

Captive Manatee Database

Captive Manatee Database

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The purpose of the Captive Manatee Database is to collect, edit, and maintain accurate data on the rescue, transfer, care, and release of Florida manatees, to provide data for federal reports and permitting, and to aid the USFWS in monitoring and improving the rescue rehabilitation program. The data is input from different locations, field stations and aquaria and therefore must be accessible over the internet. All the data for a particular event, such as a rescue is input at the same time. Once the data is posted to the database, only the administrators can edit the data. The administrators also work in different locations. A manatee can have many events in its life: captive birth, rescue, release, transfer, and death. Entry forms must be completed for each event. In addition, every six months, status forms must be completed for all manatees in captivity. Various reports are output from the system, including yearly reports of rescues, releases, transfers, deaths, and captive births. The data are also queried for summaries such as the number of animals rescued due to watercraft injuries in a particular county in a particular year.

The database contains 2 types of tables: L_ represent lookup tables, and T_ represent data tables. The primary table in the database is the Manatee table (T_Manatee) which holds information such as sex that will not change over the life of the animal. In order for a manatee to enter the system, the animal must be input as a captive birth, or a rescue. At that time, the animal is given a Manatee_Log number which uniquely identifies the animal within the Captive Manatee Database. The Manatee Table is linked to both events, such as a release, or transfer, and to other animal information such as ids and tags.

Event tables linked to Manatee Table

All information on these tables is associated with a particular event, such as a captive birth, or rescue. Except for captive birth and death, a manatee can have multiple events over its life. The event tables are: T_Birth, T_Rescue, T_Release, T_Transfer, and T_Death. A status report (T_Status) is not an event per se, but status reports are generated every 6 months on all animals in captivity.

Non-Event tables linked to Manatee Table

Information on these tables can be generated from several different events. One manatee can have many different Animal Ids (T_AnimalID) which are ids in other systems, such as the state and the aquaria. The manatees can also have more than one name (T_Manatee_Name). The manatees are marked with different types of tags at different events (T_Tag). Captive animals can be conditioned to respond to different stimuli (T_Conditioned). An animal can be conditioned for different programs and different stimuli during its life.

Other Data Tables not linked to Manatee Table

These tables are not linked to the manatee table, but hold other information that is needed by the system. The T_Research Project contains details of research projects involving the Florida manatee. The T_Other_Names is a list of names that have been given to manatees by the photo-id or tagging

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Bold indicates key fields for each table

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personnel, or others. By maintaining a list in this system, we are able to ensure that animals new to the Captive Manatee Database system be given unique names, not only within the Captive Manatee Database, but unique for other systems also. The T_User table keeps track of users, passwords, security, names, and organization.

Lookup Tables

Lookup tables provide consistency in database information. For every field that is linked, the lookup field is listed in the description of the field.

Documentation

The following pages document the Captive Manatee Database. First, a diagram of the relationships between all the data tables presents an overview of the database. Then all the data tables are listed in alphabetical order with details of fields, indices, and links. The last two columns in the data table information delineate the fields in the two previous databases that were used to load the current database. Finally, all the database lookup tables are listed in alphabetical order with details of fields, indices, and links.

Required Data:

The data that will be loaded into this system is a combination of data from two historical Access databases. One was used to record rescue rehabilitation data until 2001, and one from 2001-2008. Some fields that were in the 2001-8 database did not exist in the <2001 database. And the data entry system did not require that all fields be entered in either system. So many historical records do not have all the required fields; although efforts are underway to complete records where we can.

In the new SQL database, indice fields and any other field linked to a look-up table will be required, and if the information does not exist for these fields, they will be filled with “Unknown” or “unk” or “U” depending on field size.

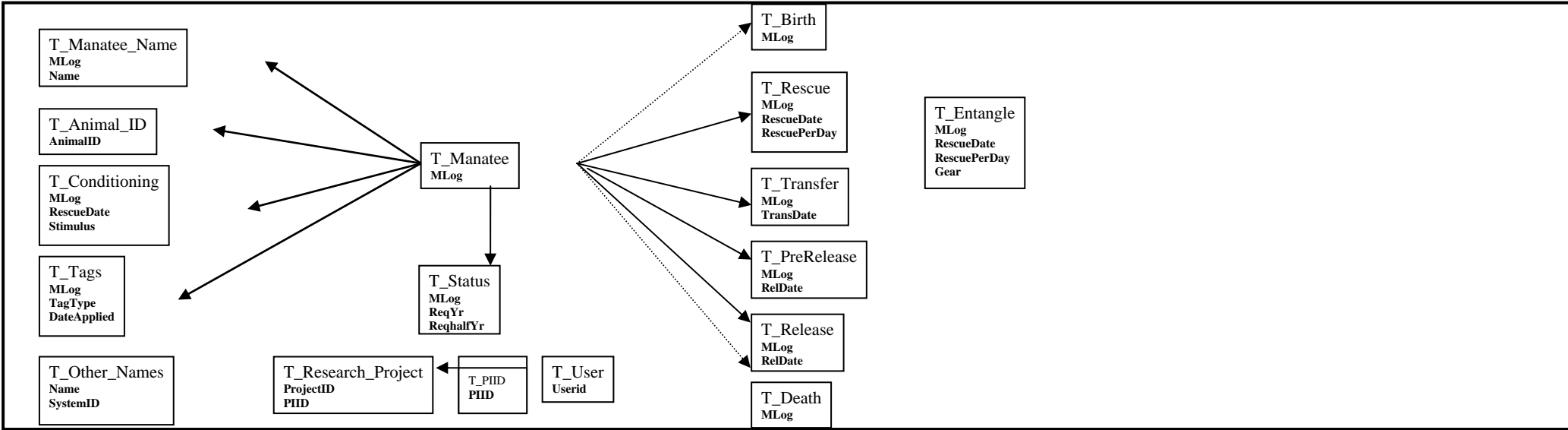
Some fields are required only under certain circumstances, and these conditions are noted in the Description column for those fields.

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Relationship of Data Tables in Captive Manatee database.

Dotted lines signify one-to-one relationship. All others are many-to-one relationships with T_Manatee (many).



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`Table: T_Animal_ID

Description: This table stores all identification numbers associated with a captive manatee from any manatee research system other than the Captive Manatee Database. These identification numbers include facility number, rescue number, or mortality number. There is a many-to-one-relationship with the T_Manatee table. This table is used primarily to search for animals. One id is identified as the primary id for that animal and will be used on reports. Users think of IDs as associated with events: Rescue could have 1-2 ids (a facility and a rescue id). Most other events, just one or none.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
AnimalID	Animal ID	Varchar	20	Must be unique		Any Id associated with this animal from another system: Facility ID, Tracking ID, MIPS ID, Mortality ID, etc. No default.	Manatee ID, Manatee ID 2, D Carcass ID Number, FWS ID Comments	Manatee_ID_1, Manatee_ID_2, Manatee_ID_3, Manatee_ID_4
MLog	Manatee Log	Int	5		T_Manatee.Mlog	Unique ID number for manatee in Captive Manatee Database.		
PrimaryID	Primary ID	byte	1	Either -1 (Y) or 0(N) Will need a maintenance report for animals with no primary ID.		Identifies a single primary ID for each animal that can be used on reports (1=Primary ID, 0 = Not Primary ID) If only one Animal_ID for Manatee_Log, default is 1; otherwise default is 0. Only one Animal_ID per Manatee_Log can have a value of 1. When a new animal is rescued, either a facility Id or a rescue id or both will be entered. Set the facility ID to primary, unless the animal already has a primary id; if no facility id, set the rescue id to primary. Admin users will change from one primary ID to another by setting Primary ID to N for what was the primary ID and then setting the new primary ID to Y.		
IDType	Id Type	Char	1		L_ID_Type.IDType	System to which ID belongs. No default.		
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D' filled with "unk" if null in database load		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate() For database load, used rescuedate or birthdate		
UpdateBy	Last Updated	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		

