

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MEC21082  
**Date of Report:** 2021-Jan-31  
**Filed By:** FWC EC Field Station

**FWC Case #** 1826 **FWC Region:** NE

**Sex:** Unknown **Length:** 300 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-31 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Brevard **Longitude:** W

**Waterway:** Indian River

**Locality description:** Merritt Island, grounded approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Verified through complainant photograph.

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed. Also FWC case number 1820. Scavenging.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	300 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MEC21082

**RECOVERY DATE** N/A

**GENDER** Undetermined **TL** 300 **cm** (est) **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 31 January 2021, at 1431 hrs, FWC biologist-Sara M. Wappes (SMW) received a text alert from FWC NE Dispatch-Orlando regarding a dead manatee at Peacock's Pocket in the Indian River, Merritt Island, Brevard County. FWC case number 1820 was assigned. The complainant, Shannon Tucker (386-307-2204), stated that the carcass was all white and a full-grown adult. At 1435 hrs, SMW received a photo that was inconclusive. At 1603 hrs, SMW received another text alert from Dispatch regarding a dead manatee at Peacock's Pocket. FWC case number 1826 was assigned. The complainant, stated that the carcass was at least nine feet long and belly-up with vultures on it. At 1636 hrs, SMW received a verification photo. Based on the location, advanced state of decomposition, and high carcass load, the carcass was not recovered or necropsied.

**EXTERNAL** From photograph - Almost all of the ventral epidermis was missing. The carcass was dorsoventrally flattened due to decomposition. There were scavenging rents on the caudal ventrum.

**COMMENTS**

### SIGNIFICANT FINDINGS

- Verified through complainant photograph
- Scavenging

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

**NECROPSY CONDUCTED BY**

N/A

**REPORT FILED BY** Wappes

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:      Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal      ☐ Ventral      ☐ R. Lateral      ☐ L. Lateral      ☐ Scars      ☐ Fluke      ☐ Cranial      ☐ Internal      ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics      ☐ Earbone      ☐ Skull      ☐ Partial Skeleton      ☐ Complete Skeleton      ☐ Histology      ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach      ☐ Liver      ☐ Kidney      ☐ Blubber      ☐ Lower Jaw      ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach      ☐ Liver      ☐ Lung      ☐ Urine      ☐ Kidney (if no urine)      ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements      ☐ Wound measurements      ☐ Perinatal evaluation      ☐ Organ weights  
☐ Rescue Report/Map      ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:



## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MEC21202  
**Date of Report:** 2021-Mar-01  
**Filed By:** FWC EC Field Station

**FWC Case #** **FWC Region:** NE

**Sex:** Female **Length:** 316 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-01 **By:** FWC-WDG,MMPL-CMF

**DATE COLLECTED:** 2021-Mar-01 **By:** FWC-WDG,MMPL-CMF

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Brevard **Longitude:** W

**Waterway:** Indian River

**Locality description:** Cocoa, grounded approximately 55m E of 4355 North Indian River Drive.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	316 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MEC21202

**RECOVERY DATE** 01 March 2021

**GENDER** Female **TL** 316 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY 01 March 2021**, at 0910 hrs, FWC biologists-Bill Greer (WDG) and Christine Fontaine (CMF) arrived at Port St. John boat ramp and launched the ECFL Key West to recover MEC21186, MEC21189, MEC21190, MEC21197 and MEC21198. At 1216 hrs, WDG located an additional carcass in the Indian River, Cocoa, Brevard County. WDG and CMF secured the carcass to the Key West at 1220 hrs, towed to a remote location (along with MEC21186, MEC21190, and MEC21198), and completed an external work up by 1432 hrs. The remains were left on site. At 1543 hrs, FWC biologist-Sara Wappes (SMW) received a text alert from FWC NE Dispatch-Orlando regarding a manatee carcass in the Indian River, Cocoa, Brevard County. FWC case number 3847 was assigned. The complainant, Alan Bukis, stated that he had seen the manatee at 1100 hrs, was at work now, but would take a picture when he returned home. Based on location, SMW thought it was likely MEC21202. At 1752 hrs, the complainant notified SMW that the carcass was no longer there.

**EXTERNAL** Approximately 40% of the epidermis was present but sloughing. Watery, red fluid exuded from the nares. The carcass was distended with gas. There was a moderate green algal mat on the right lateral aspect. There was a mild infestation of barnacles on the dorsal fluke. There was a minimum of five well healed, watercraft-related scar series on the dorsal aspect and fluke. PIT tag scan was negative. A genetics sample was collected.

**PHOTOGRAPHS** 2021-03-01\_FWC049\_4792 through 4811

### COMMENTS

### SIGNIFICANT FINDINGS

- Verified by FWC biologists

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

N/A

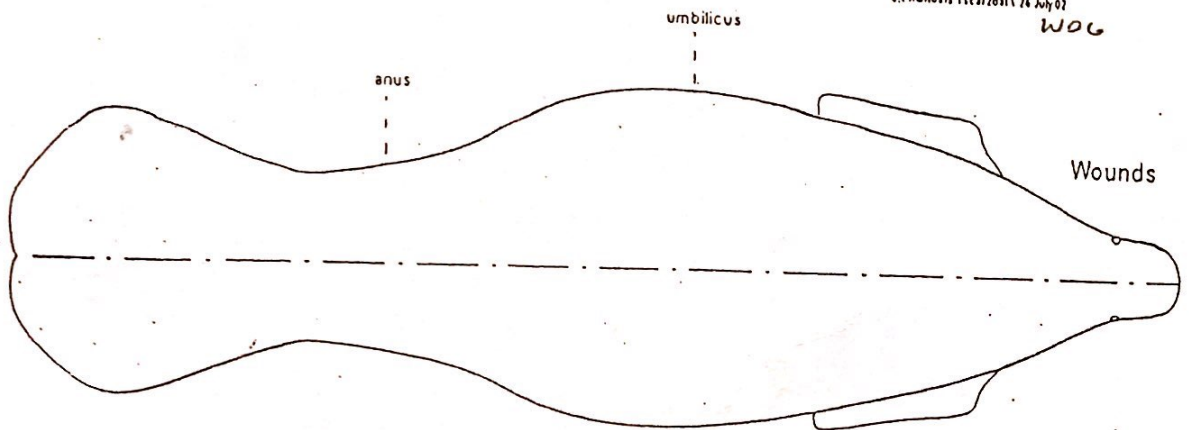
REPORT FILED BY Wappes/Greer

Date 01 MAR 2021

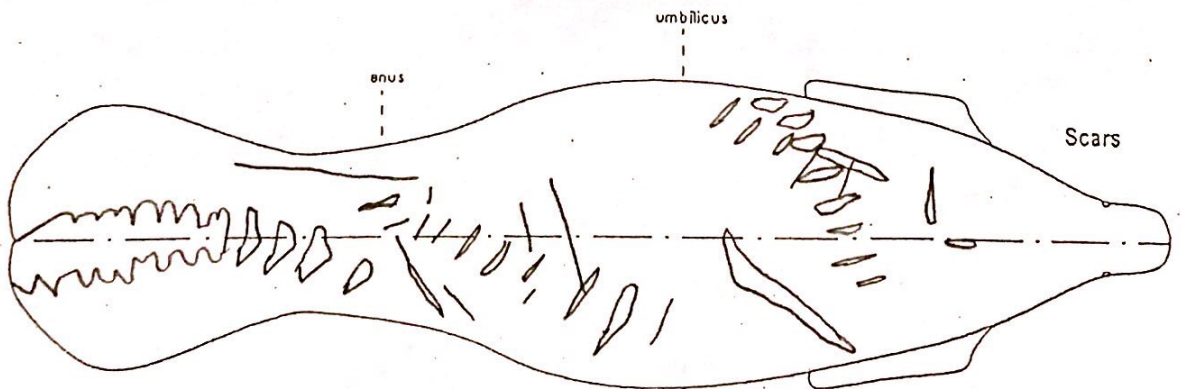
Field I.D. MEC21202

c:\Manuals\ScarData\ 26 July 02

WOG



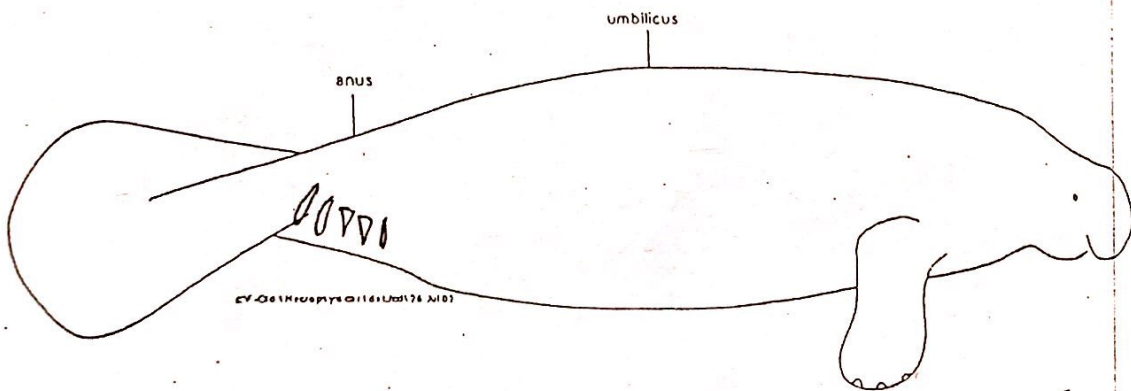
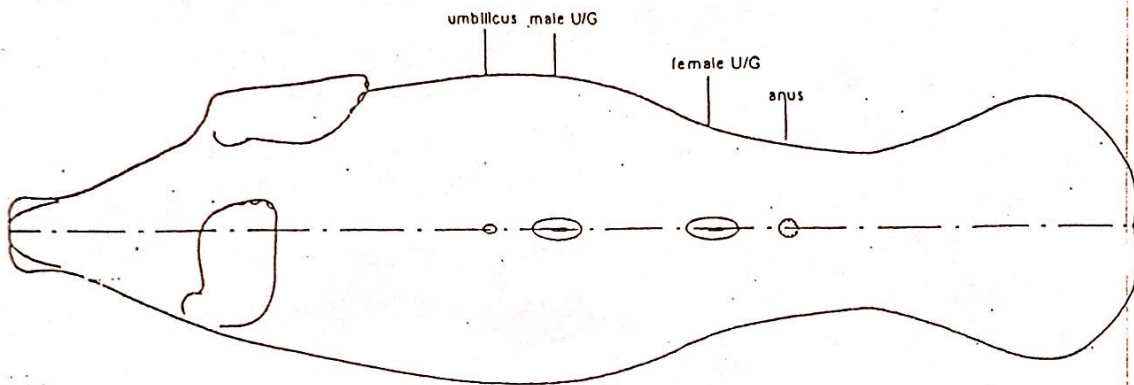
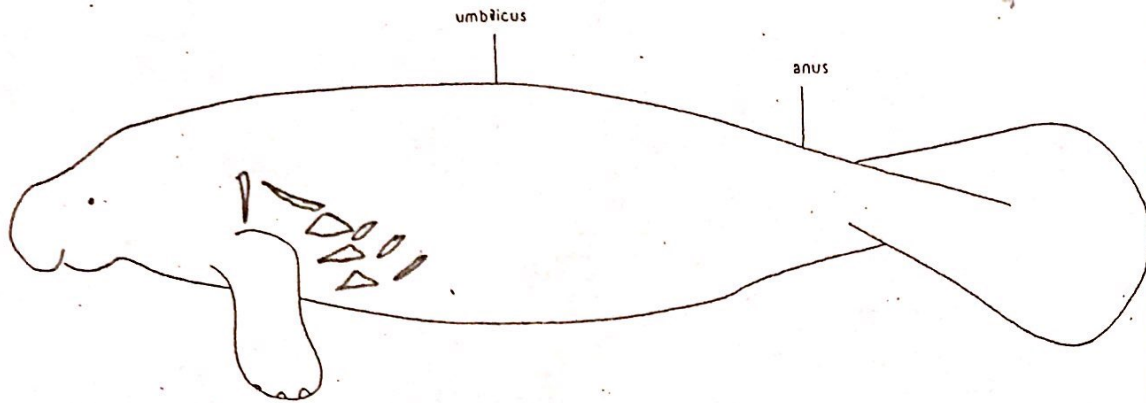
Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



Scar Data sheet Sep 2002

FIELD I.D.

