Shark Bottom Longline Observer Program Metadata

Gary Decossas & Alyssa Mathers

SEDAR85-WP-05

28 June 2023

This information is distributed solely for the purpose of pre-dissemination peer review. It does not represent and should not be construed to represent any agency determination or policy.

Please cite this document as:

Decossas, Gary and Alyssa Mathers. 2023. Shark Bottom Longline Observer Program Metadata. SEDAR85-WP-05. SEDAR, North Charleston, SC. 12 pp.

Shark Bottom Longline Observer Program Metadata

Gary Decossas & Alyssa Mathers

06/16/2023

NOAA Fisheries
Southeast Fisheries Science Center
Fisheries Statistics Division
75 Virginia Beach Drive
Miami FL 33149

Table of Contents

I. Description

The Shark Bottom Longline Observer Program (SBLOP) is responsible for collecting data on catch, bycatch, and discards of the shark bottom longline fishery in the Gulf of Mexico (hereafter, the Gulf) and South Atlantic. Due to the limited vessels within the shark bottom longline fishery, observers also board vessels that are targeting reef fish species with bottom longline gear under a different permit.

Under the University of Florida, a voluntary program was established for the commercial shark bottom longline fishery in 1994 (Morgan et al. 2010). The University of Florida maintained and collected this data from 1994 to the first trimester season of 2005 when the responsibility of the observer program transferred to the National Marine Fisheries Service's (NMFS) Southeast Fisheries Science Center (SEFSC) Fisheries Statistics Division (previously under the Panama City Laboratory). Placement of observers aboard vessels became mandatory in 2002 (50 CFR 635.7, NMFS 2003). Only data maintained by the NMFS Fisheries Statistics Division are included in this document.

II. Methodology

Initially, shark bottom longline vessels were selected for coverage by randomly choosing vessels from a pool of vessels each trimester shark season based on the following criteria: (1) the vessel/owner possessed an active directed shark permit, (2) the permit holder (i.e. vessel/owner must have reported landings of sharks with bottom longline gear in the same season of the previous year, and (3) the permit holder must not have been selected for observer coverage for the prior three consecutive shark seasons. Vessels were selected from three fishing regions: northern U.S. Atlantic Ocean, southern U.S. Atlantic Ocean, and Gulf of Mexico. The northern U.S. Atlantic Ocean was defined from Virginia through Maine, the southern U.S. Atlantic Ocean was from the east coast of Florida through North Carolina and the Caribbean, and the Gulf of Mexico was defined from Texas through the west coast of Florida including the Florida Keys (NMFS 2005). Regardless of the target species, if a vessel was selected during the coverage period it was required to carry an observer. Thus, observers also boarded bottom longline fishing trips that targeted grouper, snapper, and tilefish as well as shark. Because of the overlap observed in 2005 with grouper/snapper and tilefish targeted longline sets and those vessels possessing directed shark permits, the vessel pool was expanded in 2006 to cover all bottom longline vessels regardless if they reported fishing for sharks with bottom longline gear in the same season of the previous year. Typically, these trips would fish for reef fish initially, then on the way back to port stop to fish for sharks.

Selection letters requiring observer coverage were issued to the permit holder via U.S. Certified mail approximately one month prior to the upcoming fishing season. Upon receipt of the selection letter, the permit holder is required to make contact with the observer coordinator and indicate intent to fish during the upcoming fishing season. If the permit holder intended to fish, the observer coordinator deployed an observer to the port of departure. Vessels were required to pass a Coast Guard Vessel Safety Examination, as well as a safety evaluation by the observer prior to coverage.

For consistency among longline observer programs throughout the Southeast Fisheries Science Center, methods from the Pelagic Longline Observer Program were adopted (Beerkircher et al. 2004). While onboard the vessel, the observer completes three data forms: Longline Gear Characteristic Log, Longline Haul Log, and Individual Animal Log. The Longline Gear Characteristic Log is used to record, for example, the type and length of the mainline used, number and length of gangions, and make and model of hooks used. The Longline Haul Log is used to record the length, location, and time duration for each set and haulback, as well as environmental information and the type(s) of bait used. The Individual Animal Log records all species caught, condition of the catch (e.g. alive, dead, damaged, or unknown) when brought to the vessel, and the final disposition of the catch (e.g. kept, released, finned, etc.). When an animal is brought onboard the vessel, the observer records the species identification, sex (sharks only) and length information. In the event a protected resource (i.e. sea turtle or marine mammal) is encountered, the observer is also required to fill out additional sea turtle or marine mammal forms. If any species identification is questionable, the observer is instructed to take several digital pictures of the specimen in question for further review by SEFSC staff. Data from each trip are submitted to SEFSC staff on a per trip basis. The data are entered and reviewed by SEFSC staff and reviewed with observer contract staff to resolve any questions.