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Bold indicates key fields for each table

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UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

Table: T_Birth

Description: This table stores all information associated with a birth of a manatee in a facility. This table has a one-to-one relationship with the T_Manatee table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	Int	5		T_Manatee.Mlog	Unique ID number for manatee in Captive Manatee Database		
BirthDate	Birth Date	SmallDateTime	20			Date manatee was born no default.	B Date of Birth	Birth_Date_MM, Birth_Date_DD, Birth_Date_YYYY
Health	Health Status	Char	1	Required for Data entry but not for Update	L_Health.Health	Code for health status. no default		Health
Conceive	Where Conceived	Char	1	L- Conceived.ConceiveText	L_Conceived.Conceive	Whether manatee was conceived in wild or in captivity Default to "W"		birth circumstances
Org	Facility	Varchar	10		T_User.Org	Facility where birth occurred, entered by system based on T_User.userid	B Facility	Birth from
VetID	Veterinarian	Varchar	10	Show vets by name ie Barrie, Michael T_Userid.LastName, T_User.FirstName	T_User.Userid	Veterinarian present at birth, default to T_User.userid if T_User.Vet is 1.	Veterinarian	Veterinarian
Comments	Additional Narrative	Varchar	500			Additional Narrative about birth No default	Comments	
Weight	Weight	int	5	Required for Data entry but not for Update		Weight of animal in kg No Default	Weight	Weight
EstW	Estimated Weight?	Char	1	Required for Data entry but not for Update		Was weight estimated? Default to No	Estimate Weight	Weight_Est
WDate	Weight Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was weighed Default is Birth_Date		Weight_Date_MM, Weight_Date_DD, Weight_Date_YYYY
Length	Length	int	3	Required for Data entry but not for Update		Length of animal in cm	Length	Length

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Bold indicates key fields for each table

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EstL	Estimated Length?	Char	1	Required for Data entry but not for Update		Was length estimated? (Y,N,U) Default to No	Estimated Length	Length_Est
LDate	Length Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was measured Default is Birth_Date		Length_Date_MM, Length_date_DD, Length_Date_YYYY
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'	Reporter	Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()	Report Date	Report_Date_MM, Report_Date_DD, Report_Date_yyyy
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		8

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Bold indicates key fields for each table

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Table: T_Conditioning

Description: This table stores all information associated with the conditioning or training of a manatee for animal husbandry or scientific purposes. This table has a many-to-one relationship with the T_Manatee table. For any given rescue that results in animal being brought to captivity or captive birth, they will be conditioned only once for a particular stimulus.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northfl orida newer database
MLog	Manatee Log	int	5		T_Manatee.MLog	Unique ID number for manatee in Captive Manatee Database		
CaptivityDate	Rescue Date	SmallDateTime	20	Must be a captivity date for this animal. Must match to date of rescue or date of birth.		Date animal was most recently rescued and brought into captivity.		
Cond	Conditioning Purpose	Char	1	L_Cond.ConditioningType	L_Cond.Cond	Type of conditioning. Current records do not match L_Cond table. Future records must be entered based on L_Cond table Note: I think I have changed records to match L_Cond table.		Husbandry, Other_Cond, Other_Cond_Spec ify
Stimulus	Stimulus	Varchar	50			Type of stimulus that elicits response. "Unknown" is not allowed in future records.		
Project	Project	Varchar	10	T_Research_Proj.Title	T_Research_Proj.ProjectID	Code referencing project name. Current records do not match T_Research_Proj table, but future records must choose from that table.		

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Bold indicates key fields for each table

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Comments	Comments	Varchar	250			Other information about conditioning		
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()		
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record. Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

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Bold indicates key fields for each table

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Table: T_Death

Description: This table stores all information associated with a death of a manatee whether in a facility, during the rescue or transport, or in the wild. This table has a one-to-one relationship with the T_Manatee table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.MLog	Unique ID number for manatee in Captive Manatee Database		
DeathDate	Death Date	SmallDateTime	20			Date manatee died no default Have calendar option.	D Date of Death	Death_Date_MM, Death_Date_DD, Death_Date_yyyy
CauseID	Cause of Death	char	4	L_Death_Cause (.DeathCause,DeathCauseDetail)	L_Death_CauseCauseID	CodeID for cause and details of manatee death. Updated July 2009 by Nicole	taken from Comments or D Cause of Death	Death_Cause_human_sp ecify, Death_cause_Nat-Specify Death_cause_human, Death_cause_natural, death_cause_ND
OtherText	Other Text	Varchar	250	Check that there is no entry in this field unless CauseID = ENOT or HUMA or NAOT or OTHE or TROT Require entry in above cases		Explanation of death causes and details not found in the tables. Required for new records if Cause or CauseDetail = Other		Input from death cause table --edited by N. Adimey
Euth	Euthanasia	bit	1			Was animal euthanised? (1=yes, 0=no)	Comments	Death_Cause_euthanasia
DeathLoc	Death Occurred?	Varchar	7	L_Death_Loc.DeathLocation	L_Death_Loc.DeathLoc	Code for where in rescue rehabilitation process death occurred. Prior to treatment only valid for Historic records	D Died prior to treatment, D Died during rehab, D Died after release	Death_occurred
Org	Facility	Varchar	10	L_Org.Organization	L.Org.Org	Facility where death occurred, entered by	Death_From	

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						system based on T_User.userid Required for new records if DeathLoc = Rehab		
VetID	Veterinarian	Varchar	10		T_User.Userid	Veterinarian present at death, default to T_User.userid if T_User.Vet is 1.	Veterinarian	Veterinarian
Comments	Additional Narrative	Varchar	500			Additional Narrative about death	Comments	Comments
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'	Reporter	Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()	Report Date	Report_Date_MM, Report_Date_DD, Report_Date_yyyy
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

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Table: T_Entangle

Description: This table stores the detail information associated with the entanglement rescue of a manatee. This table has a many-to-one relationship with the T_Rescue table. Entanglement information will only be entered on rescues where the primary or secondary causes are “Entanglement” (Required if PrimCause or SecCause is “Enta”).