MAC 21202



CV-061800pysa (16x10) 176 Jul 01

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map      ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MEC21203  
**Date of Report:** 2021-Mar-03  
**Filed By:** FWC EC Field Station

**FWC Case #** 3929 **FWC Region:** NE

**Sex:** Female **Length:** 318 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-03 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** 2021-Mar-03 **By:** FWC-SMW,CMM

**DATE NECROPSIED:** 2021-Mar-03 **By:** FWC-SMW,CMM

**LOCATION: State:** FL **Latitude:** N

**County:** Brevard **Longitude:** W

**Waterway:** Indian River

**Locality description:** Titusville, grounded approximately 1.3 km ESE of 2035 Parrish Road.

**CONDITION:** Badly Decomposed

**PROBABLE CAUSE OF DEATH:** Undetermined: Too Decomposed

**EXPLAIN:** Autolyzed and/or missing internal organs. Serous fat(s); Dry, hard feces; Crumbly feces.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal.

**MATERIALS COLLECTED:**  
Genetics. Stomach contents, feces.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. Uterine Scar. A field necropsy was performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	318 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:



## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MEC21203

**RECOVERY DATE** 03 March 2021

**GENDER** Female **TL** 318 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 03 March 2021

**CONDITION** Badly Decomposed

**HISTORY** 03 March 2021, at 0840 hrs, FWC biologist-Sara Wappes (SMW) received a text alert from FWC NE Dispatch-Orlando regarding a manatee carcass in the Indian River, Titusville, Brevard County. FWC case number 3929 was assigned. The complainant, Mr. Flutes (407-968-8054), stated that the carcass was belly up and intact with its skin starting to peel. SMW and FWC biologist-Carley Metcalf arrived at the Nasa Railroad bridge at 1035 hrs, verified the carcass at 1052 hrs, and completed a field necropsy by 1220 hrs. The remains were left on site.

**EXTERNAL** Approximately 25% of the epidermis was present but sloughing. The carcass was distended with gas. There were eight well healed, watercraft-related scar series on the dorsal aspect and one well healed, watercraft-related scar series on the head. PIT tag scan was negative. A genetics sample was collected.

**ABDOMINAL** There was a small amount of serous abdominal fat. There was a moderate amount of serous and gassy mesenteric fat. There was a small amount of serous and gassy omental fat.

**STOMACH** The stomach contained 3.7 L of moist, moderately chewed, leafy, stringy, brown digesta mixed with yellow and red macroalgae. No parasites were observed. The mucosa was autolyzed. There was a diffuse brown to red coloration of the stomach wall.

**DUODENUM** The duodenum contained 500 mL of moist, moderately chewed, leafy, stringy, brown digesta mixed with yellow and red macroalgae and a small amount of watery, gray fluid. The mucosa was autolyzed. No parasites were observed.

**JEJUNUM & ILEUM** The proximal small intestine contained a small amount of viscous gray fluid. The mid small intestine was mostly empty with intermittent sections of moist, moderately formed, poorly chewed, leafy, stringy, yellow to brown ingesta. The distal small intestine contained moist, moderately formed, poorly chewed, leafy, stringy, yellow to brown ingesta. The mucosa was autolyzed. No parasites were grossly observed.

**CECUM** The cecum contained 3 L of moist, poorly digested, leafy, stringy, yellow to green digesta mixed with yellow macroalgae and dark brown to black vegetation (see photo). The mucosa was autolyzed. No parasites were observed.

**COLON** The distal-most portion of the colon contained dry, crumbly, well digested, poorly formed, stringy brown feces. The proximal portion of the distal colon contained slightly moist, well digested, well formed, stringy brown feces. The distal portion of the mid-colon contained very moist, well digested, poorly formed, stringy brown feces mixed with red and yellow macroalgae. The proximal portion of the mid colon contained slightly moist, moderately digested, moderately formed, stringy, leafy brown feces mixed with red and yellow macroalgae. The distal portion of the proximal colon contained moist, poorly digested, poorly formed, stringy, leafy, green feces mixed with red and yellow macroalgae. The mid portion of the proximal colon contained moist, moderately digested, well formed, extremely stringy, leafy brown feces mixed with red and yellow macroalgae and dark brown to black vegetation. The proximal-most portion of the colon contained moist, moderately digested, well formed, stringy, leafy brown to green feces mixed with red and yellow macroalgae. There was a 16 x 4 cm long piece of gray duct tape in the contents of the proximal colon (see photo). The mucosa of the proximal colon was sloughing. The mucosa of the mid and distal colon was autolyzed. No parasites were grossly observed.

**PANCREAS** The pancreas was soft and gassy. The pancreas was gray on serosal surfaces and pink on cut surfaces.

**SPLEEN** The spleen was mottled gray to black on serosal surfaces and gray on cut surfaces.

---

**LIVER** The liver was soft, friable, and autolyzed.

**GALLBLADDER** The gallbladder was empty of contents. The mucosa was stained yellow to black.

---

**REPRODUCTIVE** There was a moderate amount of serous reproductive fat. The reproductive organs were soft and friable. The uterus was contracted. The uterine horns were distended with gas. The left uterine horn contained a scar. Both ovaries contained numerous fluid-filled follicles (maximum diameter 0.8 cm).

**KIDNEYS** The perirenal fat was rendered. The kidneys were soft. Both kidneys were brown on serosal surfaces. On cut surfaces, the cortices of the left kidney were gray to brown and the medullae were red. The corticomedullary boundaries of the left kidney were mostly distinct. On cut surfaces, the cortices of the right kidney dark red and the medullae were dark red. The corticomedullary boundaries of the right kidney were indistinct.

**URINARY BLADDER** The urinary bladder contained 50 mL of watery, pink to red tinged urine. The mucosa was gassy.

---

**HEART** The epicardial fat was rendered. The heart was soft. The valves and chambers were unremarkable.

---

**RESPIRATORY SYSTEM** Both hemidiaphragms were torn due to decomposition. Both lungs were soft, friable, and autolyzed.

---

**HEAD & NECK REGIONS** NVL.

---

**SKELETON** NVL.

---

**OTHER**

---

**PHOTOGRAPHS** 2021-03-03\_FWC049\_4832 through 4872

---

**COMMENTS** A fecal and stomach sample were collected for IRL feeding ecology study.

---

**SIGNIFICANT FINDINGS**

- Serous fats
- Autolyzed internal organs
- Macroalgae in GI tract
- Duct tape in colon

---

**PROBABLE CAUSE OF DEATH** Undetermined; Too Decomposed

---

**NECROPSY CONDUCTED BY**

Sara M. Wappes  
Carley M. Metcalf

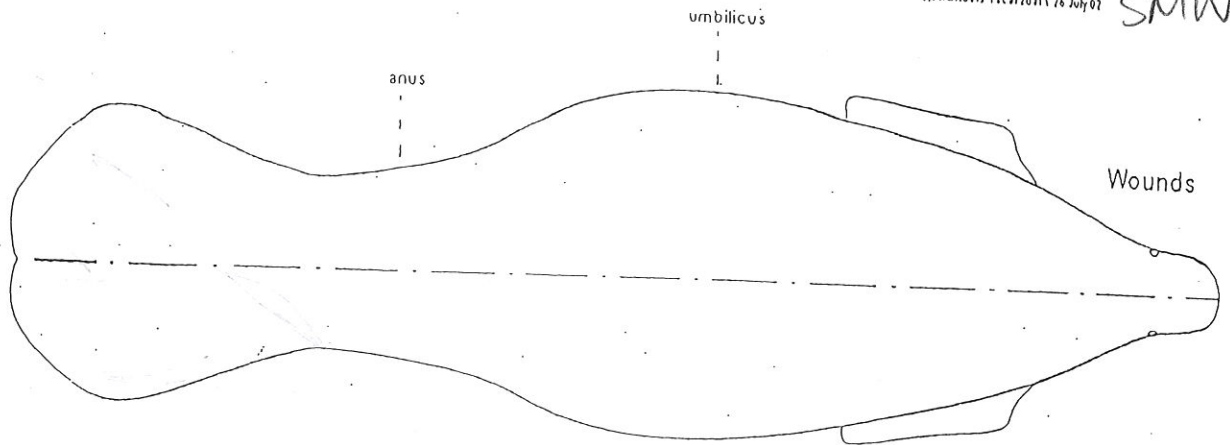
REPORT FILED BY Wappes/Metcalf

Date 03 MAR 2021

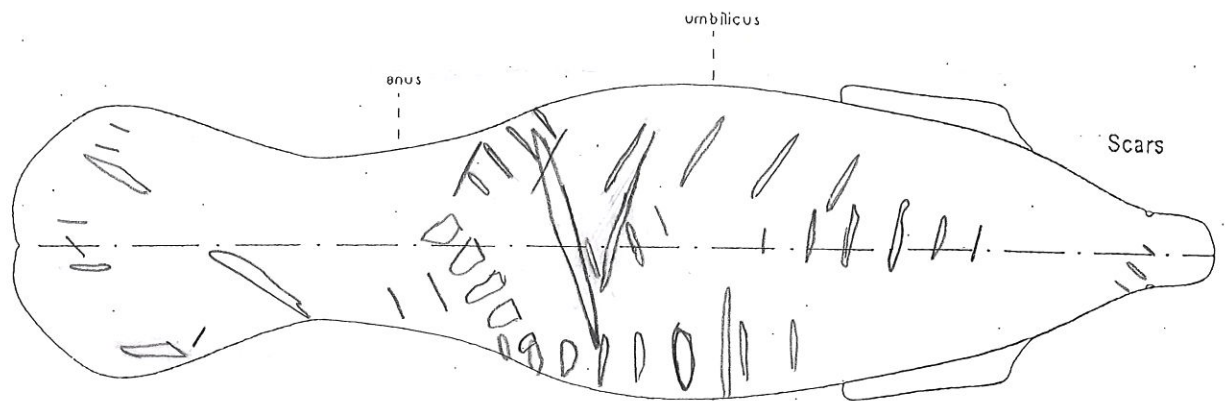
Field I.D. MEC21203

c:\Manuals\1scar\2011\26 July 02

SMW



Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



Scar Data sheet, Sep 2002

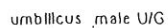
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



CV-061KtUopryk Q1161 Uda\76 N10?

