



Stranding Report of Bluefin Tuna
in South Eleuthera on 1st May 2022
by Dr Nicholas Higgs

On Sunday morning 1st May 2022, reports of stranded tuna in southwest Eleuthera were made to Dr Nicholas Higgs, Director of Research and Innovation at the Island School. Initial reports were of large individuals washed up on the western coast, specifically at Deep Creek (1) and Tarpum Bay (2) settlements. Photos showed single individuals. A subsequent stranding was identified at the public beach near the entrance to Page Creek on the Cape Eleuthera peninsula (3) later on the same evening. This is the only stranding that was attended by staff from The Island School's Cape Eleuthera Institute and therefore the only one that could be absolutely verified in this report. No physical samples were taken, in accordance with research permitting regulations.

Location of stranding reports. (1) Deep Creek; (2) Tarpum Bay; (3) Page Creek. Locations are approximate, except for (3) which was verified in person.



Stranding #1

A single photograph was sent on the morning of May 1st along with the initial report of the stranding, showing a large tuna washed up dead on the beach near Deep Creek. This appears to be on the northern shore (Red Bays area) based on the coarse sand grain.



Stranding #2

No photographs of the reported stranding in Tarpum Bay were received but the initial report was also corroborated by a separate reporter, so it is likely that this stranding did take place. Further investigation may reveal photographs of this stranding.

Stranding #3

This fish was first discovered on the morning of May 1st. According to photographs sent by the manager of The Cape Eleuthera Marina, it was largely intact at the time with evidence of scavenging on the dorsal margin (photo right and below). When it was subsequently discovered by Dr Higgs at approximately 5 pm, a section of the flesh from the dorsal flank had already been removed by a member of the public. In addition, a piece of rope litter had been used to move the fish. This fish measured ~253 cm (99 in) standard length, which equates to a weight of approximately 334 kg (~735 lbs).

The surrounding coast was surveyed by Dr Higgs to determine if any further fish had washed up and none were found. Upon return, a member of the public was seen leaving with the head of the tuna, which had been removed and viscera dispersed on the beach (see images below). This prevented a thorough assessment of the carcass. The fish was found washed up 200 yards down the shore the next day in a state of advanced decomposition (final image).







Interpretation

The fish appear to be bluefin tuna (*Thunnus thynnus*), given their large size, colouration and relatively short pectoral fins that did not extend past the 2nd dorsal fin. Positive identification was difficult to confirm owing to the scavenging that had taken place on the dorsal surface of the bodies and the loss of colouration in some of the tuna.

All photographs of the stranded fish showed signs of scavenging on the dorsal margin, indicating that the fish were already dead when they washed up and had been drifting for some time before that. The pattern of scavenging suggests that the fish were floating belly up, probably because the belly had bloated after death. The fact that scavenging was restricted to a narrow area suggests that most of the body of the fish was floating out of water because of the bloating. It seems unlikely that the fish would have drifted that far from the eastern [Atlantic] side of Eleuthera, without being eaten by scavengers or decomposing further (e.g. fish #3). Therefore, it is likely that the fish originated from the pelagic habitat of Exuma Sound and probably died there.

There were no obvious signs of cause of death. Local charter-boat captains reported hearing of tuna in the Exuma Sound and it seems likely that the fish may have been caught by sport fishers but escaped from the line before being brought into the boat and then expired from exhaustion. Given that fish of this size are rarely seen in this area, it is likely that most fishers would not have had tackle prepared for fish of this size making escape from the line a likely scenario. More typical catches are for Mahi, Wahoo or Yellowfin Tuna.

It is emphasised that this scenario presented above is purely hypothetical based on observations of the available evidence.