Rescue and Entanglement records must have some connection during update to be useful. If the entanglement cause is deleted from both the T_Rescue.PrimCause or T_Rescue.SecCause, the entanglement record must be deleted. If the rescue date is changed on the rescue and the rescue has an entanglement record, the rescue date must also be changed on the entanglement record. Update screen can look like Enter Screen.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Rescue.MLog	Unique ID number for manatee in Captive Manatee Database		
RescueDate	RescueDate	SmallDateTime	20		T_Rescue.RescueDate	Date manatee was rescued.	R Date of Rescue	Rescue_Date_MM, Rescue_Date_DD, Rescue_Date_YYYY
RescuePerDay	Rescue Per Day	int	1		T_Rescue.RescuePerDay	Will enter this info as part of a particular rescue and so the key information will be entered by system		
Gear	Type of Gear	Varchar	4	L_Gear_Type.GearType	L_Gear_Type.Gear	Type of gear animal is entangled in	n/a	Rescue_line_type
GearDesc	Gear Description	Varchar	250	Required if T_Entangle.Gear = “Other”		More details of gear. Only required if Gear = Other IF null, leave blank in database load.		
EntLoc	Entanglement Location on Animal	Varchar	100			Description of where entanglement was located on animal. Note: leave as text no default If null use “Unknown” in database load	n/a	Rescue_entan_location

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CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D' IF null, use "unk" in database load.	Reporter	Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate() If null, use rescuedate in database load	Report Date	Report_Date_MM, Report_Date_DD, Report_Date_YYYY
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

Table: T_Manatee

Description: This table stores all information associated with a manatee. This is the core table of this database. This table is linked to every table in the database that holds information on a particular animal: T_Animal_ID, T_Birth, T_Conditioning, T_Death, T_Manatee_Name, T_Release, T_Rescue, T_Status, T_Tag, T_Transfer

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	Autonumber	5		T_Manatee	Unique ID number for manatee in Captive Manatee Database		
Sex	Sex	Char	1	L_Sex.Description	L_Sex.Sex	Sex of manatee No default	Sex	Sex
Dam	Dam	int	5	Display Mlog and T_Manatee.ManateeName (primary) and T_Animal_ID.AnimalID (Primary) of Dam	T_Manatee.MLog	Mlog of Dam No default	B Dam, B Dam Name,	Mother_Id, MotherName
Sire	Sire	int	5	Display Mlog and T_Manatee.ManateeName (primary) and T_Animal_ID.AnimalID (Primary) of Sire	T_Manatee.MLog	Mlog of Sire No default	B Sire, B Sire Name, needs work	None have father id-ed
Rearing	Rearing	Varchar	4	L_Rearing.RearingType	L_Rearing.Rearing	Rearing Method		

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	Method					no default In loading the database, all captive births were given "Captive Reared" and all others "Wild Reared"		
Studbook	Studbook	Varchar	4	Must be unique Please test when update		Studbook number without "SB"	FWS ID	Studbook_Number
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. "unk" for unknown		Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()	R Date of Rescue Or B Date of Birth	Rescue_Date_MM , Rescue_Date_DD, Rescue_Date_YY YY Or Birth_Date_DD, Birth_Date_MM, Birth_Date_YYYY
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

Table: T_Manatee_Name

Description: This table stores all names associated with a manatee. This table has a many-to-one relationship with the T_Manatee table. Manatees could have any number of names in the past, but new animals will be restricted to a single name.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.Mlog	Unique ID number for manatee in Captive Manatee Database		
Name	Name	Varchar	30	If name is duplicated in T_Manatee_Name.Name Give error message, "The animal name (Bonnie) is already in the database. Press back to re-enter." Require a new name		Name of manatee. Can have spaces but no punctuation.	Manatee_Name	Name

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				<p>Elseif name is duplicated in T_OtherNames.Name</p> <p>Give warning message, “This name (T_Other_Names.Name) is already in use by another system (T_Other_Names.System) with ID (T_Other_Names.SystemID)”.</p> <p>Is this the same animal ? (Drop down box with Yes/No</p> <p>If Yes, allow the name</p> <p>When you write the Manatee record, also write an additional Animal ID Record for that Mlog:</p> <p>T_Animal_ID.AnimalID = T_OtherName.SystemID</p> <p>T_Animal_ID.IDType = T_OtherName.System</p> <p>T_Animal_ID.PrimaryId = “N”</p> <p>Else (No)</p> <p>Require new name.</p> <p>End</p> <p>end</p> <p>Note: This also means that we need to have L_Systems included on L_IDType. So it can be put in in only one place, I think we should delete L_Systems and have L_IDType have an extra column for “Other name system”. And for all data entry for our system, we only show “Other name system” = N and for Other name data entry we show “Other name system” = Y only and for update and other places, we list the entire table.</p>				
Primary	Primary Name ?	Char	1	will need a maintenance report to identify manatee with name that does not have a primary name and to identify manatees		Identifies primary name for manatee. Only one primary name is allowed for each		

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				with 2 primary names if system does not do edit.		manatee (1=Yes, 0=No)		
CreateBy	Reporter	Varchar	10		T_User.UserId	Userid of individual who first posted record to database. Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()		
UpdateBy	Last Updated By	Varchar	10		T_User.UserId	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

Table: T_Other_Names

Description: This table stores all names associated with a manatee that are identified in other manatee databases. For example, an animal may be given a name in the MIPS database. This list ensures that the same name will not be used for another animal in the Captive Manatee database. This table has a many-to-one relationship with the T_Manatee table. Input for this table was provided by USGS Sirenia.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northfl orida newer database
Name	Name	Varchar	30	does not need to be unique		Name of manatee No default		
SystemID	Identification in other system	Varchar	30			Identification number used in other systems No default		
System	System	Varchar	10	L_System.Description May change to L_IDType	L_System.System May change to L_IDType	Code for system which named the animal.		
CreateBy	Reporter	Varchar	10		T_User.UserId	Userid of individual who first posted record to database. Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()		
UpdateBy	Last Updated By	Varchar	10		T_User.UserId	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

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Table: T_PI

Description: This table stores all information associated with a PI. This table has a one-to-many relationship with the T_Research_Proj table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Lookup Table / Link	Final_Historic old database	Master_r4_northflorida newer database
PI ID	PI ID	Varchar	10		T_PI.PIID	Code for PI	T_PI.PIID		researcher
PI	PI Name	Varchar	100			Name of PI. No default			researcher
PIOrg	PI Org	Varchar	100			PI Organization. No default			Res_organization
PIAddress	PI Address	Varchar	250			Address of PI. No default			Res_Address
PIPhone	PI Phone	varchar	16			Phone number of PI. Phone number format xxx-xxx-xxxx No default			Res_Phone
PIEmail	PI email	Varchar	50			Email of PI. No default.			Res_Email
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'	T_User.Userid		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()			
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'	T_User.Userid		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()			

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Table: T_PreRelease

Description: This table stores all information entered before the release of a manatee. This table has a many-to-one relationship with the T_Manatee table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.MLog	Unique ID number for manatee in Captive Manatee Database		
EntryDate	PreRelease Entry Date	SmallDateTime	20			Date pre-release record was entered		
RelDate	Release Date	SmallDateTime	20			Date manatee is scheduled to be released. no default. Have calendar option.		
RelSite	Release Site	Varchar	50			Site where animal was released No default		
State	State	Char	2		L_State.State	State where animal was released No default		
County	County	Varchar	30		L_County.County	County where animal was released No default		
City	City	Varchar	50			City nearest site where animal was released If possible to generate a list of cities to choose from based on waterway, but also allow entry of new city; otherwise no default		
Waterway	Waterway	Varchar	50			Waterway where animal was released No default		
Photos	Photos sent to Sirenia?	byte	1			(1=Yes, 0=No) no default	n/a	
FormComplete	If freeze-branded, Scar, Cookie, FB form completed?	byte	1			(1=Yes, 0=No) no default	n/a	
CondStop	Was reinforcement of all conditioning stopped 60 days	byte	1		Required if animal has a T_Cond record	(1=Yes, 0=No) no default		