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MEC21204  
**Date of Report:** 2021-Mar-03  
**Filed By:** FWC EC Field Station

**FWC Case #** 3947 **FWC Region:** NE

**Sex:** Female **Length:** 336 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-03 **By:** Citizen to FWC NE Dispatch  
**DATE COLLECTED:** 2021-Mar-04 **By:** FWC-SMW,MMPL-CMF,FWC Intern-K. Lawson  
**DATE NECROPSIED:** 2021-Mar-04 **By:** FWC-SMW,MMPL-CMF,FWC Intern-K. Lawson

**LOCATION:** **State:** FL **Latitude:** N  
**County:** Brevard **Longitude:** W  
**Waterway:** Indian River

**Locality description:** Cocoa, grounded approximately 75 m W of 4640 Brentwood Drive.

**CONDITION:** Badly Decomposed

**PROBABLE CAUSE OF DEATH:** Natural: Other

**EXPLAIN:** Autolyzed and/or missing internal organs. Serous fat(s); Depleted fat(s); Empty GI tract.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal.

**MATERIALS COLLECTED:**  
Genetics. Feces.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

### REMARKS:

PIT tag scan negative. Uterine Scar. A field necropsy was performed. Known as MIPS ID BC308, TBC012, "Heike", first sighted on 13 Feb 1980 at the Indian River OUC/Reliant power plant.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	336 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MEC21204  
**RECOVERY DATE** 04 March 2021  
**GENDER** Female **TL** 336 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*  
**NECROPSY DATE** 04 March 2021  
**CONDITION** Badly Decomposed

**HISTORY** 03 March 2021, at 1208 hrs, FWC biologist-Sara Wappes (SMW) received a text alert from FWC NE Dispatch-Orlando regarding a manatee carcass in the Indian River, Cocoa, Brevard County. FWC case number 3947 was assigned. The complainant, David Sharp (321-917-0553), reported a dead manatee behind his home. The manatee was verified via photo at 1213 hrs. At 1530 hrs FWC biologist-Christine Fontaine (CMF) and FWC LE officer Seth Loeffler located the animal and secured the carcass at the OUC boat ramp at 1615 hrs for retrieval the next day. 04 March, CMF, SMW and FWC intern-Kylie Lawson arrived at OUC boat ramp at 1035 hrs, loaded the carcass via U-trailer at 1051 hrs, and transported the carcass to the Brevard County landfill. A necropsy was completed at 1300 hrs. The remains were disposed of at the Brevard County landfill.

**EXTERNAL** Approximately 30% of the epidermis was present and sloughing. The cranial dermis of the ventrum was sunburnt. A moderate amount of bloody fluid exuded from the nares. The carcass was distended with gas. There was cobblestone-like epidermis on the dorsal fluke and ventrum. There was a thick brown algal mat on the remaining epidermis of the left lateral aspect. There were mites on the ventral fluke. No watercraft-related wounds were observed. There was a minimum of 11 well healed, watercraft-related scar series on the dorsal aspect and fluke. The fluke margin had six large, distinct, well-healed mutilations between the 3 and 8 o'clock positions. PIT tag scan was negative. A genetics sample was collected.

**ABDOMINAL** There was a small amount of serous abdominal fat. There was a moderate amount of gassy omental fat. There was an abundant amount of serous and gassy mesenteric fat.

**STOMACH** The stomach contained 25 mL of viscous, grey to tan fluid. The mucosa was unremarkable. No parasites were observed. Mucosa autolyzed throughout.

**DUODENUM** The stomach contained 250 mL of viscous, grey to tan fluid. The mucosa was unremarkable. No parasites were observed.

**JEJUNUM & ILEUM** The proximal small intestine was empty. The mid small intestine had scant watery, yellow fluid. The distal small intestine had scant viscous, gray fluid. No parasites were grossly observed. The mucosa was autolyzed throughout.

**CECUM** The cecum contained 800 mL of moist, partially digested, fibrous, stringy, and leafy orange to brown digesta. No parasites observed. The mucosa was autolyzed.

**COLON** The proximal colon contained a moderate amount of moist, moderately formed, poorly digested, stringy, fibrous, leafy dark orange to brown feces. The mid colon contained a moderate amount of moist, well-formed, moderately digested, very stringy yellow to brown feces. The distal colon contained a moderate amount of moist, well-formed well digested, stringy brown feces. No parasites observed throughout. The mucosa was autolyzed throughout.

**PANCREAS** The pancreas was soft, friable, autolyzed

**SPLEEN** The spleen was soft, friable, autolyzed.

**LIVER** The liver was soft, friable, autolyzed

Commented [FC1]: Is this true??

Commented [WS2R1]: yes



**GALLBLADDER** The gallbladder had a scant amount of slightly viscous golden yellow to orange bile. Mucosa was bile-stained.

**REPRODUCTIVE** There was a small amount of serous reproductive fat. Both uterine horns had uterine scars. Uterine horns and uterus were contracted. Ovaries were autolyzed.

**KIDNEYS** There was scant perirenal fat. The kidneys were pink to brown on serosal surfaces. On cut surfaces, the cortices were pink to brown and the medullae were red. The corticomedullary boundaries were mostly indistinct and some had a black line.

**URINARY BLADDER** The bladder contained 50 ml of flocculent, pink-tinted urine. The mucosa was gassy.

**HEART** There was scant epicardial fat. The valves and chambers of the heart were unremarkable.

**RESPIRATORY SYSTEM** Both hemidiaphragms were torn due to decomposition. The right lung was soft, friable and autolyzed. The left lung was soft and friable. The serosal surface was light pink to purple and the cut surfaces were red. The airway disintegrated upon cutting. The mucosa was unremarkable. No parasites were observed.

**HEAD & NECK REGIONS** The mucosa of the trachea was tan.

**SKELETON** NVL

**OTHER**

**PHOTOGRAPHS** 2021-03-04\_FWC050\_1889 through 1930

**COMMENTS** A fecal sample was collected for the IRL feeding ecology study.

**SIGNIFICANT FINDINGS**

- Mostly serous and depleted fats
- Empty upper GI tract
- Autolyzed internal organs

**PROBABLE CAUSE OF DEATH** Natural

**NECROPSY CONDUCTED BY**

Sara M. Wappes  
Christine M. Fontaine  
Kylie C. Lawson (Intern)