III. Temporal coverage

Observer data for the shark bottom longline fishery is available from July 2005 to present. For 2005 and 2006, the vessels were selected on a trimester basis, but afterwards changed to a quarterly basis. Between 2002 and 2005, the objective of vessel selection was to achieve a 5% level of coverage of the total fishing effort in each fishing area and season. Beginning in 2006, the target coverage level was 3.9% of total fishing effort, which was estimated to attain a sample size needed to provide estimates of marine mammal/protected resource interactions with an expected CV of 0.3. Within the last decade, target coverage in the shark-directed bottom longline fishery has been maintained at approximately 1%. However, as of 2021, the shark-directed bottom longline fishery is no longer covered due to funding, only the shark research fishery.

IV. Spatial coverage

The SBLOP data spans the Gulf of Mexico to South Atlantic. Observers record the beginning and ending latitude and longitude coordinates for each set and haul on a trip. According to fishing areas observed, most of the observer coverage for the shark bottom longline fishery spans the western Gulf of Mexico from Louisiana to western Florida and the South Atlantic from South Carolina to eastern Florida. There are limited data for North Carolina.

The bottom longline reef fish fishery is concentrated along the western Florida shelf. The trips that were selected under the SBLOP, but targeted Gulf reef fish species, do not overlap with the selection of vessels for observer coverage under the Reef Fish Observer Program (RFOP) which is the dominate commercial observer program for reef fish species in the Gulf of Mexico. Some trips may target sharks and reef fish species on the same trip which is why there is limited spatial coverage for the South Atlantic for bottom longline reef fish trips. Only in 2012 were any reef fish trips observed fishing in the western Gulf of Mexico.

V. Data Source Contact

National Oceanic and Atmospheric Administration (NOAA)
National Marine Fisheries Service (NMFS)
Southeast Fisheries Science Center (SEFSC)
Fisheries Statistics Division (FSD)
Observer Program Branch
Contact Person: Gary Decossas
Email Address: gary.decossas@noaa.gov

VI. Field Descriptions

Field descriptions were organized based on observer forms: Trip Log, Gear Log, Haul Log, and Animal Log. These tables containing field names as they appear in the database can found in the Appendix. Additional columns, such as first year used and last year used, provide more detail on temporal changes to the database when fields were added or no longer on the forms as well.

VII. References

Beerkircher, L.R., C.J. Brown, D.L. Abercrombie, and D.W. Lee. 2004. SEFSC Pelagic Observer Program Data Summary for 1992-2002. NOAA Technical Memorandum NMFS-SEFSC-522, 25p.

Hale, L.F. and J.K. Carlson. 2007. Characterization of the shark bottom longline fishery, 2005-2006. NOAA Technical Memorandum NMFS-SEFSC-554, 28 p.

Mathers, A. N., B. M. Deacy, H. E. Moncrief-Cox, and J. K. Carlson. 2018. Characterization of the shark bottom longline fishery. 2017. NOAA Technical Memorandum NMFS-SEFSC-727, 21 p.1-21.

Morgan, A., P. W. Cooper, T. Curtis, G. H. Burgess. 2010. Overview of the U.S. East Coast Bottom Longline Shark Fishery, 1994-2003. *Marine Fisheries Review*, 71(1) p. 23-38.

National Marine Fisheries Service (NMFS). 2003. Final Amendment 1 to the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks. Office of Sustainable Fisheries. Highly Migratory Species Management Division, Silver Spring, Maryland.