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	prior to release?							
BottomFeed	Bottom Feeding?	byte	1			only required for naïve animals (-1=Yes, 0=No) no default		
NatVeg	Exposed to natural vegetation?	byte	1			only required for naïve animals (-1=Yes, 0=No) no default		
VegType	Vegetation Type	Varchar	50			only required for naïve animals Types of vegetation that animal has been fed No default		
MonthsVeg	Months with vegetation?	Char	3		L_Months.Months	only required for naïve animals Number of months animal has been conditioned with vegetation No default		
ExpWater	Exposed to release water type?	byte	1			only required for naïve animals (1=Yes, 0=No) no default		
DisplayType	Water type of Display?	Char	1		L_Water.Type	only required for naïve animals Code for water in display No default		
RelType	Release Water type	Char	1		L_Water.Type	only required for naïve animals Code for water at release site No default		
MonthsExpWater	Months exposed to water type	Varchar	3		L_Months.Months	only required for naïve animals Number of months animal has been exposed to water type No default		
VetID	Veterinarian	Varchar	10		T_User.Userid	Veterinarian present at release, default to T_User.userid if T_User.Vet is 1. Only historical records can have Unk.		
Weight	Weight	int	5	Required for Data entry but not for Update		Weight of animal in kg no default		

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Bold indicates key fields for each table

Captive Manatee Database

EstW	Estimated Weight?	Char	1	Required for Data entry but not for Update		Was weight estimated? (Y,N,U)Default to No		
WDate	Weight Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was weighed No default		
Length	Length	int	3	Required for Data entry but not for Update		Length of animal in cm		
EstL	Estimated Length?	Char	1	Required for Data entry but not for Update		Was length estimated? (Y,N,U)Default to No		
LDate	Length Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was measured No default		
Comments	Additional Narrative	Varchar	500			Additional Narrative about release		
Org	Facility / Field Station	Varchar	10		L_Org.Org	Code for facility where animal was held prior to release, entered by system based on animal's events		
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter <code>getdate()</code>		
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter <code>getdate()</code>		

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Bold indicates key fields for each table

Captive Manatee Database

Table: T_Release

Description: This table stores all information associated with the release of a manatee. This table has a many-to-one relationship with the T_Manatee table. After an animal has been released, the user will go to the enter release form. This form will be filled with the information from the most recent pre-release form for this animal. The user will change information (date of release, site) and add information concerning the release such as comments, tracker, and participating organizations

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.MLog	Unique ID number for manatee in Captive Manatee Database		
RelDate	Release Date	SmallDateTime	20			Date manatee is scheduled to be released. no default. Have calendar option.	REL Date of Release	Actual_Rel_Date_MM, Actual_Rel_Date_DD, Actual_Rel_Date_YYYY
RelSite	Release Site	Varchar	50			Site where animal was released No default	Location	Rel_land_reference
State	State	Char	2		L_State.State	State where animal was released No default	Use County to get state	SPECIFY_OTHER_REL_COUNT Y was blank except for one entry that I copied to Rel_Land_reference: Cutter Ridge Power Plant
County	County	Varchar	30		L_County.County	County where animal was released No default	County	Release_County, SPECIFY_OTHER_REL_COUNT Y
City	City	Varchar	50			City nearest site where animal was released If possible to generate a list of cities to choose from based on waterway, but also allow entry of new city; otherwise no default	Location	Rel_land_reference
Waterway	Waterway	Varchar	50			Waterway where animal was released No default	Waterbody	Rel_Water_body
BottomFeed	Bottom Feeding?	byte	1			From Pre-Release only required for naïve animals	n/a	prerelease_bottom_feeder

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Bold indicates key fields for each table

Captive Manatee Database

						(-1=Yes, 0=No) no default		
NatVeg	Exposed to natural vegetation?	byte	1			From Pre-Release only required for naïve animals (-1=Yes, 0=No) no default	n/a	If pre-release_veg_type not null, -1, else 0
VegType	Vegetation Type	Varchar	50			From Pre-Release only required for naïve animals Types of vegetation that animal has been fed No default	n/a	Pre_release_veg_type,pre_release_vege_specify
MonthsVeg	Months with vegetation?	Char	3		L_Months.Months	From Pre-Release only required for naïve animals Number of months animal has been conditioned with vegetation No default 0 if null on database load	n/a	Prerelease_Vege_time Edited by hand to match table
DisplayType	Water type of Display?	Char	1		L_Water.Type	From Pre-Release only required for naïve animals Code for water in display No default U if null in database load	n/a	Prerelease_Water_type 1=Fresh, 2=Brackish, 3=Brackish
RelType	Release Water type	Char	1		L_Water.Type	From Pre-Release only required for naïve animals Code for water at release site No default U if null in database load	n/a	Release_Site_Water: 1=Fresh, 2=Brackish, 3=Brackish
MonthsExpWater	Months exposed to water type	Varchar	3		L_Months.Months	From Pre-Release only required for naïve animals 0 if null in database load Number of months animal has been exposed to water type	n/a	sight_county_rel-Water-exp edited by hand to match table

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Bold indicates key fields for each table

Captive Manatee Database

						No default		
Tracker	Tracker	Varchar	100			Name of person tracking animals No default		
PartOrg	Participating Organizations	Varchar	500			Names of all participating organizations, separated by commas No default		
VetID	Veterinarian	Varchar	10		T_User.Userid	From Pre-Release Veterinarian present at release, default to T_User.userid if T_User.Vet is 1. Only historical records can have Unk.	Veterinarian	Veterinarian
Weight	Weight	int	5	Required for Data entry but not for Update		From Pre-Release Weight of animal in kg 0 if null in database load no default		Rel_weight
EstW	Estimated Weight?	Char	1	Required for Data entry but not for Update		From Pre-Release Was weight estimated? (Y,N,U)Default to No U if null in database load		Weight_Est
WDate	Weight Date	SmallDateTime	20	Required for Data entry but not for Update		From Pre-Release Date animal was weighed No default if null Reldate in database load		Weight_Date_MM Weight_Date_DD Weigh_Date_YYYY
Length	Length	int	3	Required for Data entry but not for Update		From Pre-Release Length of animal in cm 0 if null in database load		REL_length
EstL	Estimated Length?	Char	1	Required for Data entry but not for Update		From Pre-Release Was length estimated? (Y,N,U)Default to No U if null in database load		Length_Est
LDate	Length Date	SmallDateTime	20	Required for Data entry but not for Update		From Pre-Release Date animal was measured		Length_Date_MM Length_Date_DD Length_Date_YYYY

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Bold indicates key fields for each table

Captive Manatee Database

						No default If null n database load, reldate		
Comments	Additional Narrative	Varchar	500			Additional Narrative about release	Comments	Comments
Org	Facility / Field Station	Varchar	10		L_Org.Org	Code for facility where animal was held prior to release, entered by system based on animal's events	REL Facility	Release_from
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. If null in databse load,unk Default='D'	Reporter	Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate() if null in database load, reldate	Report Date	Report_Date_MM, Report_Date_DD, Report_Date_yyyy
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

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Bold indicates key fields for each table

Captive Manatee Database

Table: T_Rescue

Description: This table stores all information associated with the rescue of a manatee. This table has a many-to-one relationship with the T_Manatee table. This table has a one-to-many relationship with the T_Entangle table.