REPORT FILED BY C. Fontaine

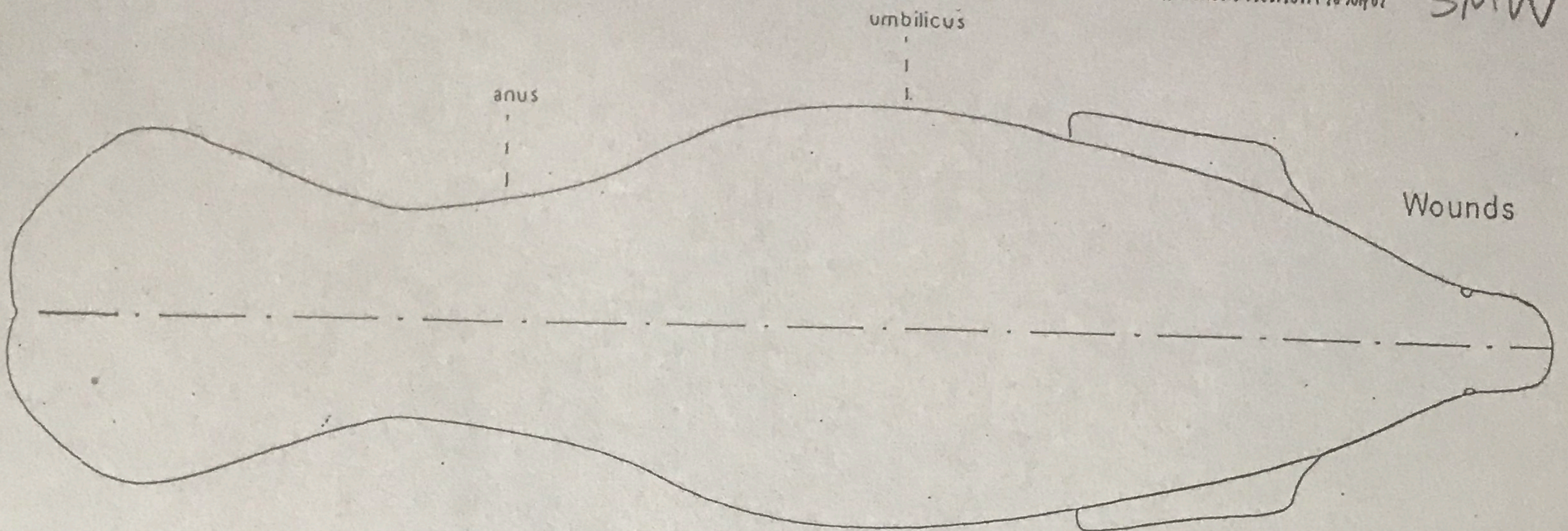


Date 04 MAR 2021

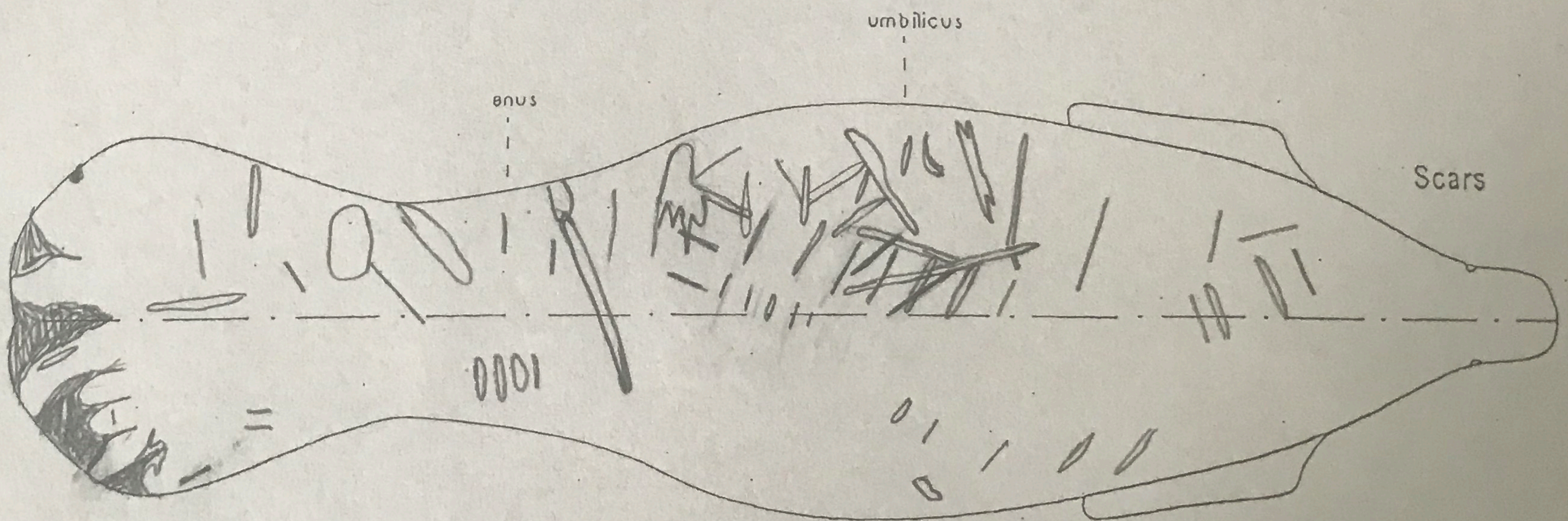
Field I.D. MEC21204

U.S. Navy Manual 11000-11 26 July 02

SMW



Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				





\_\_\_\_\_

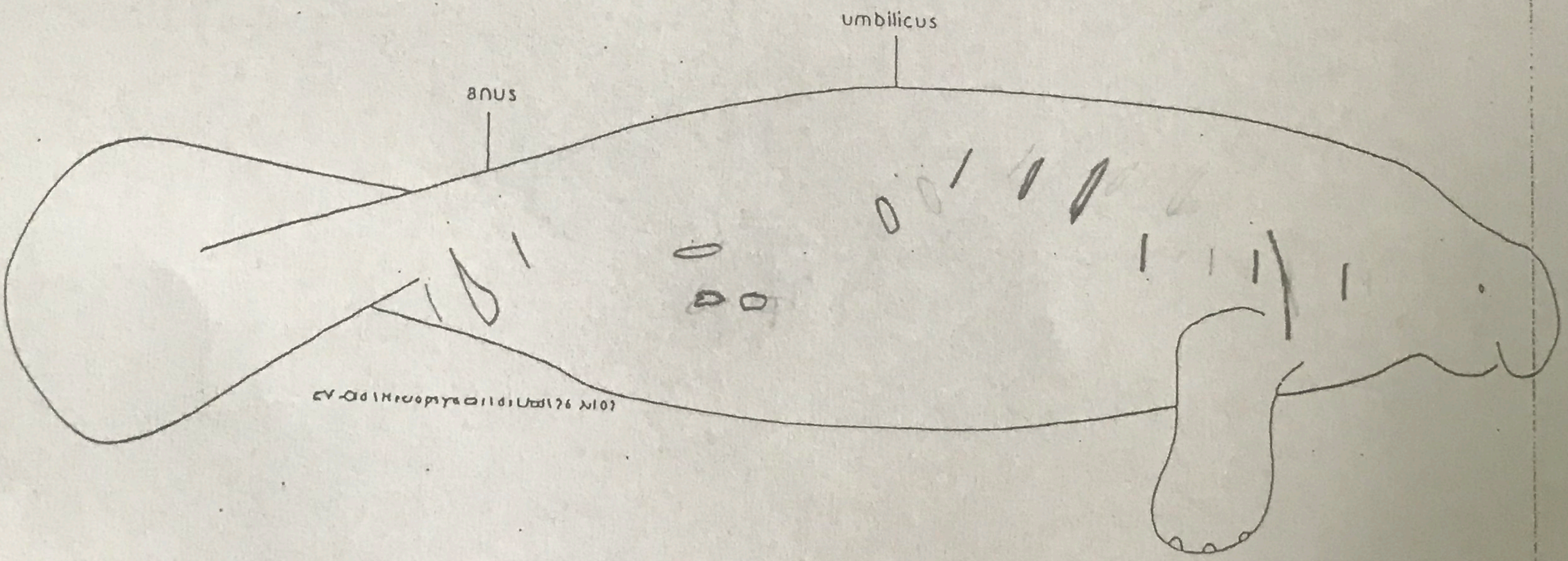
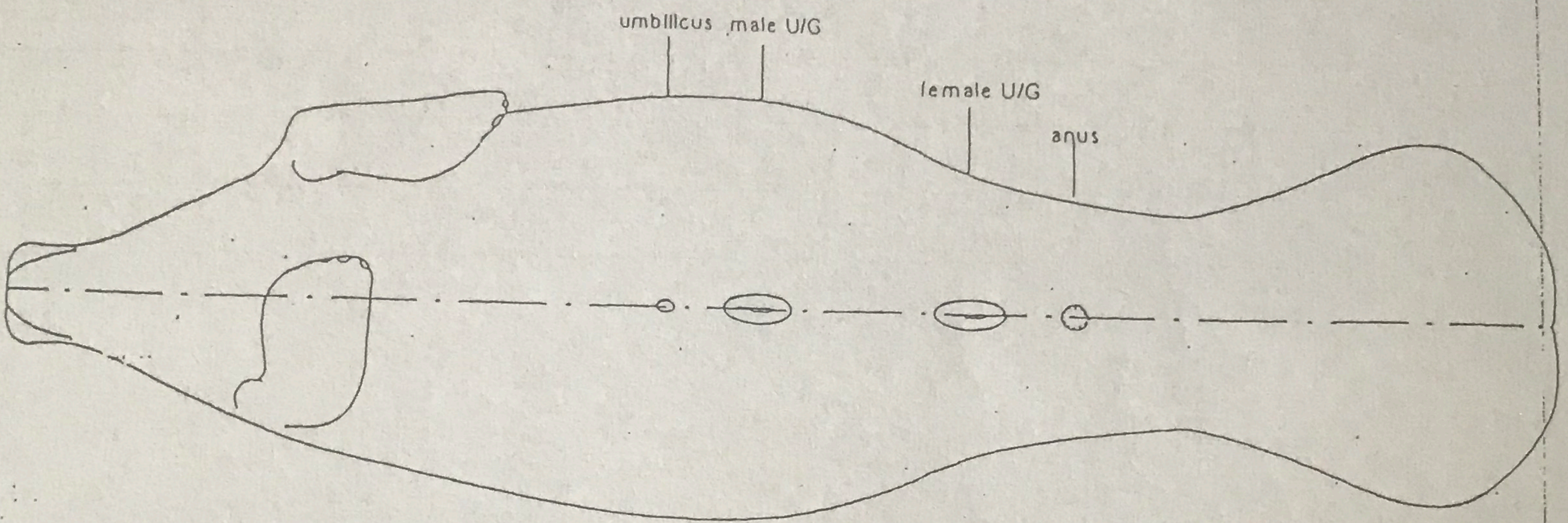
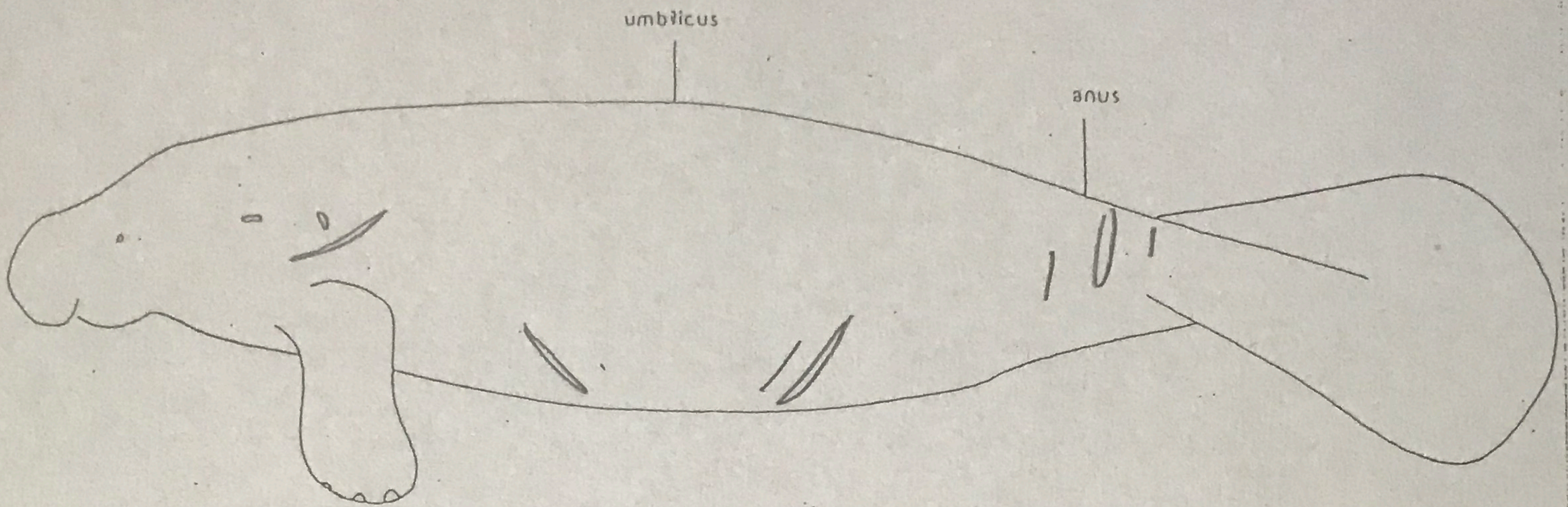
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FIELD I.D. MEC21204



CV-001Krusophya 01101 Uad126 N107



## **Bassett, Brandon**

---

**From:** Rood, Kari  
**Sent:** Thursday, March 11, 2021 10:00 AM  
**To:** Howell, Amber; amy\_teague@usgs.gov; Barbeau, Brittany; Barlas, Margie; Bassett, Brandon; Boyd, Denise; Burns, Allison; Davidson, Emily; Deutsch, Chip; deWit, Martine; Edwards, Holly; Faucett, Blake; Fontaine, Christine; Garrett, Andy; Gordon, Nadia; Greer, Bill; Herring, Hada; Honaker, Allison; Jennifer H. Johnson; Johnson, Jennifer; Martz, Meg; Metcalf, Carley; Nader, Ana; Panike, Anna; Peek, Austin; Schubert, Molly; sheri@mote.org; Tamborini, Kyanna; Tennant, Sean; Wappes, Sara; Whitcomb, Tara  
**Subject:** MEC21204=BC308

MEC21204=BC308. This animal is also known as TBC012 and Heike.

Carcass location: Indian River, Cocoa  
Female

First sighted 2/13/1980 at Indian River OUC/Reliant Power Plant  
Tagged 11/17/1987 in Indian River, Banana Creek  
Last sighted 6/5/2018 in Indian River, Haulover Canal

Verifiers: SMW 3/7/21 & KAH 3/11/21

Sighting records are not to be used without permission from FWC, MML, and/or USGS, as appropriate.

### **Kari A. Rood**

Manatee Photo-identification  
Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
100 8th Avenue S.E.  
St. Petersburg, FL 33701

---

Direct line: (727) 502-4737

Main line: (727) 896-8626

[Kari.Rood@MyFWC.com](mailto:Kari.Rood@MyFWC.com)

<http://MyFWC.com>

<http://MyFWC.com/research/>

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:      Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MEC21205  
**Date of Report:** 2021-Mar-04  
**Filed By:** FWC EC Field Station

**FWC Case #** 3998 **FWC Region:** NE

**Sex:** Unknown **Length:** 320 cm (estimated-1) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-04 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** 2021-Mar-04 **By:** FWC-CMM,ISM-KKB

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Brevard **Longitude:** W

**Waterway:** Indian River

**Locality description:** Palm Bay, floating approximately 85 m NE of 3360 Dixie Highway Northeast.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Scar, Fluke, Cranial.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. The actual length of the remains was 314cm.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	320 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MEC21205

**RECOVERY DATE** 04 March 2021

**GENDER** Undetermined **TL** 314; 320 (est) **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 04 March 2021, at 1116 hrs, FWC biologist-Sara Wappes (SMW) received a text alert from FWC NE Dispatch-Orlando regarding a dead manatee in the Indian River in Palm Bay, Brevard County. FWC case number 3998 was assigned. The complainant, Kate (321-725-7775), described a dead manatee floating behind the Marine Resources Council in Palm Bay. At 1125 hrs, SMW received photo verification. At 1300 hrs, FWC biologist-Carley Metcalf (CMM) and FWC biologist-Kristy Brightwell (KB) arrived at the reported location. CMM hand-towed the carcass to a portion of remote shoreline. At 1415 hrs, CMM and KB completed an external work up. The remains were left on site.

