

ACTIVITY: Scuba diving for abalone

CASE: GSAF 2007.01.23

DATE: Tuesday 23 January 2007

LOCATION: The incident took place in the Tasman Sea at Cape Howe, about 250 miles south of Sydney, New South Wales, Australia.

37°30'19"S, 149°58'35"E

NAME: Eric Nerhus

DESCRIPTION: He is a 41-year-old male, a professional abalone diver from Eden.

BOAT: Unknown. His son, Mark, was driving the support boat.



BACKGROUND

WEATHER: At 09h00, Merimbula recorded air temperature of 69°F [20°C], dew point 61°F [16°C], humidity 68%, sea level pressure 29.97 inches [1015hPa], and wind direction was East at 3.5 mph [5.6 km/h].

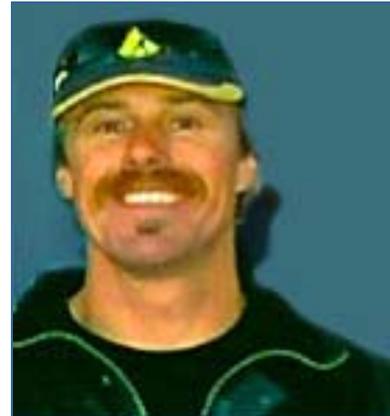
MOON PHASE: Waxing Crescent, 19% of the Moon's visible disk was illuminated.

SEA CONDITIONS: Rough conditions had deterred many divers from venturing out that morning. Nerhus told fellow divers he didn't see the shark coming as the water was so dirty that visibility was severely limited.

ENVIRONMENT: There had been a rash of white shark sightings in previous weeks due to unusually cold waters off Eden, and swimmers were evacuated from three popular NSW south-coast beaches after sharks were spotted during routine aerial patrols.

DEPTH: The diver was near the seafloor at a depth of 25 feet [7.5 metres]

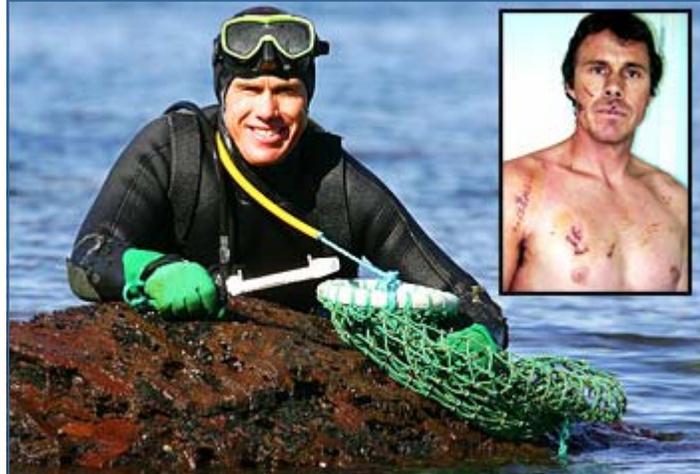
TIME: 10h30



Eric Nerhus

NARRATIVE: Eric Nerhus was diving with his 25-year-old son and a group of other divers at Cape Howe: "I was diving in one of the spots where I've been hundreds of times before, on the northern side of Cape Howe [New South Wales] in about 26 feet of water." he said. "I was following a line of abalone on the sea floor, on top of the reef, and had my head down, concentrating on making sure they were the correct size. We gather the abalone and put them into a bag we carry."

“Next minute, I was just hit that hard; I was a bit shocked because I wasn't sure what happened to me. Then I'm in like a dark cave that's squashing me like a vice, up and down. I'd gone straight into its mouth, frontwards. My shoulders, my head and one arm went straight down into its throat and I could feel the teeth crunching on my weight vest. When the shark bit me, the teeth that didn't go on my legs hit my weight vest and penetrated right through my wetsuit. When it shook its head, they're the [teeth] that cut me the deepest.”



The Daily Telegraph

*Eric Nerhus was back in the water on April 7, 2007.
(inset) Eric's scars after the incident.*

“It knocked the regulator out of my mouth, so I didn't have any oxygen. Then it started to shake me. I thought, ‘Oh, no’ because I know what happens when they shake you; that's when they cut off the biggest piece of meat they can get. I put my left hand down the side of its face because my head, shoulders and right arm were right down in its throat. All the way down in its throat. Half my body was in its mouth. I felt down to the eye socket and with my stiff fingers, I poked my fingers into the eye socket, which made the shark open its mouth a bit, and I tried to wriggle out. It was still trying to bite me. I broke my nose where it crushed the goggles on my face as I was pulling my head out of its mouth. My goggles fell into its mouth. I was very, very lucky. Once I got out of its mouth, I thought it was going to fly straight into me again.”