Field Name	App Name	Type	Size	Requirement	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.Mlog	Unique ID number for manatee in Captive Manatee Database		
RescueDate	Rescue Date	SmallDateTime	20			Date manatee was rescued. no default.	R Date of Rescue	Rescue_Date_MM, Rescue_Date_DD, Rescue_Date_YYYY
RescuePerDay	Rescue Per Day	int	1			Number of rescues of this manatee today. Most rescues will have value of 1. If animal is rescued more than once in a day, the number will increment. default = 1		
State	State	Char	2		L_State.State	State where animal was rescued		Use county to get state
County	County	Varchar	30		L_County.County	County where animal was rescued Edited by Nicole and Carol	County	Rescue_County, Speciy_other_res_count
City	City	Varchar	50			City nearest site where animal was rescued. Only historical records can have Unknown Edited by Nicole and Carol	Location, Nicole edited	res_land_reference Nicole edited
Waterway	Waterway	Varchar	50			Waterway where animal was rescued Only historical records can have Unknown	Waterbody	Res_waterbody
Latitude	Latitude	Decimal(12,7)	12	Required for Data		Latitude where	R Latitude, convert	Latitude_deg,

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Bold indicates key fields for each table

Captive Manatee Database

				entry but not for Update		animal was rescued. will be between 0 and 90 and have 4 decimal places. Should be required to be within reasonable limits. use "89.9999" as unknown		Latitude_min, Latitude_Sec
Longitude	Longitude	Decimal(12,7)	12	Required for Data entry but not for Update		Longitude where animal was rescued. will be between 0 and - 180 and have 4 decimal places. Should be required to be within reasonable limits. use "-179.9999" as unknown	R Longitude, convert	Long_Deg, Long_Min, Long_Sec
Pregnant	Suspected Pregnant	Char	1		L_Pregnant.Pregnant	Animal suspected to be pregnant. Only enter if animal is female. no default Entered "U" if null in database load		
Health	Health Status	Char	1		L_Health.Health	Code for Health Status no default Entered "U" if null in database load		Health
RescueType	Rescue Type	Char	1		L_Rescue_Type.RescueType	Code for Rescue Type no default	R Action	Rescue_type
PrimCauseID	Primary Rescue Cause ID	char	4		L_Rescue_Cause.CauseID	Code for cause and detail of manatee rescue. no default	Determined from Rescue_Cause_boat, Rescue_Cause_Entang, Rescue_Cause_Entang_other, rescue_Cause_entrap_other edited by Nicole	edited by Nicole
PrimText	Specify	Varchar	250	Required if PrimCause = Huma, NaOt, Nthe, TrOt		Text to explain "other" in either primary rescue cause or primary	edited by Nicole	edited by Nicole

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Bold indicates key fields for each table

Captive Manatee Database

						rescue cause detail. Required if PrimCause or PrimCauseDetail = Other. No default Not required – blank is ok in database load		
SecCauseID	Secondary Cause of Rescue DetailID	char	4		L_Rescue_CauseC ause	Code for cause of manatee rescue. no default Blank is ok in database load	Determined from Rescue_Cause_boat, Rescue_Cause_Entang, Rescue_Cause_Entang_ot her, rescue_Cause_entrap_oth er edited by Nicole	Edited by Nicole
SecText	Specify	Varchar	250	Required if PrimCause = Huma, NaOt, Nthe, TrOt		Text to explain “other” in either secondary rescue cause or secondary rescue cause detail. Required if PrimCause or PrimCauseDetail = Other. No default Blank is ok in database load	edited by Nicole	Edited by Nicole
WhereRel	Where re- located?	Varchar	100			Where animal was re-located. no default. No entry if RescueType is “B” Blank is ok in database load		
Dead	Animal die in rescue or transport	byte	1			Identifies animals that die before reaching the facility (-1=Yes, 0=No) default is 0 Filled in 0 if null in database load		
Tracker	Tracker	Varchar	100			Name of person tracking animals. Trackers are not necessarily User of		

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Bold indicates key fields for each table

Captive Manatee Database

						this system. no default Probably null for rescue Blank is ok in database load		
Transporter	Transporter	Varchar	10		L_Org.Org	Code for Organization that transports manatee. Must be listed in L_Org with L_Org.transporter = 1 and active =1 Required if RescueType is "B" Blank is ok in database load	R Transporter	
FacTransTo	Facility Transported to	Varchar	10	Only list if houseanimal =1 and active =1	L_Org.Org	Code for facility which receives the rescued manatee (default to T_User.org if T_User.Vet is 1) Required if RescueType is "B" Filled in "Unk" if null for database load If animal was "brought to captivity" and died before reaching facility, fill in MMPL	R Receiving Facility	transported_to
VetID	Veterinarian	Varchar	10	only list if vet = 1 active =1	T_User.Userid	Veterinarian present at rescue, default to T_User.userid if T_User.Vet is 1 Filled in "Unk" if null for database load.	Veterinarian	Veterinarian
PartOrg	Participating	Varchar	500			Names of all		Organizations

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Bold indicates key fields for each table

Captive Manatee Database

	Organization s					participating organizations, separated by commas Blank is ok in database load		
FloodGate	Flood Gate Number	Varchar	20			Identification of flood gate where animal was trapped. Will only be used if primary cause of rescue was entrapment. Blank is ok in database load		Comments where floodgate is listed – only one s-25
Pot	Pot Status	Char	1		L_Pot.Pot	Code for pot status Only enter if PrimCause or SecCause is “Entan” no default Filled with “U” if null in database load		Rescue_Pot_Status
Weight	Weight	int	5	Required for Data entry but not for Update		Weight of animal in kg. Required for new entries if RescueType = “B” Filled with 0 if null in database load		Res-Weight
EstW	Estimated Weight?	Char	1	Required for Data entry but not for Update		Was weight estimated? (Y,N,U)No default Required for new entries if RescueType = “B” filled with “U: if null in database load		Weight_est-
WDate	Weight Date	SmallDateTim e	20	Required for Data entry but not for Update		Date animal was weighed No default Required for new entries if RescueType = “B”		

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Bold indicates key fields for each table

Captive Manatee Database

						If null in database load, filled with rescuedate		
Length	Length	int	3	Required for Data entry but not for Update		Length of animal in cm Required for new entries if RescueType = "B" No default If null in database load, filled with 0		Res_Length
EstL	Estimated Length?	Char	1	Required for Data entry but not for Update		Was length estimated ? (Y,N,U) No default Required for new entries if RescueType = "B" Filled with "U" if null in database load		Length_est
LDate	Length Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was measured No default Required for new entries if RescueType = "B" If null in database load, filled with rescuedate		
Comments	Additional Narrative	Varchar	5000			Additional Narrative about rescue	Comments	Rescue_entang_other, rescue_entan_injury, Comments
Org	Facility / Field Station	Varchar	10		L_Org.Org	Code for facility on rescue entered by system based on T_User.userid Filled in "Unk" if null for database load		Rescue_From
CreateBy	Reporter	Varchar	10		T_User.UserId	UserId of individual who first posted record to database. Default='D' Filled in "Unk" if null for database load	Reporter	Reporter

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Bold indicates key fields for each table

Captive Manatee Database

CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()	Report Date	Report_Date_MM, Report_Date_DD, Report_Date_YYYY
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

Table: T_RescueReleaseLink

Description: This table connects rescue to release information. It is created whenever a download is updated on the website. It will enable rescues and releases to be linked in the Access database for reporting.

Field Name	App Name	Type	Size	Requirement	Lookup Table / Link	Description	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.Mllog	Unique ID number for manatee in Captive Manatee -- Database		
RescueDate	Rescue Date	SmallDateTime	20			Date manatee was rescued. no default. Have calendar option.	R Date of Rescue	Rescue_Date_MM, Rescue_Date_DD, Rescue_Date_YYYY
RescuePerDay	Rescue Per Day	int	1			Number of rescues of this manatee today. Most rescues will have value of 1. If animal is rescued more than once in a day, the number will increment. default = 1		
RelDate	Release Date	SmallDateTime	20			Date manatee is scheduled to be released. no default. Have calendar option.		

