



ACTIVITY: Standing
CASE: GSAF 1961.01.06.c / SA-143
DATE: Friday January 6, 1961
LOCATION: The incident took place in the Indian Ocean at Winkelspruit, 33 kilometres southwest of Durban, KwaZulu-Natal, South Africa.
 30°05,6'S, 30°51,9'E

NAME: Michael Land
DESCRIPTION: He was a 13-year-old male, 1,47 metres tall, brown-haired and lightly tanned. He wore light-green swimming trunks and a thin silver chain with a St Christopher's badge around his neck.

BACKGROUND

WEATHER: Durban meteorological station recorded that temperatures ranged between 18,4° and 28,7°C, and no rain fell. At 08h00 there was 1/8 cloud cover and a gentle 7-knot northerly breeze was blowing. By 14h00 the sky was completely overcast and there was a gentle eight-knot easterly breeze.

MOON PHASE: Waning Gibbous with 90% of the Moon's visible disk was illuminated. Full Moon, January 2, 1961 at 01h06 (Universal Time + 2h).

SEA CONDITIONS: The sea was murky; heavy rains caused flooding of rivers which carried silt downstream into the sea and produced widespread discolouration of the sea along the entire KwaZulu-Natal coast. The water is warm at this time of year, the estimated water temperature was 24°C, and the incident occurred 90 minutes after mean high tide. A shallow sandbank extended from the beach to a deep channel. This channel was bordered by a second sandbank that ran parallel to the beach. The incident took place on the edge of the channel where it was partly obstructed by a chain of submerged rocks.



ENVIRONMENT: In 1961, sei whale abundance off Durban, as measured by both catch and sightings data, was at its highest in 14 years.

DISTANCE FROM SHORE: 15 metres

DEPTH: The incident took place on the shoreward rim of the channel where the water was about two metres deep but the boy was standing on a rock which projected about a metre above the sand.

TIME: 19h35 (Sunset was at 19h01)

NARRATIVE: Michael Land had been swimming with five other boys on the inner sandbank. He was standing in the water next to submerged rocks on the edge of the channel when his right foot began to itch. As he reached down in to the water, his right hand was bitten. He screamed, flailed the water with his arms and appeared to be “struggling with something”, according to witnesses. He turned towards the beach and fell face-down in the water. His screams alerted two life-savers: one life-saver reached Land and was half-way back to shore with him - with the shark following two metres behind - when they were joined by the other life-saver. The shark was not seen again and the life-savers carried Land to the clubhouse.

INJURY: The right foot, leg and hand were bitten. The tibia was exposed and disarticulated at the ankle and the fibula was broken; the edges of the wound were clean-cut and the foot, attached to the leg only by a strip of skin, was amputated on the beach by the doctor. (It was this bite which caused Land to topple forward during the attempt to escape from the shark.)

The knee was lacerated; the most severe lacerations were at the back of the knee, and there were three tooth marks below the knee. There were additional lacerations on the back and inside of the thigh but, unlike the wounds on the lower leg which had clean-cut edges, these had a torn appearance. There were also two flattened tooth marks below the right buttock. The bite on the back of the right hand severed tendons and caused extensive damage.

FIRST AID: Life-savers followed the procedure for treatment of shark attack victims suggested by a medical Research Associate of the Oceanographic Research Institute and a tourniquet was applied to Land's right leg. Land was considered to be in good condition by the doctor when he arrived and he was taken to Addington Hospital by ambulance.

TREATMENT: When Land arrived at the hospital blood transfusions were given and he was prepared for surgery by 09h00. Lacerations on the right leg and hand were sutured and his right leg was surgically amputated about 15 centimetres below the knee.

SPECIES INVOLVED: No tooth fragments were recovered, nor were any seen on X-ray. On the basis of available evidence Dr David Davies and Jeanette D'Aubrey concluded that the incident involved a grey shark, most likely a Zambesi shark about 2,13 metres in length. However, the wide gap between tooth impressions and the bridges of skin between points of insertion of the teeth on the foot indicate the incident involved a white shark, *Carcharodon carcharias*.