**EXTERNAL** Less than 10% of epidermis was present. The carcass was dorsoventrally flattened due to decomposition. The ventral dermis was missing due to scavenging and/or decomposition. The vertebral column and the rib cage were visible. There was evidence of shark scavenging along the lateral aspects and peduncle. The margins and large portions of the dorsal and ventral aspects of the fluke were eroded. The head was decomposed. There was a minimum of six well-healed, watercraft-related scar series on the dorsal and lateral aspects. There were two possible wounds or heavily eroded scars on the dorsal aspect (wounds #1 and #2). A genetics sample was collected. PIT tag scan was performed over remaining dermis and scan was negative.

### OTHER

**PHOTOGRAPHS** 2021-03-04\_FWC049\_4875 through 4903

**COMMENTS** The total length was estimated due to severe scavenging of head and luxation of skull bones. Skeleton was inspected for fractures but none were found. All bones were luxated.

### SIGNIFICANT FINDINGS

- Verified by FWC biologists

**PROBABLE CAUSE OF DEATH** Undetermined; Not Necropsied

**NECROPSY CONDUCTED BY**

N/A

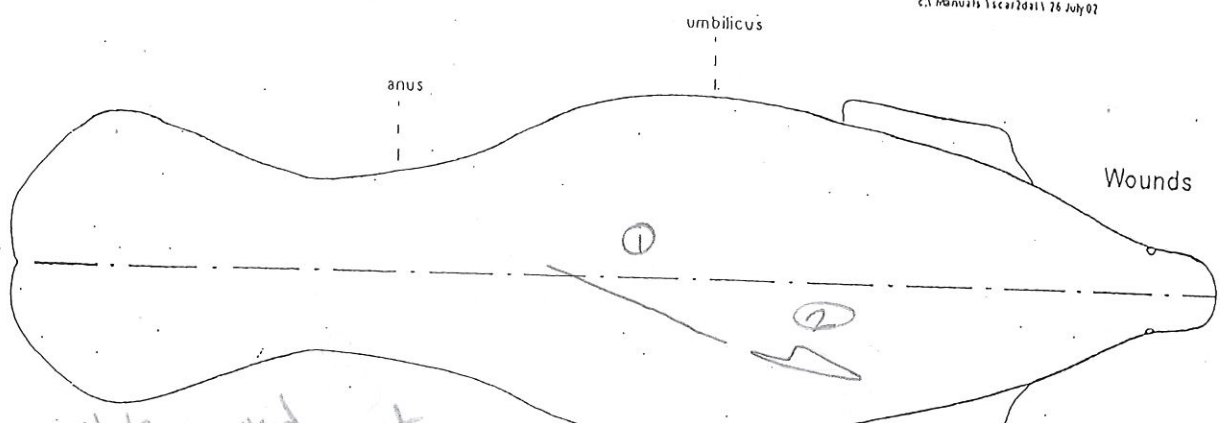
REPORT FILED BY Metcalf



Date 04 MAR 2021

Field I.D. MEC21205

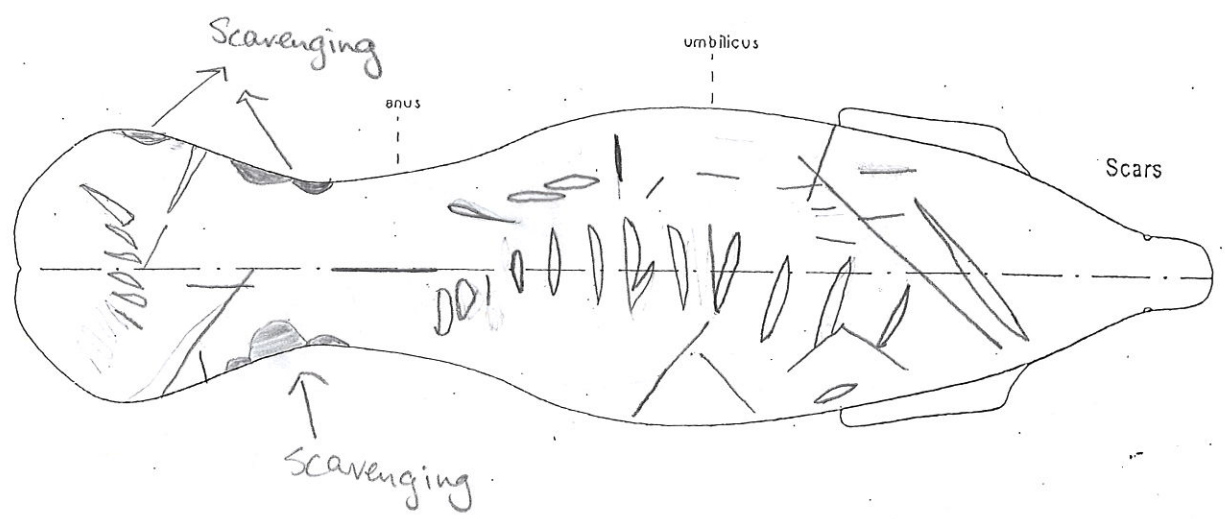
c.1 Manuals 1scar2dat1 26 July 02



*Possible wound not measured (heavily eroded)*

Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				

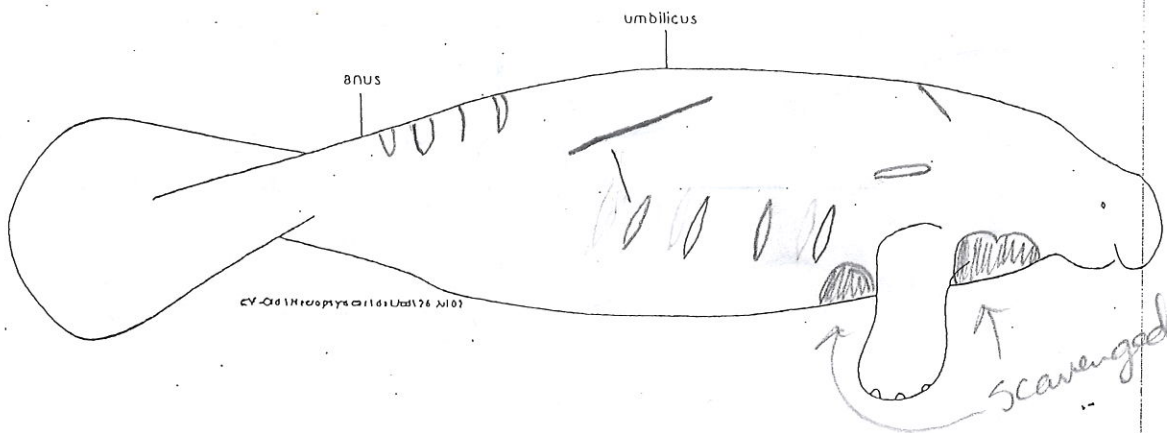
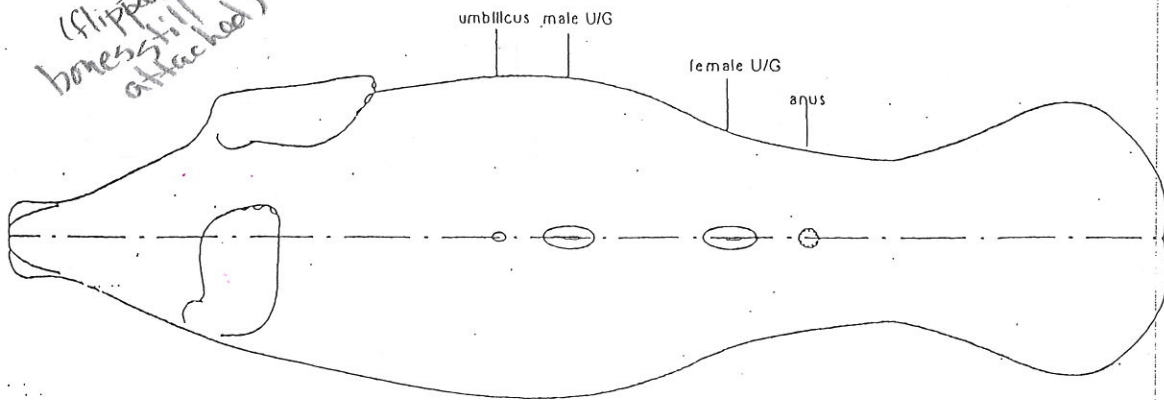
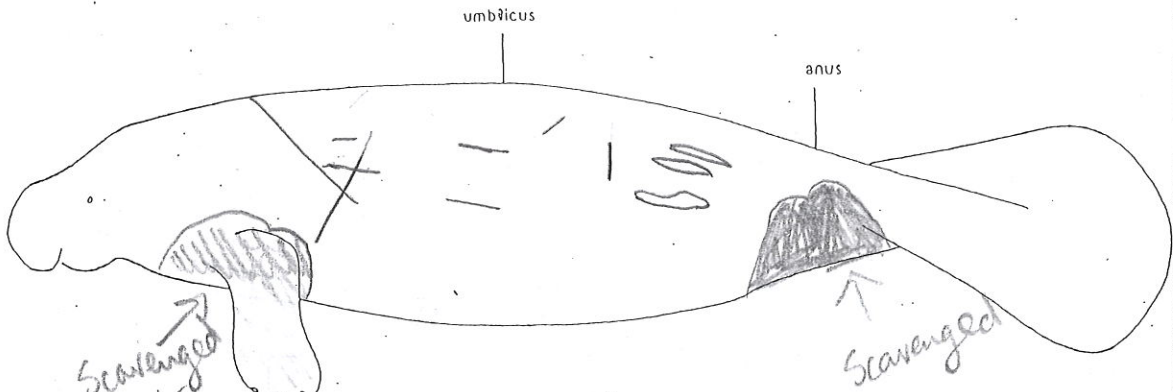
*CHM*



FIELD I.D.