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Bold indicates key fields for each table

Captive Manatee Database

Table: T_Research_Proj

Description: This table stores all information associated with scientific research projects involving manatees. This table has a many-to-one relationship with the T_Conditioning table. This table is currently empty. I will send you the data once I have cleaned it up.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_n orthflorida newer database
ProjectID	ProjectID	Varchar	10			code for project. No default		
Title	Title	Varchar	250			Title of project No default/		Title
Subject	Subject/Research Question	Varcha	250			Subject of project No default/		Subject
PrimResCat	Primary Research Category	Varchar	10		L_Research_Cat.Research	Primary Research Category. No default		
SecResCat	Secondary Research Category	Varchar	10		L_Research_Cat.Research	Secondary Research Category. No default		
PermitType	Permit Type	Varchar	3		L_Permit_Type.PermitType	Type of Permit		
PermitNum	Permit Number	varchar	15			Permit Number. Format for displaying MA MA999999-9 Format for displaying PRT PRT999999		Existing_permit_no, new_fed_permit
ExpireDate	Permit Expiration Date	SmallDateTime	20			Date the permit expires. No default/		
Desc	Description of Project	Varchar	500			Description of project. No default		
PIID	PIID	Varchar	10		T_PI.PIID	Code for PI		researcher
FundOrg	Funding Organization	Varchar	100			Funding Organization. No default		Funding
BudgetTime	Annual Budget or Project budget	Char	1		L_Budget_Time.BidgetTime	Code for description of timing on budget, whether yearly, life of project, etc.		
Budget	Budget	money	7			Budget in dollars. No default		Budget
StartDate	Start Date	SmallDateTime	20			Start date of research project. no default. Have calendar option.		Start_Date
EndDate	End Date	SmallDateTime	20			End date of research project. no default. Have calendar option.		End__Date
Location	Location	Varchar	250			Where research project will be carried out		Location
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database.		Reporter

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Bold indicates key fields for each table

Captive Manatee Database

						Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()		Report_Date_DD Report_Date_MM Report_Date_YYYY
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

Table: T_Status

Description: This table stores all information associated with the status report of a manatee. Status reports are required every 6 months on all manatees in captivity. This table should only be entered by the personnel in the facility where the animal is held or by administrators. This table's key is a combination of MLog, ReqHalfYr and ReqYear, which prevents 2 status records being entered for the same facility meeting in the same year for the same animal. This table has a many-to-one relationship with the T_Manatee table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_nort hflorida newer database
MLog	Manatee Log	int	5		T_Manatee.Mlog	Unique ID number for manatee in Captive Manatee Database	n/a	
ReqHalfYr	1st or 2 nd report of yrt	varchar	1			6 month period when report is required Can only enter: 1, 2 translate 1-2 to spring/fall Jan-Jun=1 July-Dec = 2		
ReqYear	Year Report	Int	4			Year report is required		
Health	Health Status	Char	1		L_Health.Health	Code for Health Status no default If null, fill with "U" for database load	n/a	Health
HealthDiag	Health Diagnosis	Varchar	250	Required for Data entry but not for Update		Details of animals current condition and prognosis no default If null, leave blank in database load.	n/a	Health_Diagnosis
Bloods	Bloods taken?	Char	1		L_Bloods.Bloods	Code for results of blood test. no default	n/a	

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Bold indicates key fields for each table

Captive Manatee Database

						Fill with "U" for database load – will start collecting data in new system		
Status	Release status	Varchar	10		L_Release_Status	Code for release status. no default Edited to fit table for database load	n/a	Release_Status
Time	Release Time	Varchar	1		L_Release_Time	Code for time to release Required if Status = "CondRel". If null fill with "G" for greater than 1 year in database load	n/a	Release_Time
Weight	Weight	int	5			Weight of animal in kg no default	n/a	
EstW	Estimated Weight?	Char	1			Was weight estimated? (Y,N,U) default N If null, fill with "U" in database load	n/a	
WDate	Weight Date	SmallDate Time	20			Date animal was weighed no default if null, fill with report date in database load	n/a	
Length	Length	int	3			Length of animal in cm no default	n/a	
EstL	Estimated Length?	Char	1			Was length estimated? (Y,N,U) default N If null, fill with "U" for database load	n/a	
LDate	Length Date	SmallDate Time	20			Date animal was measured no default if null, fill with report date in database load	n/a	
VetID	Veterinarian	Varchar	10		T_User.Userid	Veterinarian, default to T_User.userid if T_User.Vet is 1. Currently empty	n/a	Status_From
Org	Facility	Varchar	10		L.Org.Org	Code for facility where animal is currently held. Can be taken from T-User since only personnel from that facility can input the status record	n/a	Veterinarian

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Bold indicates key fields for each table

Captive Manatee Database

CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D' If null, fill with veterinarian	n/a	Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()	n/a	Report_Date_MM, Report_Date_DD, Report_Date_YYYY
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'	n/a	
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()	n/a	

Table: T_Tag

Description: This table stores all information associated with the any tags placed on a manatee. These can be radio tags, pit-tags, or freeze-brands. This table has a many-to-one relationship with the T_Manatee table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_History old database	Master_r4_north hflorida newer database
MLog	Manatee Log	int	5		T_Manatee.Mlog	Unique ID number for manatee in Captive Manatee Database		
TagType	Tag Type	Varchar	10		L_Tag_Type.Type	Type of tag		
DateApplied	Date Applied	SmallDateTime	20			Date tag was placed on animal. Default is eventdate	REL Release Date R Rescue Date B Birth Date	Brand_Date_MM, Brand_Date_DD, Brand_Date_YYYY,
TagID	Tag Identifier	Varchar	10	require them to enter pit tags twice to be confirmed. Pit tags must be unique over both Pit-L and Pit-R Pit tags must be 10 characters long.		Identifier or tag number or radio frequency. No Default. If TagType = Pit-R or Pit-L, then force entry of tag id twice. Only allow entry once ID is entered exactly the same twice. Also do not allow any duplicate Pit tag TagID. Pit-tags must be 10 characters long. If Freeze-	REL Tag Satellite/ VHF - ID Number if not null, Satellite, REL Tag Satellite/ VHF - FREQ if not null, Satellite	Other_Ta1, Other_Tag_2, Other_tag_3, Other_Tag_4, Freeze brand if Freeze_brand_number is not null

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Bold indicates key fields for each table

Captive Manatee Database

						brand is already in table, ask if still want to enter freeze-brand or if this could be the same animal. required for TagType: Pit-L and Pit-R and FB. Not for others	REL Tag Freeze Brand if not null, Freeze brand, Radio Tagged, Radio	
Info	Tag Information	Varchar	250			Additional information about the tag such as frequency, etc		
Event	Event	Varchar	10		L_Event.Event	Event associated with tag. Often tagging will occur at event		
EventDate	Date of Event	SmallDateTime	20		L_Months.Months	Enter the date of the event. Have calendar function for update	REL Release Date R Rescue Date B Birth Date	Brand_Date_MM, Brand_Date_DD, Brand_Date_YYYY,
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()		
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

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Bold indicates key fields for each table

