

**ACTIVITY:** Boogie boarding

**CASE:** [GSAF 2011.07.19](#)

**DATE:** Tuesday July 19, 2011

**LOCATION:** The attack took place in the Atlantic Ocean near Ramp 72 in the South Point area of Ocracoke Island, Hyde County, North Carolina, USA.

*35.1150°N, 75.9883°W*

**NAME:** Lucy Mangum

**DESCRIPTION:** She is a six-year-old female. She was wearing a one-piece swimsuit (black, yellow, pink and green) and wore a black board leash on her wrist. She had no injuries prior to the accident. She is four feet tall and weighs 35 pounds.

**BOARD:** A 2.5 ft boogie board: yellow and blue upper surface, black under surface.

#### **BACKGROUND**

**WEATHER:** At 16h51, Hatteras recorded a clear sky and 10-mile visibility. The air temperature was 84.9°F, dew point 71.1°F, humidity 63%, sea level pressure 29.86 inches and wind direction was SW at 12.7 mph with gusts to 19.6 mph

At 17h51, the sky was still clear with 10 mile visibility. The air temperature was 84°F, dew point 72°F, humidity 67%, sea level pressure 29.86 inches and wind direction was SSW at 11.5 mph with gusts to 17.3 mph.

**MOON PHASE:** Waning Gibbous, 81% of the Moon was illuminated. Full Moon, July 15, 2011. Last Quarter, July 23, 2011.

**SEA CONDITIONS:** The sea was bluish green and very clear. The sea was calm with small waves, and no channel was present. Mean low tide took place at 17h41. Sea surface temperature was 85°F, estimated.

**ENVIRONMENT:** Ocracoke Island is part of the Cape Hatteras National Seashore. The entire island is owned by the US National Park Service, except for the village. The incident site is 1.8 miles from the inlet. The water at the incident site was very shallow for quite a distance out. There are several sandbars in the area where the girl was boogie boarding and just to the north are several troughs

**DISTANCE FROM SHORE:** Six feet

**DEPTH OF WATER:** 18 inches

**TIME:** 17h15 (Sunset was at 20h16)

**NARRATIVE:** Six people were on the beach, and four people were in the water. Lucy was



in the water with her mother and sister. She had been in the water about 20-30 minutes and was lying prone on her board facing shoreward when the shark came up from behind her and bit her right leg twice. Deputy Emergency Services Director Brian Carter said bystanders witnessed what was thought to be a shark attacking the girl.

Lucy's mother, Jordan, who was about ten feet away from her daughter, heard her scream, immediately turned towards Lucy and saw the shark right next to her. Jordan ran over to her daughter and took her from the water.

**INJURY:** Although no tissue was removed by the shark, Lucy sustained severe lacerations. According to Dr. Richard Zeri, chief of plastic surgery at East Carolina School of Medicine, "She has significant lacerations to her calf, her ankle and her foot, and injury to one of the major vessels that brings blood supply to the foot and the leg." Lucy sustained a 90% muscle and tendon tear, and a severed artery. The measurement from Lucy's foot to knee cap is about 12.5 inches. The bite is about 5 inches across.

**FIRST AID:** Lucy's mother applied pressure over the bite areas with both hands. Lucy's father, Craig Mangum, an ER doctor, described the injury as "basically the entire lower leg from the mid calf down just sort of filleted. I was able to see the extent of the wound. It was a pretty significant wound. I realized this thing was way too large and it would have to go to a level-one-trauma center."

Hyde County EMS, National Park Service, and Ocracoke Fire Department responded to a call at Ramp 72. Lucy was transported by private car, then truck, then by ambulance to a waiting helicopter. Paramedics with East Care flew her by medical helicopter to Pitt County Medical Hospital in Greenville, North Carolina

**TREATMENT:** Lucy arrived at Pitt Memorial Hospital about 60 minutes after she was bitten by the shark and underwent surgery.

**SPECIES:** Although the most common species of sharks found close to shore in North Carolina are sandbar, bull, scalloped hammerhead and sharpnose sharks. Local experts believe the incident involved a juvenile tiger shark. Dr. Gordon Hubbell believes the accident involved a 5.5-foot bull shark, based on the species' tendency to inhabit shallow water, its aggressiveness, and the lesions on the girl's calf.

**SOURCES:** Jordan Mangum; Kenny Ballance, District Ranger, Ocracoke District; The Virginian-Pilot, July 20, 2011; Eyewitness News & ABC News, July 20, 2011.

**CASE INVESTIGATORS:** Clay Creswell and Dr. Gordon Hubbell, GSAF