“The first thing I did was to put my reg back in and get a breath of air, which enabled me to act in a calm manner and ascend nice and carefully without kicking and splashing too much. I didn't want to excite it any more than it already was. I held my abalone bag in my left hand between the shark and myself. Even though I didn't have my goggles, I could see it quite clearly because it was that close to me. It was circling around my flippers – round and around in tight circles – and the big, round, black eye was like a five-inch eye staring straight into my face with not one hint of fear of any boat or any man or any other animal in the sea. They've got no fear at all, those sharks. Just before I got out of the water, it was coming under my legs again, so I'm sure it would have probably bitten my legs off on the next one, and Mark [who was in the dive boat] would have lost me.”

Mark Nerhus, said, “He come up to the surface and he was going ‘Oh! Help, help! There's a shark, there's a shark!’ and I went over there and there was a big pool of red blood and I pulled him out of the water,” Two other young divers in a nearby boat rendered immediate first aid and one radioed his father, who was flying overhead in a spotter plane, to call for emergency help.

INJURY: The shark apparently attempted to close its jaws on the diver. The brunt of the bite on diver's torso was taken by his lead-weight vest. Abalone divers spend sometimes six to eight hours underwater and use lead-weight vests, not lead weights on belts, to control their

buoyancy. The vests spread the lead weight across the torso, minimizing back strain. The diver, however, sustained injuries to his head, torso and left arm. The shark's bite crushed the faceplate of the diver's mask against his nose, breaking his nose. At least 14 of the shark's teeth punctured the diver's lead vest. There were tooth marks from the right shoulder to below the left armpit. The deepest wounds were to his right shoulder, approximately 2 to 3 cm deep at the most, and from the damage to the wetsuit, approximately 10 cm in length. The puncture marks on his left pectoral muscle were superficial, as were the two scratches to his right cheek.

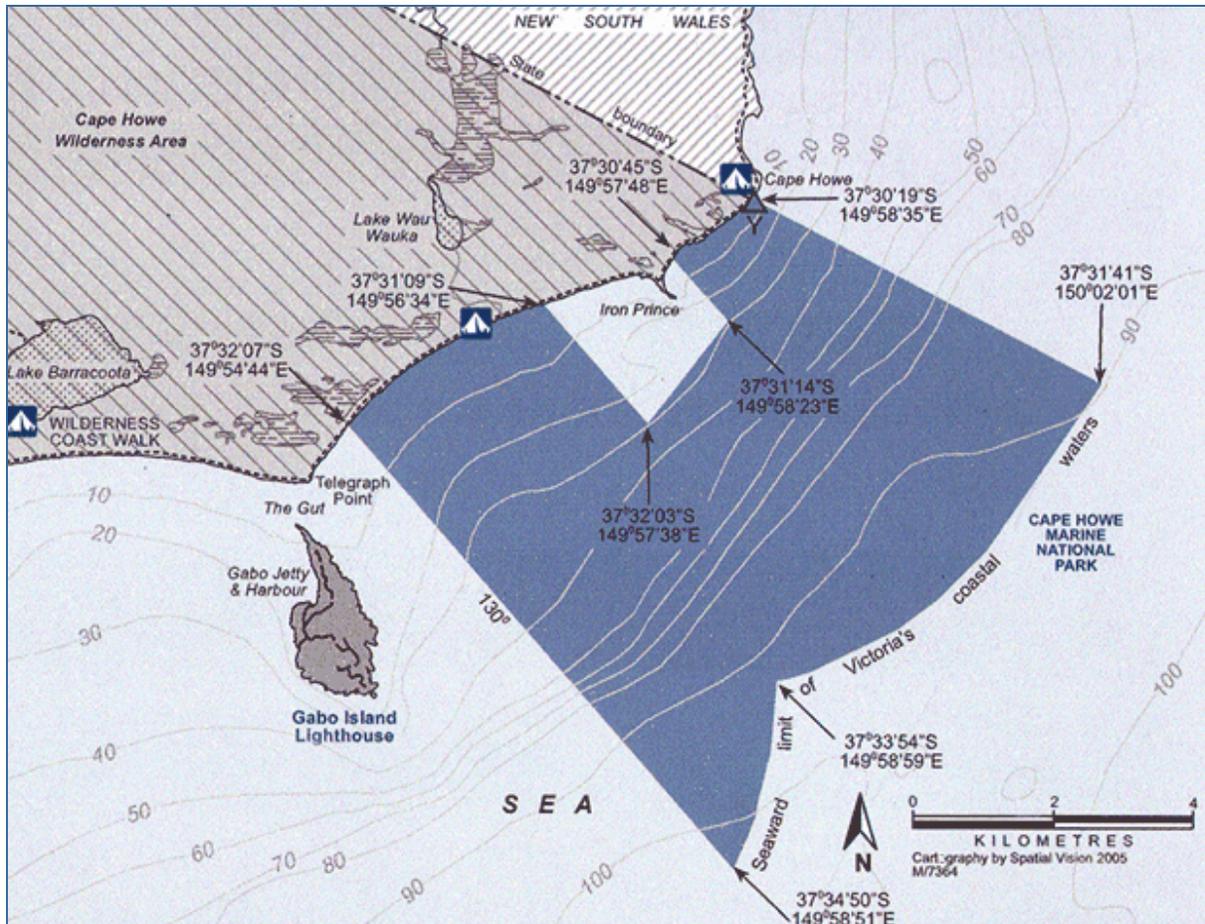
FIRST AID: A Snowy Hydro Rescue Helicopter spokeswoman said the patient was flown to Wollongong Hospital rather than Canberra, which is closer to Eden, to allow the helicopter to fly at a lower altitude. Transporting the patient at too high an altitude would have caused him to suffer decompression sickness, where nitrogen bubbles form in the blood, she said. "When he came to us he was conscious and alert but had a broken nose and lacerations to both sides of his torso and chest — bite marks all the way around," the spokeswoman said. The Snowy Hydro Rescue Helicopter arrived shortly after 11h10 and flew the patient to Wollongong Hospital suffering blood loss and shock. Mr Luobikis, 53, said it was a miracle his friend had lived to tell the tale. "Eric is a tough boy, he's super fit," he said.