MEC21205

04 MAR 2002



MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural                      ☐ Undetermined              ☐ Not Necropsied  
Natural:                      ☐ Cold Stress                      ☐ Other (includes Red Tide)  
Undetermined:              ☐ Too Decomposed              ☐ Other                      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MEC21206  
**Date of Report:** 2021-Mar-04  
**Filed By:** FWC EC Field Station

**FWC Case #** 4027 **FWC Region:** NE

**Sex:** Female **Length:** 278 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-04 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** 2021-Mar-05 **By:** FWC-CMM,FWC LE

**DATE NECROPSIED:** **By:**

**LOCATION:** **State:** FL **Latitude:** N

**County:** Brevard **Longitude:** W

**Waterway:** Indian River

**Locality description:** Titusville, grounded approximately 80 m ENE of 1200 Riverside Drive.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC EC Field Station pending distribution.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	278 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MEC21206

**RECOVERY DATE** 05 March 2021

**GENDER** Female **TL** 278 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** **04 March 2021**, at 1619 hrs, FWC biologist-Carley Metcalf (CMM) received a text alert from FWC NE Dispatch-Orlando regarding a manatee carcass in the Indian River, Titusville, Brevard County. FWC case number 4027 was assigned. The complainant, Dale Nichols (321-246-3216), described a possibly injured manatee with a white gash he was looking at through binoculars behind his residence. At 1715 hrs, CMM received photo verification the manatee was deceased. A response was planned for the following day. **05 March**, at 0922 hrs, CMM and FWC LE Officer-Seth Loeffler (SL) left the Titusville Marina on an FWC LE boat and arrived at the reported residence at 0948 hrs. The carcass was towed to remote shoreline and an external work up was completed at 1140 hrs. The remains were left on site.

**EXTERNAL** Approximately 10% of the epidermis was present but sloughing. The carcass was distended with gas. Red, watery fluid exuded from the nares. There was an orange substance on the ventral aspect and right flipper. It was linearly concentrated in some areas but diffuse in others, smooth in texture, and only came off when scratched. There was one watercraft related wound series on the right dorsal aspect (wound #1-10). Wound #2 and wound #3 penetrated the dermis. There was one, linear, superficial wound on the ventral aspect (wound #11). A minimum of eight well healed, watercraft related scar series were observed on the dorsal and lateral aspects. There were two sharp, triangular, tail mutilations at the two o' clock and three o' clock position. There were two rounded tail mutilations between the seven o' clock and eight o' clock positions. A genetics sample was collected. PIT tag scan was negative.

**PHOTOGRAPHS** 2021-03-05\_FWC049\_4904 through 4928

**COMMENTS**

### SIGNIFICANT FINDINGS

- Verified by FWC biologists through photos

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

**NECROPSY CONDUCTED BY**

N/A

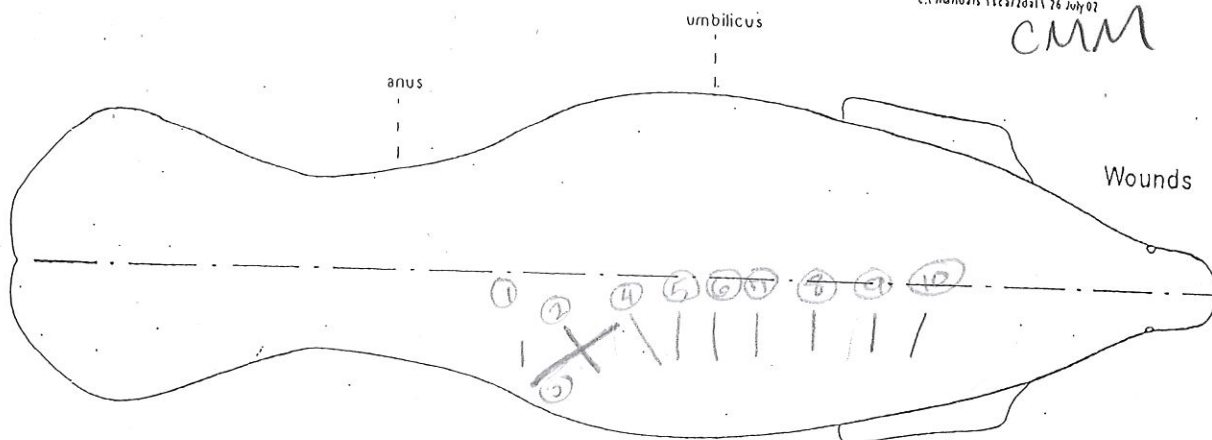
**REPORT FILED BY** Metcalf

Date 05 MAR 2021

Field I.D. MEC21206

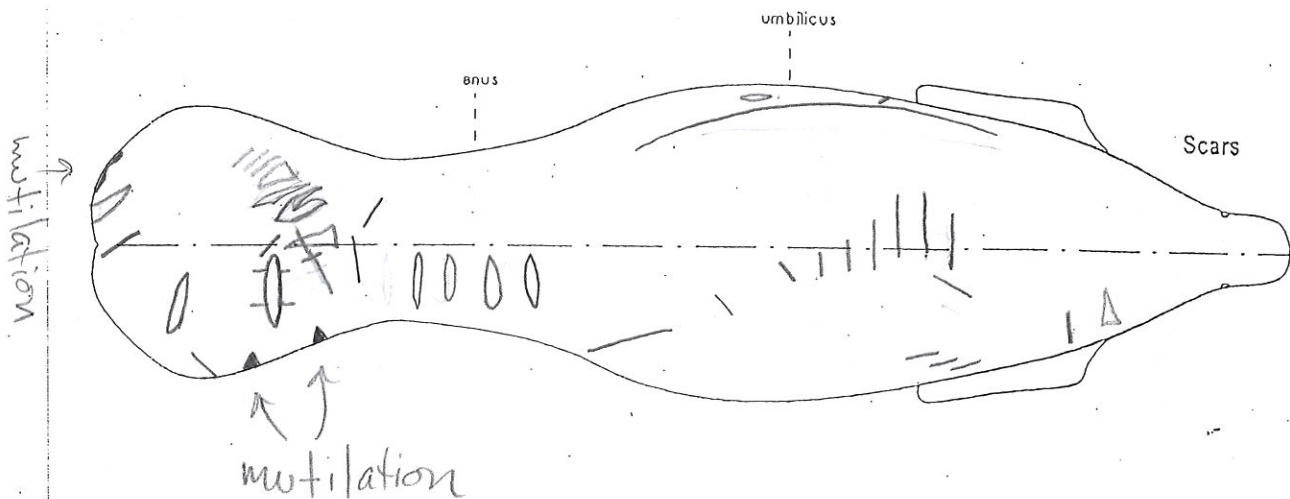
c:\Manuals\Scar2011 26 July 02

CMM



Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length	6.0	14.1	26.0	12.0	8.5	8.3	9.5	8.1	8.6	8.7	12.0									
Width	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1									
Depth	0.01	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1									
Distance	15.3		14.5	12.5	11.1	14.4	12.5	13.3	13.0											

wound #11 found on ventrum





\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

MEC21206  
05 MAR 2021  
CMM



anus



female U/G

ଅନୁସ

\*wound\*



anus

\* wound \*

CV-06 \K+Uoprya Q/I d: Uad\76 \I 02



MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MNE21003  
**Date of Report:** 2021-Jan-03  
**Filed By:** FWC NE Field Station

**FWC Case #** 0491 **FWC Region:** NE

**Sex:** Female **Length:** 192 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-03 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** 2021-Jan-09 **By:** FWC-KAT

**DATE NECROPSIED:** 2021-Jan-09 **By:** FWC-KAT

**LOCATION: State:** FL **Latitude:** N

**County:** Volusia **Longitude:** W

**Waterway:** Tomoka River

**Locality description:** Ormond Beach, floating approximately 170 m NE of 1021 Shockney Drive.

**CONDITION:** Badly Decomposed

**PROBABLE CAUSE OF DEATH:** Natural: Cold Stress

**EXPLAIN:** Bleached epidermis; Depleted fat(s); Relatively empty GI tract; Dry, hard feces; Wet lung(s).

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. A field necropsy was performed. Also FWC case numbers 0184, 0407, 0423, 0463, and 0468.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	192 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MNE21003

**RECOVERY DATE** 09 January 2021

**GENDER** Female **TL** 192 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 09 January 2021

**CONDITION** Badly Decomposed

**HISTORY** **03 January 2021**, at 1640 hrs, FWC biologist-Allison C. Burns (ACP) received a text alert from FWC NE Dispatch-Orlando regarding a dead manatee in the Tomoka River, Ormond Beach, Volusia County. FWC case number 0184 was assigned. The complainant, Nicholas Craig (386-682-9816), was on the water and went back to the carcass to get pictures and coordinates that he sent ACP at 1649 hrs. **08 January**, at 0839 hrs, FWC biologist-Kyanna A. Tamborini (KAT) received a text alert from Dispatch regarding the same dead manatee. FWC case number 0423 was assigned. The complainant, Jennifer Peterson (386-804-3536), advised that the carcass had drifted near the Tomoka Estates Boat Ramp and sent a photo. At 1058 hrs, KAT called Dispatch to request assistance with towing the carcass to a remote location. At 1224 hrs, Dispatch advised that LE was unavailable to assist for the day. At 1659 hrs, KAT received a second text alert from Dispatch. FWC case number 0463 was assigned. The complainant, Mark McGrath (386-214-5445), advised that the carcass was not in the way of the boat ramp. At 1730 hrs, KAT received a third text alert from Dispatch. FWC case number 0468 was assigned. The complainant, Kristin Occhiogrosso (386-341-9029), advised that the carcass was behind her residence. KAT asked her to call the following morning if the carcass was still there. **09 January**, at 0823 hrs, KAT received a text alert from Dispatch regarding the carcass. FWC case number 0491 was assigned. The complainant, Bert Eddy (386-527-1275), advised that the carcass was floating in the canal across from her residence. KAT mobilized to the Tomoka Estates Boat Ramp after the complainant informed KAT that her husband could tow the carcass to the boat ramp. KAT arrived at the boat ramp at 1025 hrs, loaded the carcass into the Ezy-lift truck at 1045 hrs, and transported it to Buck Island in Jacksonville. A field necropsy was completed at 1445 hrs.

**EXTERNAL** Approximately 35% of the epidermis was present but sloughing. The carcass was distended with gas. Both eyes were bulging due to decomposition. Red-tinged fluid exuded from the nares. Several healing linear lesions and well-healed linear scars were observed. The epidermis in the axillae was bleached and thickened. PIT tag scan was negative. A genetics sample was collected.

**ABDOMINAL** There was a small amount of abdominal fat, a small amount of gassy mesenteric fat, and scant omental fat.

**STOMACH** The stomach contained approximately 100 mL of viscous, gelatinous, brown to green fluid mixed with a scant amount of fibrous, brown to yellow pieces on ingesta. The mucosa was sloughing. No parasites were observed.

**DUODENUM** The duodenum contained a scant amount of cloudy, dark green fluid. The mucosa was autolyzed. No parasites were observed.

**JEJUNUM & ILEUM** The proximal small intestine contained a small amount of brown to gray fluid. The mid and distal small intestine were empty of contents. The mucosa was sloughing. No parasites were grossly observed.

**CECUM** The cecum contained approximately 200 mL of moist, well-chewed, homogeneous, black digesta. The mucosa was autolyzed. No parasites were observed.

**COLON** The proximal colon contained slightly moist, hard, fibrous, well-formed, well-digested, black to green feces. The mid colon contained dry, hard, well-formed, fibrous, dark green to yellow feces. The distal colon contained dry, hard, brown to orange feces. The mucosa was sloughing throughout. No parasites were

observed.

**PANCREAS** The pancreas was gassy. Serosal surfaces were pink and cut surfaces were off-white.

**SPLEEN** The spleen was black on serosal and cut surfaces.

---

**LIVER** The liver was soft, friable, and autolyzed.

**GALLBLADDER** The gallbladder contained a scant amount of dark orange to green bile. The mucosa was stained dark orange.

