

ACTIVITY: Hookah diving for locos

CASE: GSAF 1980.01.05

DATE: Saturday January 5, 1980

LOCATION: The incident took place in the southern Pacific Ocean at Punta Negra, seven kilometres south of Pichidangui, Chile.

NAME: José Larenas Miranda

DESCRIPTION: The diver was clad in a black neoprene wetsuit with black fins and mask. He was carrying a collecting bag in his left hand and a pry bar in his right hand.

SUPPORT BOAT: A seven-metre wooden boat with a beam of 1.4 metres.



BACKGROUND

WEATHER: The day was overcast and calm with no wind.

MOON PHASE: Full Moon, January 2, 1980

SEA CONDITIONS: The water temperature was about 16°C, and underwater visibility was eight metres.

ENVIRONMENT: Punta Negra has a steep rocky shoreline. In the days preceding this incident divers had seen parts of sea lion bodies on the seafloor, but the cause of the animals' death was not apparent.

TIME: 11h00

NARRATIVE: Miranda had completed a 35-minute dive during which he speared fish and collected locos. Then he moved to a second site that was within 150 metres of a sea lion haulout while the boat remained 20 metres from the shore in a metre of water.

The diver entered the water, swam five metres from the boat and descended obliquely. After about a minute he ceased moving forward and no exhaust bubbles were seen. Pressure began to build in the accumulator tank and then a mass of bloody bubbles ascended. At that moment, the head and anterior trunk of a large shark broke the surface three metres from the boat. The diver's decapitated upper torso, left arm and shoulder were hanging from the shark's mouth by a portion of the wetsuit. The shark dislodged the remains, submerged in a circling pattern. It reappeared with its head above the surface and its mouth open.

Nearby boats came rapidly to the site as the shark circled and occasionally mouthed the body. Motormen of the approaching boats tried to drive off the shark by revving their motores, This partially succeeded and the men in Miranda's boat were able to recover the body, now exsanguinated. As they were doing this, the shark attempted to snatch away the body, passing close by and biting its right arm. The shark moved off about 15 metres from the boat and then rammed it at high speed with its head out of the water and its mouth open. The boatman managed to turn the boat obliquely to avoid the collision and the impact was taken on the port stern, lifting the boat from the water and turning it 90°. The boatman

started the motor in an attempt to escape, but the shark then violently bumped the prow with side thrusts of its head. The shark's snout was even with the prow of the boat and its tail was seen to extend about a metre beyond the stern. It was as broad as the boat's beam. The boatman guided the boat to shoal water and the shark followed and became grounded. The crew escaped before the shark freed itself.

INJURY: Fatal. Autopsy at the Los Vilos Hospital on January 9th showed decapitation at the 7th cervical vertebra, including amputation of the shoulder and left arm. The clavicle was lost, as was part of the scapula and a mass of corresponding dorsal musculature. The wounds were surrounded by jaggedly cut skin. The midsection was wounded due to secondary bites by the shark, producing both dorsal and ventral lacerations, vertebral and rib fracture, lung penetration, and penetration of the abdominal cavity. The right arm showed a six-centimeter laceration inside the elbow. No shark tooth fragments were recovered.

Observations by witnesses and the character of the wounds suggested that the diver saw the shark coming and attempted to fend it off with his left arm. Secondary wounds on the cadaver as it floated belly-down show bites of the shark on the upper torso. Displacement of dorsal and ventral wounds on the

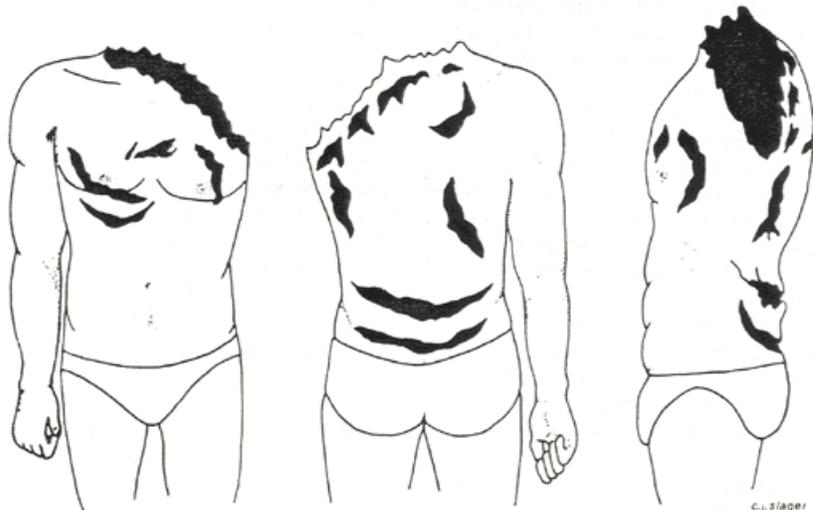


FIGURE 2. Illustration of cadaver of José Larenas Miranda, attacked at Punta Negra.

body indicate that the weight belt may have prevented penetration by the shark's lower jaw teeth. Thoracic wounds were probably produced by lateral teeth.

SPECIES INVOLVED: The shark was described as having a brown-gray dorsal surface and white ventral surface. The dorsal fin was broadly triangular and the tail lobes appeared subequal. It was estimated to be more than seven metres in length. On the basis of the attack behavior and the nature of the wounds, the incident was believed to a white shark.

SOURCE: John E. McCosker and Alfredo Cea Engaña (1984), pages 175-177



Locos