At the hospital later the same day, the patient was in a serious but stable condition. His injuries required 75 sutures.

SPECIES: The incident was believed to involve a white shark, about 10 feet in length.

Nerhus said later: "I have no animosity towards the shark, because I realise that it obviously mistook me for its natural prey, which would be possibly a seal. They're designed perfectly for the purpose they were created for. I'm glad I'm still around. It makes you realise how short life is, if you have an accident or something happens. I think I'd better start having a different outlook and enjoying life a bit more — less work and more fun. It just wasn't my time to go. Sometimes you get a break in life. I'm a working man that just wanted to survive very, very badly, at all costs. I'm so fortunate my survival instincts and reflexes took over, enabling me to get out of the jaws. I've got a very nice family. I enjoy their company. And I didn't want to lose my life that way. I'm very blessed it worked out for me in the way it did. The children have already told me I'm not to continue diving. When you think about it, this is probably a one in ten million chance of escape from some harm. Everyone's been telling me I should buy a lottery ticket. It might be good advice."

CASE INVESTIGATOR: Phil Kemp, Global Shark Accident File



DISCUSSION:

While Eric was in the shark's mouth he said the shark shook him a bit. The way Eric described it, and due to the extent of his wounds (even though he was wearing chest webbing with lead weights in it), the nature of the 'shaking' suggests that the shark was 'exploring' or sizing him up. After the shark released Eric, he said that it circled him slowly at a close distance. Eric also stated that while the shark circled him it kept its eye on him the whole time. He reported that the shark never made any abrupt movements towards him or in any other direction. The shark just swam in a calm and casual manner and continued to observe him until he was pulled out of the water in to the boat.

Eric and his colleagues commented that they were surprised with blood in the water from Eric's broken nose and open wounds the shark didn't behave aggressively, nor did it make any other attempts to bite him.

One of the hunting strategies of a white shark is to make an initial, crippling bite on a prey animal, then retreat until it bleeds out and becomes an easier meal. ...*Aiden Martin*

A few teeth penetrated the lead weights and the divers believe Eric survived because of his lead vest. All divers need lead to submerge, but abalone divers use a lead vest rather than

a weight belt. 'We've always felt (the vest) would probably help us in a shark attack and this is the first time we've had it confirmed,' Mr Luobikis said.