---

**REPRODUCTIVE** The uterine horns were small in diameter. There was a scant amount of gelatinous, red-tinged fluid in both the uterine horns.

**KIDNEYS** There was a small amount of perirenal fat. The kidneys were soft, friable, and autolyzed.

**URINARY BLADDER** The urinary bladder contained a scant amount of red-tinged urine. The mucosa was off-white with gray specks.

---

**HEART** There was scant, serous epicardial fat. Valves and chambers were unremarkable.

---

**RESPIRATORY SYSTEM** Both hemidiaphragms were intact. The lungs were gassy. Serosal surfaces were dark gray to pink and cut surfaces were red and wet. The primary airways were clear. No parasites were observed.

---

**HEAD & NECK REGIONS** NVL.

---

**SKELETON** NVL.

---

**OTHER**

---

**COMMENTS**

---

**SIGNIFICANT FINDINGS**

- Bleached epidermis
- Depleted fat
- Relatively empty GI tract
- Dry, hard feces
- Wet lungs

---

**PROBABLE CAUSE OF DEATH** Natural; Cold Stress

---

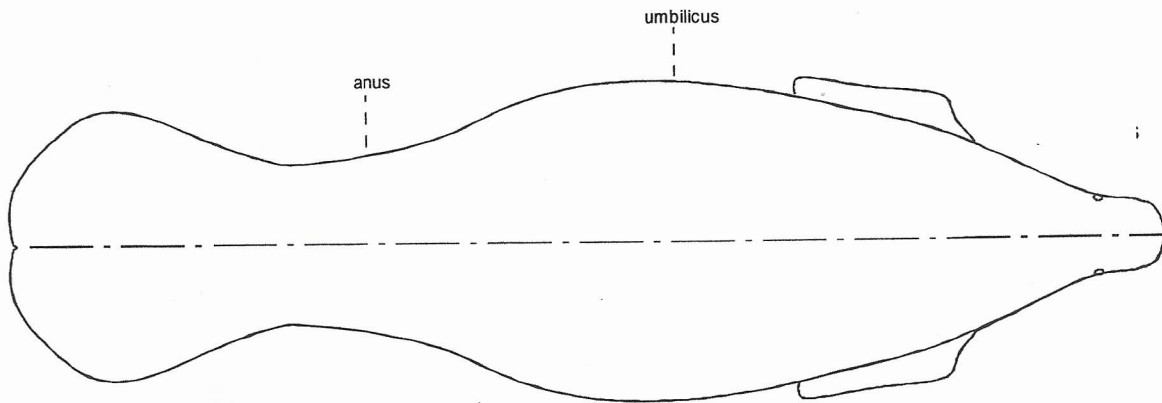
**NECROPSY CONDUCTED BY** Kyanna A. Tamborini

**REPORT FILED BY** Burns / Tamborini

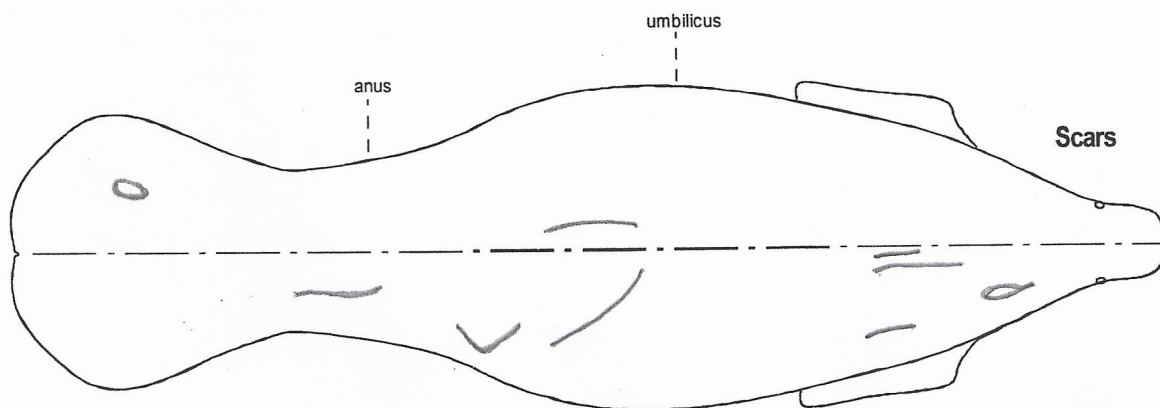
Date 09 Jan 2021

Field I.D. MNE21003

c:\Manuals\scar2dat1 26 July02

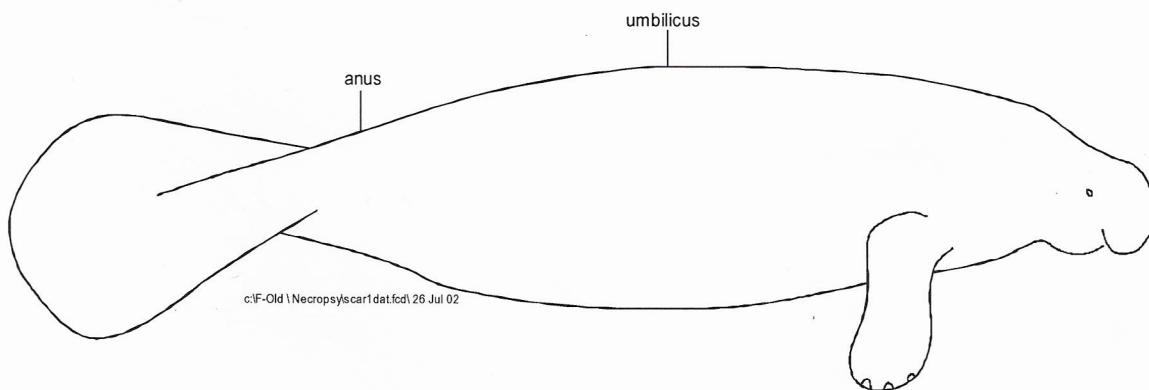
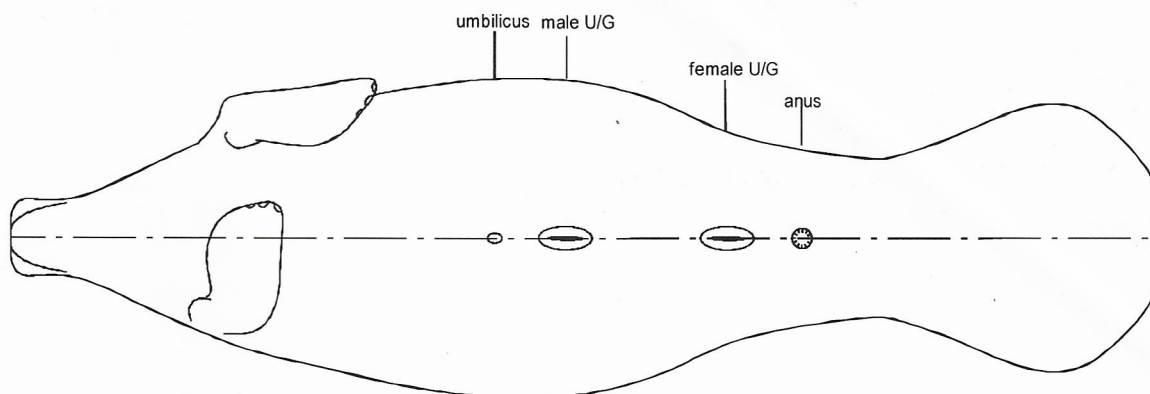
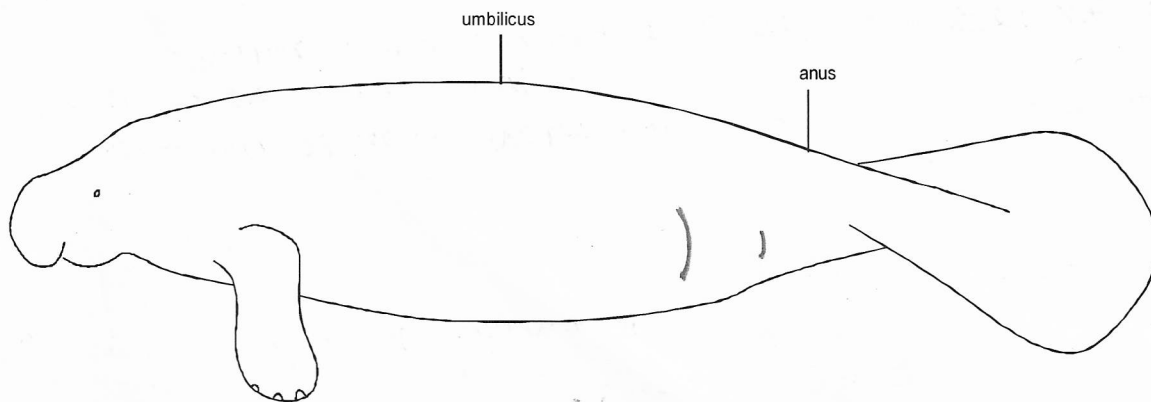


Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



Female  
192 cm

FIELD I.D. MNE21003



MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:      Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal      ☐ Ventral      ☐ R. Lateral      ☐ L. Lateral      ☐ Scars      ☐ Fluke      ☐ Cranial      ☐ Internal      ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics      ☐ Earbone      ☐ Skull      ☐ Partial Skeleton      ☐ Complete Skeleton      ☐ Histology      ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach      ☐ Liver      ☐ Kidney      ☐ Blubber      ☐ Lower Jaw      ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach      ☐ Liver      ☐ Lung      ☐ Urine      ☐ Kidney (if no urine)      ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements      ☐ Wound measurements      ☐ Perinatal evaluation      ☐ Organ weights  
☐ Rescue Report/Map      ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:



## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MNE21007  
**Date of Report:** 2021-Jan-27  
**Filed By:** FWC NE Field Station

**FWC Case #** 1552 **FWC Region:** NE

**Sex:** Male **Length:** 280 cm (estimated-1) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-27 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** 2021-Jan-27 **By:** FWC-ACP

**DATE NECROPSIED:** 2021-Jan-28 **By:** FWC-NJG,ACP

**LOCATION: State:** FL **Latitude:** N

**County:** Volusia **Longitude:** W

**Waterway:** Tomoka River

**Locality description:** Ormond Beach, floating approximately 50 m S of 1066 Shockney Drive.

**CONDITION:** Moderately Decomposed

**PROBABLE CAUSE OF DEATH:** Natural: Cold Stress

**EXPLAIN:** Cobblestone-like epidermis; Bleached epidermis; Serous fat(s); Bloody lung(s); Wet lung(s); Crumbly feces; Dry feces; Congested urinary bladder mucosa; Fluid in pleural cavities, abdominal cavity; Bloody kidneys, liver; Sediment in airways; Fluid-filled duodenum; Specks GI serosa.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. A field necropsy was performed. Plastic in colon. Known as MIPS ID RB367, first sighted on 12 Jan 1982 at Riviera Beach power plant.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	280 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fluid in seminal vesicles.