Captive Manatee Database

Table: T_Transfer

Description: This table stores all information associated with the transfer of a manatee. This table has a many-to-one relationship with the T_Manatee table.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Lookup Table / Link	Final_Historic old database	Master_r4_northflorida newer database
MLog	Manatee Log	int	5		T_Manatee.MLog	Unique ID number for manatee in Captive Manatee Database	T_Manatee.MLog		
TransDate	Transfer Date	SmallDateTime	20			Date manatee is transferred. no default. Have calendar option.		T Date of Transfer	Actual_trans_Date_MM, Actual_trans_Date_DD, Actual_trans_Date_YY
Reason	Transfer Reason	Varchar	5	L_Trans_Reason.TransferReason	L_Trans_Reason.Reason	Reason for transfer	L_Trans_Reason.Rason	T Reason (edited by Nicole Adimey)	Transfer_reason (edited by Nicole Adimey)
FromFac	From Facility	Varchar	10	Only list if houseanimal =1 and active =1	L_Org.Org	Code for facility where manatee is currently located entered by system based on previous rescue and transfers	L_Org.Org	T Originating Facility	Present_location
ToFac	To Facility	Varchar	10	Only list if houseanimal =1 and active =1	L_Org.Org	Code for facility where animal is to be transferred. Select from list from L_Org where both active and	L_Org.Org	T Receiving Facility	Proposed_location

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Bold indicates key fields for each table

Captive Manatee Database

						house animals = 1. Default to T_User.Org if T_User.Org not = FromFac, else no default			
VetID	Veterinarian	Varchar	10		T_User.Userid	Veterinarian present at transfer, default to T_User.userid if T_User.Vet is 1.	T_User.Userid		
Weight	Weight	int	5	Required for Data entry but not for Update		Weight of animal in kg No default Used 0 for unknown when loaded database		Veterinarian	Veterinarian
EstW	Estimated Weight?	Char	1	Required for Data entry but not for Update		Was weight estimated? (Y,N,U)Default to No			
WDate	Weight Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was weighed No default If no date, used transfer date for database load.			
Length	Length	int	3	Required for Data entry but not for Update		Length of animal in c Used 0 for unknown when loaded database m			
EstL	Estimated Length?	Char	1	Required for Data entry but not for Update		Was length estimated? (Y,N,U)Default to No			
LDate	Length Date	SmallDateTime	20	Required for Data entry but not for Update		Date animal was measured No default If			

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Bold indicates key fields for each table

Captive Manatee Database

						no date, used transfer date for database load.			
Comments	Additional Narrative	Varchar	500			Additional information about transfer No default		Comments	Comments
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'	T_User.Userid	Reporter	Reporter
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate() If no report date, used transfer date for database load.		Report Date	Report_Date_MM, Report_Date_DD, Report_Date_YYYY
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'	T_User.Userid		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()			

Table: T_User

Description: This table stores all information associated with the User of this system. Every table in the system will link to this table to get userid, etc.

Field Name	App Name	Type	Size	Requirements	Lookup Table / Link	Description	Final_Historic old database	Master_r4_n orthflorida newer database
Userid	Userid	Char	10		Every data table	Unique identifier for every user of system, Must be at least 5 characters, but not more than 10.		

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Bold indicates key fields for each table

Captive Manatee Database

Login	Login Name	Char	10			Unique identifier for every user of system selected by the user. Must be at least 5 characters, but not more than 10.		
FirstName	First Name	Varchar	50	Required for Data entry but not for Update		First name of user		
LastName	Last Name	Varchar	50			Last name of user		
Password	Password	Varchar	10	Required for Data entry but not for Update		Password for system. Jang— what is your suggestion for length and requirements?		
Phone	Phone	varchar	12	Required for Data entry but not for Update		Phone number of user. Phone number format xxx-xxx-xxxx No default		
Org	Facility / Field Station	Varchar	10	Required for Data entry but not for Update	L_Org.Org T_Birth.Org T_Death.Org T_Release.Org T_Rescue.Org T_Status.Org T_Transfer.ToFac	Code for facility or field station of user. Select from L_Org.Org where active = 1. No default		
Email	Email	Varchar	100	Required for Data entry but not for Update		Email for user		
Group	Security Group	Char	1		L_Group.Group	Code for security Group No Default.		
Vet	Vet ?	byte	1			Identifies veterinarians. (1=Y, 0=No) Default is No.		
Active	Active?	byte	1			Identifies active users of system versus historical users (1=Y, 0=No) Default is Yes.		
CreateBy	Reporter	Varchar	10		T_User.Userid	Userid of individual who first posted record to database. Default='D'		
CreateDate	Report Date	DateTime	20			Date record was first posted to database. Enter getdate()		
UpdateBy	Last Updated By	Varchar	10		T_User.Userid	Userid of individual who last changed record Default='D'		
UpdateDate	Last Updated Date	DateTime	20			Date record was last changed. Enter getdate()		

.....
Bold indicates key fields for each table

Lookup tables

Lookup tables are listed below in alphabetical order. Entries in Lookup tables can be found in Access Database. There are 31 lookup tables. I used lookup tables wherever we needed to standardize entries, even for simple Yes/No/Unknown so that the Manatee Administrators can manage add/change categories as needs arise. Note: R indicates required fields.

Table: L_Bloods

Description: Lookup table to show results of blood taken from manatees.

Field Name	Type	Size	R	Description	Lookup Table / Link
Bloods	Char	1	A	Code for blood results	T_Status.Bloods
Bloodstaken	Varchar	50	A	Text for blood results	
Description	Varchar	100		Further definition or explanation	

Table: L_Budget_Time

Description: Lookup table for different budget cycles.

Field Name	Type	Size	R	Description	Lookup Table / Link
BudgetTime	Char	1	A	Code for budget cycle	T_Research_Proj.BudgetTime
BudgetText	Varchar	50	A	Text for budget cycle	
Description	Varchar	100		Further definition or explanation	

Table: L_Conceived

Description: Lookup table for whether conceived in wild or in captivity

Field Name	Type	Size	R	Description	Lookup Table / Link
Conceive	Char	1	A	Code for where conceived	T_Birth.Conceive
ConceiveText	Varchar	15	A	Full text for where conceived	
Description	Varchar	50		Further definition or explanation	

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 **Bold** indicates key fields for each table

Captive Manatee Database

Table: L_Con

Description: Lookup table for conditioning types

Field Name	Type	Size	R	Description	Lookup Table / Link
Cond	Char	1	A	Code for conditioning type	T_Conditioning.Co nd
ConditioningType e	Varchar	15	A	Full text for conditioning type	
Description	Varchar	100		Further definition or explanation	

Table: L_County

Description: Lookup table for county

Field Name	Type	Size	R	Description	Lookup Table / Link
State	Char	2	A	State abbreviation	T_Release.County T_Rescue.County
County	Varchar	30	A	Name of county	

Table: L_Death_Cause

Description: Lookup table for cause and details of death

Field Name	Type	Size	R	Description	Lookup Table / Link
CauseID	char	4	A		T_Death.CauseID
DeathCause	Varc har	30	A	Full text for cause of death	
DeathCauseDetail	Varc har	30	A	Full text for cause of death detail	
Description	Varc har	300		Further definition or explanation	

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..... **Bold** indicates key fields for each table

Captive Manatee Database

Table: L_Death_Loc

Description: Text to delineate when in the rescue rehabilitation process death occurred

Field Name	Type	Size	R	Description	Lookup Table / Link
DeathLoc	Varchar	7	A	Code for where in rescue rehab process death occurs	T_Death.DeathLoc
DeathLocation	Varchar	25	A	Full text for where in rescue rehab process death occurs	
Description	Varchar	100		Further definition or explanation	
Active	Varchar	1	A	Identifies active choice for data entry	

Table: L_Event

Description: Lookup table for events in manatee life

Field Name	Type	Size	R	Description	Lookup Table / Link
Event	Varchar	10	A	Event	T_Tag.Event

Table: L_Gear_Type

Description: Lookup table for cause of death

Field Name	Type	Size	R	Description	Lookup Table / Link
Gear	Varchar	4	A	Code for gear type	T_Entangle.Gear
GearType	Varchar	25	A	Full text for gear type	
Description	Varchar	250		Further definition or explanation	