VIII. Appendix

Trip Information

Field Name	Description	First Year Used	Last Year Used
TRIP_LOG_ID	Identifier assigned to the trip	2005	Present
TRIP_TYPE_CODE	BLL = bottom longline, BVL = bottom & vertical line, VL = vertical line	2005	Present
VESSEL_ID	The vessel ID or a FK to VESSEL table, in the case that this vessel does not have a permit and not on file at SERO.	2005	Present
VESSEL_NAME	Vessel name as it was when this trip took place	2005	Present
CAPTAIN_NAME	Captain name of the vessel	2005	Present
VESSEL_OWNER_NAME	Vessel owner name	2005	Present
DEPARTURE_DATE	Date the vessel left for the trip	2005	Present
DEPARTURE_CITY	City in which the trip started	2005	Present
DEPARTURE_STATE	State in which the trip started	2005	Present
LANDING_DATE	Date the vessel returned from the trip	2005	Present
LANDING_CITY	City in which the trip ended	2005	Present
LANDING_STATE	State in which the trip ended	2005	Present
SEA_DAYS	Days at sea for this trip	2005	Present
SEASON_FISHED	Year and trimester indication for each fishing season (ex. 81 = 2008, 1st trimester)	2005	Present
TARGET_CATEGORY_ID	FK to TARGET_CATEGORY	2005	Present
CREW_SIZE	Number of crew on the vessel during this trip	2012	Present
INCIDENTAL_TAKE	The sets/hauls in which there were incidental takes	2009	Present
NUMBER_OF_HAULS	Total number of hauls made this trip	2005	Present
LAB_CODE	PAN = Panama City Laboratory; MIA = Miami Laboratory	2005	Present
STATUS_CODE	Trip status code: Valid, Pending, Invalid	2005	Present
STANDBY_DAYS	Total number of days the observer was forced to wait to complete a trip due to bad weather, etc.	2016	Present
COMMENTS	Trip-level related comments	2009	Present
TRIP_DESIGNATION	Mix-reef fish bottom longline and shark bottom longline; mix-reef fish vertical line and shark bottom longline; reef fish bottom longline; shark bottom longline trip	Retroactively categorized 2020	Present

Gear Information

Field Name	Description	First Year Used	Last Year Used
GEAR_LOG_ID	Primary Key (PK)	2005	Present
STRING_NUMBER	Consecutive number assigned to each gear configuration	2005	Present
NUMBER_OF_HAULS_THIS_STRING	The number of hauls that used this gear configuration	2005	Present
IS_ANCHOR_USED	Was an anchor used for this gear configuration?	2005	Present
TOTAL_ANCHOR_WEIGHT	Total weight of all of the anchors used in this gear configuration, in pounds	2005	2016
IS_POLYBALLS_USED	Were polyballs used in this gear configuration?	2005	Present
NUMBER_OF_POLYBALLS	AVG number of polyballs used in this gear configuration	2005	Present
IS_HIGHFLIERS_USED	Were highfliers used in this gear configuration?	2005	Present
NUMBER_OF_HIGHFLIERS	Average number of highfliers used	2005	Present
IS_BULLETS_USED	Were bullet floats used in this gear configuration?	2005	Present
NUMBER_OF_BULLETS	AVG number of bullet floats used in this gear configuration; actual amount collected at the haul log level	2005	Present
NUMBER_OF_RADIO_BEACONS	AVG number of radio beacons used for this gear configuration; actual amount collected at the haul log level	2005	Present
IS_RADAR_REFLECTORS_USED	Were radar reflectors used in this gear configuration?	2005	Present
NUMBER_OF_RADAR_REFLECTORS	AVG number of radar reflectors used in this gear configuration; actual amount collected at the haul log level	2005	Present
IS_ADD_LINE_WEIGHTS_USED	Were additional line weights used in this gear configuration?	2005	Present
NUMBER_OF_ADD_LINE_WEIGHTS	AVG number of additional line weights used in this gear configuration; actual amount collected at the haul log level	2005	Present
IS_HOOK_TIMERS_USED	Were gear hook timers used in this gear configuration?	2005	Present
NUMBER_OF_HOOK_TIMERS	AVG number of gear hook timers used in this gear configuration; actual amount collected at the haul log level	2005	Present
IS_TDRS_USED	Were Temperature Depth Recorders used?	2005	Present
NUMBER_OF_TDRS	AVG number of Temperature Depth Recorders used; actual amount collected at the haul log level	2005	Present
IS_OTHER_LINE_ADDS_USED	Were other line additions used in this gear configuration?	2005	Present
NUMBER_OF_OTHER_LINE_ADDS	AVG number of other line additions used in this gear configuration; actual amount collected at the haul log level	2005	Present
IS_DROPLINES_USED	Were droplines used in this gear configuration?	2005	Present
NUMBER_OF_DROPLINES	AVG number of droplines used in this gear configuration; actual amount collected at the haul log level	2005	Present

