ACTIVITY: Snorkeling
CASE: GSAF 2011.06.30
DATE: Thursday June 30, 2011
LOCATION: The accident took place in the Atlantic Ocean in Mudjin Harbour, Middle Caicos, Turks and Caicos.

Mudjin Harbour : *This is the coral rock outcrop where Tyler was injured. He was just on the other side of the wall.*

NAME: Tyler Cyronak
DESCRIPTION: He is a 28-year-old male from Malvern, Pennsylvania. He is 6'1" tall, weighs 190 lbs. He was wearing black board shorts with a small white and blue line across the middle, black dive booties and black fins, blue snorkel and mask. He wore no jewelry and had no injuries before the accident.

BACKGROUND
WEATHER: It was a sunny day, the air temperature was in the mid 80ºs, and there was a 5 to 10 mph easterly breeze.
MOON PHASE: Waning Crescent, 1% of the Moon was illuminated. New Moon, July 1, 2011.
SEA CONDITIONS: The sea was bright turquoise, and the sea surface temperature was 80ºF, estimated. Underwater visibility was 25-30 feet and no channel was present. There was a slight chop outside the reef.
ENVIRONMENT: He was in a sandy cove with a rocky ledge jutting out onto the reef. The reef dropped off sharply right beyond the ledge.
DISTANCE FROM SHORE: 400 ft from beach but right next to rocky ledge.
DISTANCE FRM ROCKS OR PIER: Five to ten feet.
DEPTH OF WATER: Eight to ten feet
TIME: 13h30

NARRATIVE: Ten or 15 people were on the beach, but only one other person was in the water — another snorkeler close to the shore. Tyler had been in the water for about 15 minutes, and was facing the rocky outcrop.

"I was snorkeling out by the rocky outcrop and noticed bubbles from where waves were coming across the top of the rock. I couldn't see anything because of the

bubbles so I backed up…wanting to look what was underneath the bubbles I dove down. could see the bottom, so my torso and shoulder were in the bubbles from the waves and turbulence. Then I felt a sudden thwack on my shoulder, it felt like getting hit with a baseball bat. Thinking I may have hit a rock I quickly turned but felt no rock with my fins or hand. It occurred to me it may have been a shark so I quickly swam to the closest ledge along the outcropping, pulled myself out of the water, and then realized my shoulder was sliced open. I never saw the shark."

INJURY: Lacerations to left shoulder and back. He sustained tissue damage but no tissue was lost. "The biggest gash on the top of my shoulder was about 0.5 in deep, but no injuries to muscle or tendon. . . I never saw the wounds on my back prior to stitches. I don't have the doctor's info on hand but if it is important I can get it for you."

TREATMENT: "I got 18 stitches from a local doctor, no photos or records were taken of the wounds prior to stitches."

SPECIES: Tyler didn't see a shark, but did not feel a rock with his fins or hand.

Shark expert Ralph Collier examined the photographs of Tyler's wounds and concluded that he was bitten by a carcharinid shark, but was unable to determine the species involved in this accident.

"The subject sustained a wound to his shoulder arising at about 45 degrees from the top of the left shoulder and extending in to an area 5- 6 inches down from the shoulder at about a 45 degree angle. The wound toward the center of the back, consisting of 4 individual sutured punctures, is somewhat reminiscent of the agonistic attacks Don Nelson described by grey reef sharks on his submersible. They are probably wounds from lower jaw teeth during an open mouth strike. The larger sutured wound on the shoulder was the result of lateral serrated teeth cutting the dermis and underlying musculature during the open mouth agonistic strike.

"More instructive as to confirming the accident to be the result of an interaction with a shark are the parallel scrapes below the larger wound on the shoulder. The descending equal distance between these scrapes are the result of lower teeth making contact following the initial strike near the center of the back. The wounds could not be replicated by any other fish due to the nature of these wounds and the jaw structure and dentition of other indigenous fish, i.e. barracuda. A rock or coral configuration would not generally produce this wound with such uniformity. These are the primary artifacts that helped me arrive at my conclusion."

As to the species, Collier adds, "it is only a guess, but the wounds are suggestive of a carcharhinid shark about 5 or 6 feet in length."