COMMENT: From examination of the wounds and accounts given by Michael Land and witnesses, Davies and D'Aubrey established that the shark made multiple strikes on the

boy. The initial bite was made on the right foot and the second on his right hand. The shark made a series of “tentative” bites on his thigh and bit his knee which caused extensive lacerations and a partial dislocation of the knee joint. The shark bit the lower leg above the ankle, severing the bone, which caused him to pitch forward into the water.

CASE INVESTIGATORS: Dr. David Davies and Jeanette D’Aubrey



Caption: “The Three Michaels . . . at Addington Hospital on the 16th birthday of Michael Murphy (left). Michael Hely (right) visited Michael Land and Michael Murphy, both of whom will probably be discharged . . . as their artificial limbs have been fitted. Michael Hely has still to have another operation.” ...Eastern Province Herald.

Michael Hely - GSAF 1960.04.30

Michael Murphy - GSAF 1961.01.22

Boy Bitten 7 JAN 1961 By Shark In Natal

Cape Times Correspondent

DURBAN. — Eleven-year-old Michael Land, of Luanshya, Northern Rhodesia, was attacked by a shark in 3 ft. of water about 100 yards from the edge of the surf near Winkelspruit swimming baths at 7.30 last night.

Doctors report his leg would have to be amputated, probably below the knee.

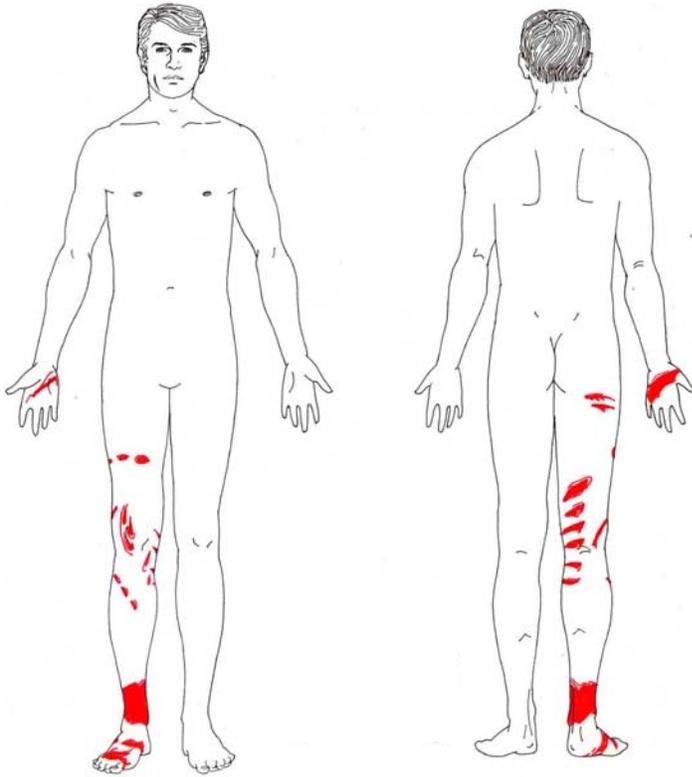
He was swimming with four other youths when the shark bit him just below the left ankle.

EMERGENCY OPERATION

Hugh Cruddas, captain of the Winkelspruit Life-saving Club, and Eddie Vincent, who is also a life-saver, rushed to Michael and took him out of the surf while other life-savers called two doctors.

Michael was taken to Addington Hospital by ambulance and there doctors performed an emergency operation on his leg. Early this morning Michael's condition was reported to be satisfactory.

Eddie Vincent said last night: "I heard screams and rushed into the surf fully clothed while Hugh Cruddas went to get a lifeline."



SOUTH AFRICAN ASSOCIATION FOR
MARINE BIOLOGICAL RESEARCH



OCEANOGRAPHIC RESEARCH INSTITUTE

Investigational Report No. 3

SHARK ATTACK OFF THE EAST COAST
OF SOUTH AFRICA, 6 JANUARY 1961.

by

D. H. Davies and J. D. D'Aubrey

Durban, South Africa
1961