**ACOUSTIC DATA**

**AllDetections\_Lith**

**Sheet description**

This is the Raw VUE Detections Export containing all detections of Al Lith Whale Shark Tags

**Mafia analog (the equivalent sheet used in the Mafia acoustic paper)**

AllMafiaDetections20140715

**Notes and Concerns**

This sheet includes ALL detections of tags eventually applied to whale sharks, even those obtained before the tag was put on a shark. I think your program already accounts for this possibility, but I wanted to make sure you were aware.

The other concern is a situation which I do not think we ran into in Mafia. One tag (A69-9002-2673) was retrieved from a dead shark (WS-031) on May 04 2011. It was attached to a second animal (WS-502) on April 192015. Both Sharks are male, so at least it didn’t switch sexes.

**AllEvents\_Lith**

The Raw VUE Events Exportcontaining all events from receivers which recorded at least on Al Lith Whale Shark Tag.

**Mafia analog**

AllMafiaEvents\_20141210

**Notes and Concerns**

This sheet includes ALL events from receiver units with detections of Al Lith whale shark tags. Some of these receivers were eventually deployed on Mafia, others served time on range test arrays in canyon and on whale shark reef. I think your program already accounts for this using the ArrayEvents sheet (see below), but I wanted to make sure you were aware.

There are some events listed from 1970, I believe these were from some setup demonstrations the vemco guys gave us. I don’t think this is a huge problem: these are outside the study period and should be discarded by your program. I am including them for sake of giving you the full dataset.

The bigger problem is that some of the receivers were downloaded by computers not set to UTC +3:00. For the most part I think this happened when we sent a broken receiver to vemco and they managed to get the data for us. In these cases Nova Scotia time is either UTC -3 or -4 (depending on daylight savings). In other cases (the UTC -8 and -6), I have no idea what happened and don’t want to speculate.

**Stations\_Lith**

Coordinates for all receiver stations

**Mafia analog**

Stations20130205

**Notes and Concerns**

The original station names were a bit haphazard because I have included stations from the whale shark and the offshore arrays. To produce a more consistent system, I renumbered them from 1 to 65. The original names are now in the comments column.

**ArrayEvents\_Lith**

Tracks the receiver deployments at stations in the AL Lith Area.

**Mafia analog**

ArrayEvents\_20141211

**Notes and Concerns**

The event times in this sheet are in UTC +3:00 (any errors in PC time have been accounted for). In cases where receivers malfunctioned and Vemco retrieved data for us, I went into the event file and found the last day that the receiver recorded data and listed that as its final active date rather than the date is was picked up.

Similar to the Stations sheet, the station names use the 1 to 65 numbering system and the original names have been moved to the comments.

**WSTags\_Lith**

Whale shark metadata for tagged sharks

**Mafia Analog**

WSTags\_20140909

**Notes and Concerns**

The major concern is that we do not have Ecocean IDs for all of the tagged sharks. This could make extracting sightings from Ecocean difficult. I do have our sightings (and we are pretty much all of them), but for now I will send the ecocean search results for sightings, but let me know if you want our encounters specifically.

The Batch column is just the year the tag was deployed. So a retagging in 2015 would be labeled in the 2015 Batch even if the shark was tagged in a previous year.

**SIGHTINGS DATA**

**Approved\_Lith & Unapproved\_Lith**

Raw sightings from Wildbook searches

**Mafia analogs**

approved\_20150130 & unapproved\_20150130

**Notes and Concerns**

None that aren’t covered elsewhere. These are just Wildbook searches. Though, as noted in the whale shark metadata, not all of our tagged sharks have Wildbook IDs.

**SurveyEffort\_Lith**

Search effort for 2011-2016.

**Mafia analog**

Surveys\_20140721

**Notes and Concerns**

I don’t have effort data for 2010.