Table: L_Group

Description: Lookup table to define security groups

Field Name	Type	Size	R	Description	Lookup Table / Link
Group	Char	1	A	Code for security group	T_User.Group

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 **Bold** indicates key fields for each table

Captive Manatee Database

GroupText	Varchar	20	A	Full text for security group	
Description	Varchar	200		Further definition or explanation	

Table: L_Health

Description: Lookup table for health status

Field Name	Type	Size	R	Description	Lookup Table / Link
Health	Char	1	A	Code for health status	T_Birth.Health T_Rescue.Health T_Status.Health
HealthStatus	Varchar	15	A	Full text for health status	
Description	Varchar	500		Further definition or explanation	

Table: L_ID_Type

Description: Lookup table for categorizing ids from other systems

Field Name	Type	Size	R	Description	Lookup Table / Link
IDType	Char	1	A	Code for id type	T_AnimalID.IDType
TypeofID	Varchar	15	A	Full text for id type	
Description	Varchar	50		Further definition or explanation	

Table: L_Months

Description: Lookup table for months of treatment. Lists numbers 0-12 and >12.

Field Name	Type	Size	R	Description	Lookup Table / Link
Months	Varchar	3	A	Code for months	T_Release.MonthsVeg T_Release.MonthsExpWater T_Status.Time

Table: L_Org

Description: Lookup table for all information about organizations, including whether they can house or transport animals, and whether they are active

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 **Bold** indicates key fields for each table

Captive Manatee Database

Field Name	Type	Size	R	Description	Lookup Table / Link
Org	Varchar	10	A	Abbreviation for organization	T_Rescue.FacTransTo T_Release.Transporter T_Transfer.ToFac T_User.Org
Organization	Varchar	50	A	Full text for organization	
Active	byte	1	A	Is facility currently active? (1=Yes, 0=No)	
HouseAnimals	byte	1	A	Can facility house animals? (1=Yes, 0=No)	
Transporter	byte	1	A	Can facility transport animals? (1=Yes, 0=No)	
Comments	varchar	100		Further explanation of organization	

Table: L_Permit_Type

Description: Lookup table for categorizing permit

Field Name	Type	Size	R	Description	Lookup Table / Link
Type	Varchar	3	A	Code for permit type	T_Research_Proj.PermitType
PermitType	Varchar	50	A	Full text for permit type	
Description	Varchar	100		Further definition or explanation	

Table: L_Pot

Description: Lookup table for pot status

Field Name	Type	Size	R	Description	Lookup Table / Link
Pot	Char	1	A	Code for pot status	T_Rescue.Pot
PotStatus	Varchar	10	A	Full text for pot status	
Description	Varchar	100		Further definition or explanation	

Table: L_Pregnant

Description: Lookup table for suspected pregnant

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 **Bold** indicates key fields for each table

Captive Manatee Database

Field Name	Type	Size	R	Description	Lookup Table / Link
Pregnant	Char	1	A	Code for Suspected pregnant	T_Rescue.Pregnant
Description	Varchar	50	A	Full text for pregnant	

Table: L_Rearing

Description: Lookup table for categories of how manatee was raised.

Field Name	Type	Size	R	Description	Lookup Table / Link
Rearing	Varchar	4	A	Code for rearing type	T_Manatee.Rearing
RearingType	Varchar	30	A	Full text for rearing type	
Description	Varchar	50		Further definition or explanation	

Table: L_Release_Status

Description: Lookup table defining release status

Field Name	Type	Size	R	Description	Lookup Table / Link
Status	Varchar	10	A	Code for release status	T_Status.Status
ReleaseStatus	Varchar	50	A	Full text for release status	
Description	Memo	500		Further definition or explanation	
Active	Char	1		Identifies active choice for data entry	

Table: L_Release_Time

Description: Lookup table defining release Time

Field Name	Type	Size	R	Description	Lookup Table / Link
TimeCode	Varchar	1	A	Code for release time	T_Status.Time
ReleaseTime	Varchar	15	A	Full text for release time	

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 **Bold** indicates key fields for each table

Captive Manatee Database

Description	Memo	100		Further definition or explanation	
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Table: L_Rescue_Cause

Description: Lookup table for cause and details of rescue

Field Name	Type	Size	R	Description	Lookup Table / Link
CauseID	Char	4	A		
RescueCause	Varchar	30	A	Full text for cause of rescue	
RescueCauseDetail	Varchar	30	A	Full text for cause of rescue detail	
Description	Varchar	500		Further definition or explanation	

Table: L_Rescue_Type

Description: Lookup table for rescue type

Field Name	Type	Size	R	Description	Lookup Table / Link
RescueType	Char	1	A	Code for rescue type	T_Rescue.RescueType
RescueTypeText	Varchar	30	A	Text for Rescue Type	
Description	Varchar	100		Further definition or explanation	

Table: L_Research_Cat

Description: Lookup table for research categories

Field Name	Type	Size	R	Description	Lookup Table / Link
Research	Varchar	10	A	Code for research category	T_Research_Proj.EResCat
Research_Category	Varchar	50	A	Full text for research category	
Description	Varchar	100		Further definition or explanation	

Table: L_Sex

Description: Lookup table for sex of manatee

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 **Bold** indicates key fields for each table

Captive Manatee Database

Field Name	Type	Size	R	Description	Lookup Table / Link
Sex	Char	1	A	Code for rescue type	T_Manatee.Sex
Description	Varchar	15	A	Further definition or explanation	

Table: L_State

Description: Lookup table for State

Field Name	Type	Size	R	Description	Lookup Table / Link
State	Char	2	A	State Abbreviation. Must be uppercase and 2 characters	T_Release.State T_Rescue.State
StateName	Varchar	50	A	State Name	

Table: L_Status_Rpt_Month

Description: Lookup table for months for status

Field Name	Type	Size	R	Description	Lookup Table / Link
Month	Char	1	A	Month	
MonthName	Varchar	10		Name of month	

Table: L_System

Description: Lookup table for names of other manatee research systems

Field Name	Type	Size	R	Description	Lookup Table / Link
System	Varchar	10	A	Code for system	T_Other_Names.System
Description	Varchar	100		Further definition or explanation	

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 **Bold** indicates key fields for each table

Captive Manatee Database

Table: L_Tag_Type

Description: Lookup table for tag type

Field Name	Type	Size	R	Description	Lookup Table / Link
Type	Varchar	10	A	Code for tag type	T_TagTagType
TagTypeText	Varchar	50	A	Text for tag Type	
Description	Varchar	100		Further definition or explanation	

Table: L_Trans_Reason

Description: Lookup table for transfer reasons

Field Name	Type	Size	R	Description	Lookup Table / Link
Reason	Varchar	5	A	Code for transfer reason	T_Transfer.Reason
TransferReason	Varchar	50	A	Text for transfer reason	
Description	Varchar	100		Further definition or explanation	

Table: L_Water

Description: Lookup table for defining water types by salinity

Field Name	Type	Size	R	Description	Lookup Table / Link
Type	Char	1	A	Code for water salinity	T_Release.DisplayType T_Release.RelType
Water_Type	Varchar	50	A	Text for water type by salinity	
Description	Varchar	100		Further definition or explanation	

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 **Bold** indicates key fields for each table

Captive Manatee Database

Table: L_Year

Description: Lookup table for year

Field Name	Type	Size	R	Description	Lookup Table / Link
LYear	int	4	A	Year	

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..... **Bold** indicates key fields for each table