I spoke with Rodney Fox about his attack back in the 1960's. He recalled that when the white shark bit him, he felt immense pressure. He said when the shark grabbed his torso he felt "as if all of his insides were being forced to the opposite side". If the white shark that bit Eric had closed its jaws with the same amount of force, he should have felt a similar pressure even though he was wearing the lead webbing around his chest. Eric felt the pressure on his face (enough to break his nose against the faceplate of his mask) but he said that occurred when he attempted to pull his head out of the shark's mouth. It may be that the shark that bit Rodney Fox was 1) considerably larger. or 2) the shark's motivation in this incident was different.

The shark may have been drawn to the immediate vicinity of the diver by the scraping sounds made by the ab iron as the diver pried abalone from the rocks. Visibility was very poor but the shark no doubt sensed the presence of the diver and was curious. The diver was an unfamiliar animal and so the shark used its mouth to discern/learn what he was. From the description of the incident and the extent of Eric's wounds it appears the shark applied minimal bite force, just enough to hold the diver while it shook him around a bit. Eric believes the shark shook its head in order to remove large chunks of flesh, but it doesn't seem that was the shark's intention in this case; if the shark so intended, it could have bitten Eric in half despite the lead weights. Maybe Eric's punch/poke in its the eye was enough encouragement for the shark to release the diver, or the shark was about to release him anyway after satisfying its curiosity, and it hung around to observe him further. What do you think?

Also, when it comes to the mistaken identity theory and whether the shark may have mistaken a diver clad in black for a seal...white sharks (at least here) don't hunt seals along the seafloor. Further, when sharks go after seals they generally hit them with force. Would the shark really risk letting its prey escape with a half-hearted test bite?

"Refer to the case where, in September 1974, commercial abalone diver Jon Holcomb was attacked by a white shark. Jon Holcomb's case is interesting in several respects. Unlike the majority of white shark attacks on humans, in which the victim is bumped or bitten while floating more-or-less motionless at or near the surface, Holcomb was bitten while swimming close over the seabed. Like Eric, he got off lightly with non-life-threatening injuries. But what is even more remarkable is the shark's behaviour during the incident. Although the attack seemed sudden and violent from Holcomb's perspective, the initial strike was surprisingly gentle. The shark bumped Holcomb repeatedly in the chest, grasped one of his arms, shook and released him, then swam around to the other side, grasped his other arm, shook, and released him. It was very uncharacteristic of the no-nonsense, full-force charge white sharks so often employ when attacking prey.

Also refer to the case of Rodney Orr, September 1990, off Jenner, California" ...*Aiden Martin*

Because the timeline in this case is somewhat unclear, I went back and watched the taped interview with Eric and I picked up on something that I missed while I was taking notes. When Erich was asked how long he was inside the shark's mouth, he said he was up to his

waist (head first) for two minutes, and the shark was biting and shaking him for the entire two minutes. He based this on the fact that while he was in the shark's mouth his regulator was knocked out and he was starting to run out of air before he managed to free himself and retrieve his regulator.

Eric may be able to hold his breath for two minutes under normal circumstances, but his heart rate and O₂ consumption would have soared when he realized he was in the mouth of a shark. No doubt it felt like a long time to Eric, but under the circumstances his air consumption would have been greater than normal, making it unlikely that he held his breath for that length of time."

I do believe that Eric has embellished a bit there, and with that said I would also like to mention that he has now made thousands of dollars for his story. *No problem at all with that — Eric is unable to work, has bills to pay, and his story is big news*, but every time it's told the shark gets bigger, the shaking and biting of the shark gets longer and stronger. But I guess that's just human nature.

I'm not too familiar with the relationship between the jaw height and width and overall size of the shark. I have looked everywhere for a table of such info but haven't had much luck.

Would you agree that if it was a 9 to 10 foot animal the jaw height and width would be no more than about 35 x 37 cm (14 x 15 inches)?

I managed to take one good photo of the TV screen with my digital camera of Eric while in hospital (sorry that's not very clear) but I hope it helps. I agree with you that the injuries to his face would be due to the face mask being crushed against his face.

Take a close look at his right armpit (next page), there appears to be to a reasonable gash exposed, and the small markings on his left chest. I also saw some footage of Eric's colleagues holding up his wetsuit to the cameras revealing a hole approximately 10cm in length located at the right shoulder joint. This may have been caused while he was in the shark's mouth and being shaken by the shark.

I have also passed this info along with the photo to Erich Ritter.

. . .*Phil Kemp*