There was a dangerous nurse shark, uncontrollable winds, too many excited and disrespectful blacktips, bloody scraps and now a lemon shark! And the sun was still fifteen degrees above the sea! (The sicklefin lemon shark of the Pacific is known for its temperamental nature.)

## Feeding

As I surveyed the wild scene in consternation, one of my favourite sharks raised her head up towards me in the boat in obvious expectation. So I started throwing in the food, and soon, the blacktips glided down to look it over. The lemon shark had not reappeared. But as I prepared to go in, one of the very big nurse sharks was right underneath! I paused in renewed uncertainty but managed to slide slowly underwater, looking swiftly around for more surprises.

Sharks were flying through the coral to the visual limit, the lemon shark was not in sight and the nurse shark's behaviour was normal. Surely the animal knew me, as a strange one would never come under the kayak in full daylight. He lay placidly, munching his way into a fish head, while multitudes of bright fish flew around him, feeding on the scattering particles.

I drifted away from the food and watched. The shark stick was still stuck under the last sack of fish scraps and would be impossible to extract quickly if I needed it.

## Dilemma

I wrote, watched and checked around me. When the time came to have the shark stick ready, I worried that working at the kayak with my head above the surface could precipitate a rush. In waters wild with sharks, I would be unable to see if the lemon shark had joined the blacktips. The kayak could overturn in the wind and waves, causing incalculable trouble.

The problem circled through my mind faster and faster as the darkness deepened and the probability shot up that the dangerous shark would appear. Paralysed with anxiety, I stayed riveted in place, making and abandoning plans, while Arthur's words of warning gained alarmingly in significance.

But then two of my beloved lost sharks dashed up, and for a few moments, I relaxed in the pleasure of throwing them some morsels. Then I simply went to the boat and started working on freeing the shark stick. Indeed, it was easy to detach. While the sharks were temporarily down-current, the last sack fell uneventfully to the floor. It was a reminder of how paralysing and often irrational fear is.

The sun set, the unusual nurse shark did not come, and when night descended, I got in the kayak and was swept away by the wind. The outing had been an unforgettable nightmare.

## Following sessions

The following week, I tried again to find the enigmatic nurse shark. The waters were still turbulent and clouded, and everything looked grey and shadowed under the ruffled

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Tawny nurse shark (*Nebrius ferrugineus*)

surface and low sky. The current was so strong that I could not maintain myself against it, so I trailed in it with my back to the direction from which the creature would approach. Thus positioned in the scent flow, sharks flew past me from behind, and the need to glance backwards while holding my mask in place was a continual distraction. But I identified several rare visitors, which was the highlight of the session. The nurse shark did not come.

But at the next session, my faithful follower swept casually in behind me and followed a metre behind. As we neared the site, he accelerated to chase another large nurse shark away from his scrap. I could not tell if he bit him or not—I had never seen a nurse shark do such a thing. This did not fit in with the theory of him being blind. It fitted in with the theory of him being aggressive.

At first, I had been unconcerned by his arrival, but after that, I drifted to the kayak. I had forgotten to take a stick with me. My former worries about this problematic creature had faded from my mind in the far greater concerns over the shark finning. With the sun sunk in heavy cloud in the west, the scene was shadowed. So when the nurse shark glided away from the food and circled infinitely slowly around me, it was impossible to see his small eyes in detail. He appeared less interested in me when I remained still. It was when I was moving around that he was stirred to follow me.

He seemed more active than the other nurse sharks, constantly moving around and changing position. He trailed another large nurse shark, nose to tail. Perhaps he was simply a very unusual individual. He certainly did not look handicapped—he seemed to be in excellent shape. Night slowly fell as I watched from the kayak. While I was actually with the dreaded shark, I did not have a moment of anxiety, as he seemed so peaceful. How strangely fear works.

I planned to spend more time with him in the future, in hopes of getting to know him more, and watched for him as the weeks went by.

But I never saw him again. ■

*Read more about sharks, with additional insights into their remarkable intelligence, and sentience, while facing ever-present threats. Buy the full ebook or paperback,* The Shark Sessions: My Sunset Rendezvous, *by Ila France Porcher at:* ***amazon.com****.*

*Ethologist Ila France Porcher, author of* **The Shark Sessions** *and* **The True Nature of Sharks**, *conducted a seven-year study of a four-species reef shark community in Tahiti and has also studied sharks in Florida with shark-encounter pioneer Jim Abernethy. Her observations, the first of their kind, have yielded valuable details about the reproductive cycles, social biology, population structure, daily behaviour patterns, roaming tendencies and cognitive abilities of sharks. Visit:* ***ilafranceporcher.wixsite.com***


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