MAINLINE_DIAMETER	Diameter of the mainline used on this gear configuration, in millimeters	2005	Present
MAINLINE_STRENGTH	Mainline test breaking strength for the mainline used in this gear configuration, in pounds	2005	Present
MAINLINE_STRANDS	Number of strands used in the mainline that was used in this gear configuration	2005	Present
MAINLINE_LENGTH	AVG length of the mainline used in this gear configuration, in Nautical Miles	2005	Present
GANGION_DIAMETER	Gangion diameter used in this gear configuration, in millimeters	2005	Present
GANGION_STRENGTH	Gangions test breaking strength used in this gear configuration, in pounds	2005	Present
LEADER_LENGTH	NO LONGER USED - MOVED TO GANGIONS_USED; AVG Length of the leaders used, in inches	2006	Present
LEADER_STRENGTH	NO LONGER USED - MOVED TO GANGIONS_USED; Pound test or dry breaking strength of leaders used in this gear configuration, in pounds	2006	Present
GEAR_COMP_ITEM_MLINE_COLOR_ID	FK to GEAR_COMPONENT_ITEM for mainline color information	2005	Present
GEAR_COMP_ITEM_LEADER_MAT_ID	NO LONGER USED - MOVED TO GANGIONS_USED; FK to GEAR_COMPONENT_ITEM for leader material information	2006	2017
NUMBER_OF_HOOKS_AT_START	The total number of hooks onboard at the start of the trip	2010	Present
NUMBER_OF_HOOKS_BETWEEN_FLOATS	Maximum number of hooks found between floats in this gear configuration	2005	2016
NUMBER_OF_SECTIONS	Number of sections formed in this gear configuration	2005	2016
DISTANCE_BETWEEN_SECTIONS	AVG distance between each section in this gear configuration, in nautical miles	2005	2016
NUMBER_OF_HOOKS	AVG number of hooks set calculated over all hauls with the same gear configuration.	2005	Present
DISTANCE_BETWEEN_GANGIONS	Distance between gangions in this gear configuration, in feet	2005	Present
GEAR_COMP_ITEM_GANG_COLOR_ID	FK to GEAR_COMPONENT_ITEM for gangion color information	2005	Present
GEAR_COMP_ITEM_MLINE_MAT_ID	FK to GEAR_COMPONENT_ITEM for mainline material information	2005	Present
GEAR_COMP_ITEM_GANG_MAT_ID	FK to GEAR_COMPONENT_ITEM for gangion material information	2005	Present
GEAR_CODE	Gear code of the gear used in this configuration; FK to UDP.FLS_GEAR_CODES_NMFS	2005	Present
HYBRID_TRIP_TYPE	Used for trips in which both vertical line and bottom longline gear was used (BVL). BLL = bottom longline data for that trip, VL = vertical line data for that trip	2005	Present

IS_BUOYS_USED	Were buoy line additions used in this gear configuration?	2005	2016
NUMBER_OF_BUOYS	AVG number of buoy line additions used in this gear configuration; actual amount collected at the haul log level	2005	2016

Haul Information

Field Name	Description	First Year Used	Last Year Used
HAUL_LOG_ID	PK	2005	Present
HAUL_NUMBER	Sequential number that tracks the number of hauls made with a particular gear configuration; always starts at 1 for gear GEAR_LOG_ID	2005	Present
IS_HAUL_OBSERVED	Was this haul observed?	2005	Present
IS_CATCH	Was there catch for this haul?	2005	Present
IS_INCIDENTAL_TAKE	Was an incidental take witnessed during this haul?	2005	Present
IS_SPLIT_HAUL	Did a split haul occur during this haul (portion of gear having additional soak time)?	2005	Present
IS_EXPERIMENT	Was this an experimental haul?	2005	Present
IS_DELAY	Was a delay (part-off or otherwise) observed during this haul?	2005	Present
DELAY_DETAILS	Information related to the delay	2009	Present
DELAY_DURATION	Time taken to resolve delay, in hours - Place holder - probably should use HAUL_LOST_TIME	2009	Present
WEATHER_DESCRIPTION_ID	FK to WEATHER_DESCRIPTION; the state of the weather at the star of the haul.	2005	Present
WIND_SPEED	Wind speed at the start of the haul, in knots	2005	Present
WIND_DIRECTION	Wind direction at the start of the haul, compass degrees	2005	Present
WAVE_HEIGHT	Maximum wave height at the start of the haul, in ft	2005	Present
MAINLINE_LENGTH	Length of the mainline that was used to complete this haul to the nearest tenth of a nautical mile	2005	Present
SET_SPEED	Vessel speed during the setting of the gear for this haul , in knots	2005	Present
HAUL_BEHAVIOR_ITEM_ID	FK to HAUL_BEHAVIOR_ITEM	2005	Present
TARGET_CATEGORY_ID	FK to TARGET_CATEGORY	2005	Present
BEGIN_SET_DATE	Date in which the setting of the gear started	2005	Present
END_SET_DATE	Date in which the setting of the gear ended	2005	Present
BEGIN_HAUL_DATE	Date in which the hauling of the gear started	2005	Present

END_HAUL_DATE	Date in which the hauling of the gear ended	2005	Present
BEGIN_SET_LATITUDE	Begin Set Latitude Degrees	2005	Present
BEGIN_SET_LATITUDE_MINUTES	Begin Set Latitude Minutes	2005	Present
BEGIN_SET_LATITUDE_HEM	Begin Set Latitude Hemisphere	2005	Present
BEGIN_SET_LONGITUDE	Begin Set Longitude Degrees	2005	Present
BEGIN_SET_LONGITUDE_MINUTES	Begin Set Longitude Minutes	2005	Present
BEGIN_SET_LONGITUDE_HEM	Begin Set Longitude Hemisphere	2005	Present
END_SET_LATITUDE	End Set Latitude Degrees	2005	Present
END_SET_LATITUDE_MINUTES	End Set Latitude Minutes	2005	Present
END_SET_LATITUDE_HEM	End Set Latitude Hemisphere	2005	Present
END_SET_LONGITUDE	End Set Longitude Degrees	2005	Present
END_SET_LONGITUDE_MINUTES	End Set Longitude Degrees	2005	Present
END_SET_LONGITUDE_HEM	End Set Longitude Hemisphere	2005	Present
BEGIN_HAUL_LATITUDE	Begin Haul Latitude Degrees	2005	Present
BEGIN_HAUL_LATITUDE_MINUTES	Begin Haul Latitude Minutes	2005	Present
BEGIN_HAUL_LATITUDE_HEM	Begin Haul Latitude Hemisphere	2005	Present
BEGIN_HAUL_LONGITUDE	Begin Haul Longitude Degrees	2005	Present
BEGIN_HAUL_LONGITUDE_MINUTES	Begin Haul Longitude Minutes	2005	Present
BEGIN_HAUL_LONGITUDE_HEM	Begin Haul Longitude Hemisphere	2005	Present
END_HAUL_LATITUDE	End Haul Latitude Degrees	2005	Present
END_HAUL_LATITUDE_MINUTES	End Haul Latitude Minutes	2005	Present
END_HAUL_LATITUDE_HEM	End Haul Latitude Hemisphere	2005	Present
END_HAUL_LONGITUDE	End Haul Longitude Degrees	2005	Present
END_HAUL_LONGITUDE_MINUTES	End Haul Longitude Minutes	2005	Present
END_HAUL_LONGITUDE_HEM	End Haul Longitude Hemisphere	2005	Present
SET_DURATION	Time it took to set the gear, in hours; historic column; calculated field - only historical values are loaded; new values are calculated	2005	Present
SOAK_DURATION	Time in which the gear soaked in hours; historic column; calculated field - only historical values are loaded; new values are calculated	2005	Present
HAUL_DURATION	Time it took to haul up the gear, in hours; historic column; calculated field - only historical values are loaded; new values are calculated	2005	Present

HAUL_LOST_TIME	Time lost during this haul, in hours	2005	Present
IS_REVERSE_HAUL	Was this haul a reverse haul (last hook set is the first hook hauled)?	2005	Present
BEGIN_SET_TIME	Time the set started, in 24hr	2005	Present
END_SET_TIME	Time the set ended, in 24hr	2005	Present
BEGIN_HAUL_TIME	Time the haul started, in 24hr	2005	Present
END_HAUL_TIME	Time the haul ended, in 24hr	2005	Present
COMMENTS	Haul related comments	2005	Present

Catch Information

Field Name	Description	First Year Used	Last Year Used
ANIMAL_LOG_ID	PK	2005	Present
ANIMAL_ITEM_TAG_ACT_ID	FK to ANIMAL_ITEM for tag action information	2005	Present
TAG_NUMBER	Tag number	2005	Present
CARCASS_TAG_NUMBER	Carcass tag number / Specimen Number	2005	Present
TARGET_CATEGORY_ID	FK to TARGET_CATEGORY	2005	Present
ANIMAL_ITEM_SEX_ID	FK to ANIMAL_ITEM for sex information	2005	Present
ANIMAL_ITEM_BOARDING_ID	FK to ANIMAL_ITEM for animal status information	2005	Present
TIME_BOARDED	The time the animal was brought on the vessel; 24HR	2010	2018
ANIMAL_ITEM_DISPO_ID	FK to ANIMAL_ITEM for animal disposition information	2005	Present
ANIMAL_ITEM_RELEASE_ID	FK to ANIMAL_ITEM for animal status information	2005	Present
PAGE_NUMBER	The page number that this animal's information was recorded on	2005	2010
ANIMAL_ITEM_DAM_SRC_ID	FK to ANIMAL_ITEM for damage source type information. For Miami, this value is extracted from ANIMAL_ITEM_DAM_COMBO. For Panama City Vertical Line and Bottom Longline, this code is the source of damage (their old PRED_TYPE column)	2005	Present
HOOK_TIMER_ELAPSED_TIME	Time reported on the hook timer; 24HR	2010	2018
ANIMAL_ITEM_GEAR_INTERACT_ID	FK to GEAR_INTERACTION_TYPE	2005	Present
IS_ENTANGLED	Was the animal entangled in any gear?	2012	Present
IS_TDR	Was a TDR reading available when this animal was hauled?	2012	Present
HOOKS_USED_ID	Type of hook the animal was caught on; FK to HOOKS_USED	2005	Present

VENTED	Was the animal properly vented by crew or observer before being released alive?	2005	Present
ANIMAL_ITEM_MATURITY_ID	FK to ANIMAL_ITEM for maturity stage information	2005	Present
IS_PRED	Is this animal a predator?	2005	Present
IS_PREY	Is the animal prey?	2005	Present
ANIMAL_ITEM_DAM_AMT_ID	FK to ANIMAL_ITEM for damage amount information. For Miami, this value is extracted from ANIMAL_ITEM_DAM_COMBO. For Panama City Vertical Line and Bottom Longline, this code is the amount of damage (their old DCODE column)	2005	Present
PRED_SPEC_NUM	Specimen number for predator if predator was another animal caught on the line	2005	Present
HOOK_TIMER_CONDITION_ID	FK to HOOK_TIMER_CONDITION	2005	Present
IS_OTOLITH_TAKEN	Was an otolith sample taken?	2005	Present
IS_VERTEBRAE_TAKEN	Was a vertebrae sample taken?	2005	Present
IS_REPRODUCTIVE_TAKEN	Was a reproductive organ taken?	2005	Present
REPRODUCTIVE_WEIGHT	Weight of the reproductive organ taken, in grams	2005	Present
IS_STOMACH_TAKEN	Was a stomach sample taken?	2005	Present
IS_FIN_TAKEN	Was a fin clip sample taken?	2005	Present
IS_PHOTO_TAKEN	Was a photo taken?	2005	Present
IS_SAMPLE_CHECKED_IN	Has the sample been checked in?	2005	Present
LENGTH_MEASUREMENT_1	First length measurement taken, in CM. For Panama City, it is a fork length measurement. For the Miami Lab, the length type taken depends on the animal.	2005	Present
LENGTH_MEASUREMENT_2	Second length measurement taken, in CM. For Panama City, it is a total length measurement. For the Miami Lab, the length type taken depends on the animal.	2010	2012
WEIGHT_KG	Animal weight, in kilograms	2005	Present
WEIGHT_TYPE_ID	FK to WEIGHT_TYPE	2005	Present
IS_TAGGED	Was this animal tagged (Y/N)	2005	Present
COMMENTS	Any comments regarding the animal	2005	Present