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MNE21007

**RECOVERY DATE** 27 January 2021

**GENDER** Male **TL** 280 cm (est) **WT** N/T kg

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 28 January 2021

**CONDITION** Moderately Decomposed

**HISTORY** 27 January 2021, at 1022 hrs, FWC biologist-Allison C. Burns (ACP) received a text alert from FWC NE Dispatch-Orlando regarding a dead manatee in the Tomoka River, Ormond Beach, Volusia County. FWC case number 1552 was assigned. The complainant, Donna Smith (386-672-3902), advised that the carcass was floating. ACP contacted Chad Murch with Volusia County Marine Mammal Stranding Team for assistance in securing the carcass. ACP mobilized to the Tomoka Estates boat ramp by 1430 hrs. The carcass was loaded and transported to the NE Field Station where it was stored overnight pending necropsy. 28 January, ACP, FWC biologist-Nadia J. Gordon, and FWC volunteer-Steve Trosell transported the carcass to Buck Island in Jacksonville. A field necropsy was completed at 1500 hrs.

**EXTERNAL** Almost all of the epidermis was present but sloughing. Red-tinged fluid exuded from the nares. There was a thin green algal mat on the dorsum. Cobblestone-like epidermis was present on the dorsum. The epidermis was bleached at the axillae. A minimum of six well-healed watercraft-related scar patterns was observed. Most of the peduncle was missing due to a large, well-healed mutilation. Actual length of the remains was 250 cm. PIT tag scan was negative. A genetics sample was collected.

**ABDOMINAL** There was a small amount of serous abdominal fat and moderate omental and mesenteric fat. There was 1.5 L of red-tinged fluid in the abdominal cavity. There were pink and black fibrin-like tags on the stomach and duodenum serosa.

**STOMACH** The stomach contained approximately 2.0 L of moist, fibrous, green to brown ingesta. The ingesta were coated in white mucus. The mucosa was unremarkable. No parasites were observed.

**DUODENUM** The duodenum contained approximately 300 mL of gray fluid. The mucosa was gray. No parasites were observed.

**JEJUNUM & ILEUM** The proximal and mid small intestine contained a moderate amount of gray fluid. The distal small intestine contained a moderate amount of dark yellow fluid. The mucosa was unremarkable. No parasites were grossly observed.

**CECUM** The cecum contained approximately 2.6 L of dry, fibrous, moderately digested, orange to brown digesta mixed with brown pieces of seeds. The mucosa was sloughing. No parasites were observed.

**COLON** The proximal colon contained dry, fibrous, well-formed, brown feces. There was an 11 x 30 cm piece of gray plastic bag and a 7 x 10 cm piece of thick clear plastic in the contents. The distal colon contained dry, fibrous, crumbly, brown feces. The mucosa was sloughing throughout. There were patches of congestion in the wall. No parasites were observed throughout.

**PANCREAS** The pancreas was gassy. Serosal and cut surfaces were pink.

**SPLEEN** The spleen was firm. Serosal surfaces were mottled black and tan, and cut surfaces were dark purple to black.

**LIVER** The margins of the liver were rounded. The liver was firm. Serosal surfaces were green to brown and cut surfaces were dark red and bloody.

**GALLBLADDER** The gallbladder contained approximately 50 mL of dark yellow to orange bile. The mucosa was stained yellow.

**REPRODUCTIVE** There was moderate, gassy reproductive fat. The seminal vesicles were large and contained a large amount of tan fluid. The testes were large. No fluid was observed on cut surfaces of the deferent ducts.

**KIDNEYS** There was a small amount of serous perirenal fat. The kidneys were red-brown. On cut surfaces of the left kidney, the cortices were red and the medullae were tan to red. On cut surfaces of the right kidney, the cortices were dark purple and the medullae were tan to red. Cut surfaces of both kidneys were bloody. The corticomedullary boundaries were distinct. There was a red to dark red line at some of the corticomedullary boundaries.

**URINARY BLADDER** The urinary bladder contained 2.75 mL of cloudy, yellow urine. The mucosa was severely congested.

**HEART** There was moderate, serous epicardial fat. Valves and chambers were unremarkable.

**RESPIRATORY SYSTEM** Both hemidiaphragms were intact. The left pleural cavity contained approximately 500 mL of red-tinged fluid. The right pleural cavity contained approximately 2.8 L of red-tinged fluid. The left lung was light purple to green on serosal surfaces and red and slightly bloody on cut surfaces. The primary airway contained one piece of mucus. The right lung was pink on serosal surfaces and red, wet, and slightly bloody on cut surfaces. The primary airway contained a scant amount of viscous, red mucus and sandy, gritty, brown contents.

**HEAD & NECK REGIONS NVL**

**SKELETON NVL**

**OTHER**

**COMMENTS**

**SIGNIFICANT FINDINGS**

- Bleached, cobblestone-like epidermis
- Serous fat
- Fluid in pleural cavities, abdominal cavity
- Bloody, wet lungs
- Bloody kidneys, liver
- Sediment in airways
- Congested urinary bladder mucosa
- Fluid-filled duodenum
- Dry, crumbly feces
- Specks GI serosa
- Plastic in colon

**PROBABLE CAUSE OF DEATH** Natural; Cold Stress

**NECROPSY CONDUCTED BY**

Nadia J. Gordon

Commented [BB1]: Maybe check water temps

Allison C. Burns  
Steve Trosell (FWC volunteer)

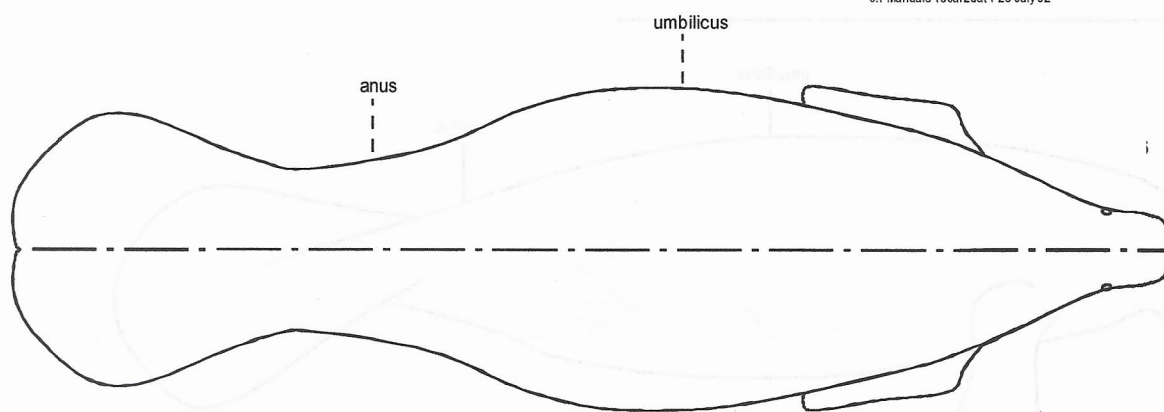
REPORT FILED BY Tamborini / Burns

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

Date 28 Jan. 2021

Field I.D. MNE21007

c:\Manuals\scar2dat\ 26 July 02



Number

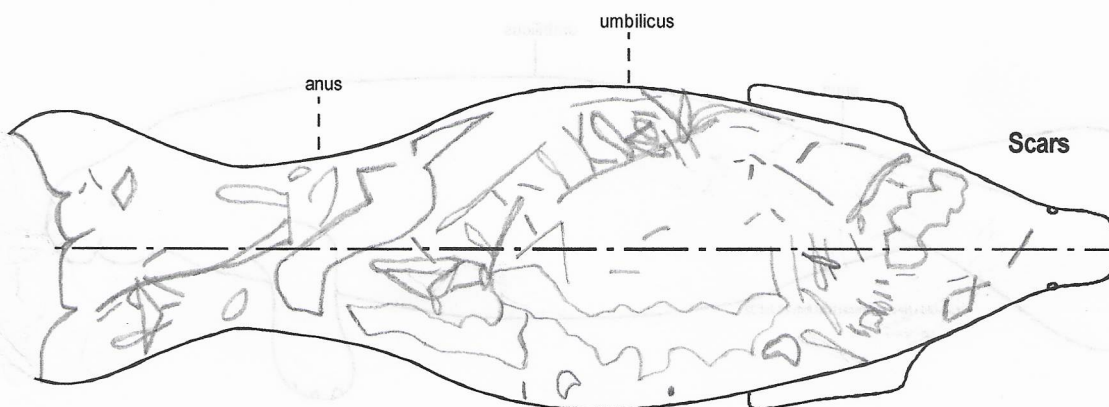
Length

Width

Depth

Distance

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20



Male

---

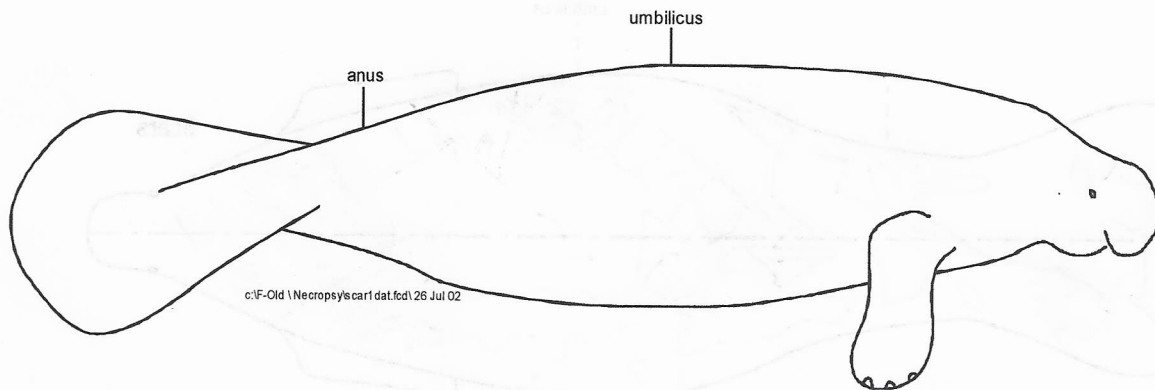
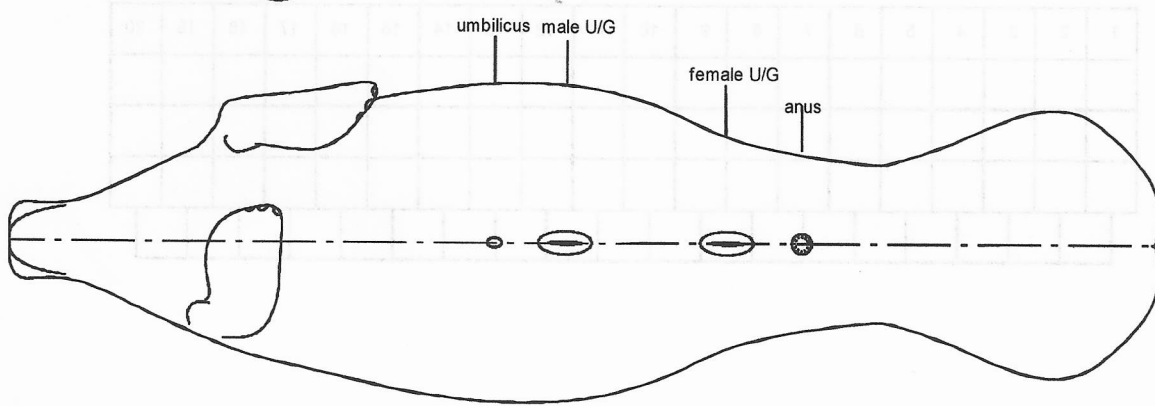
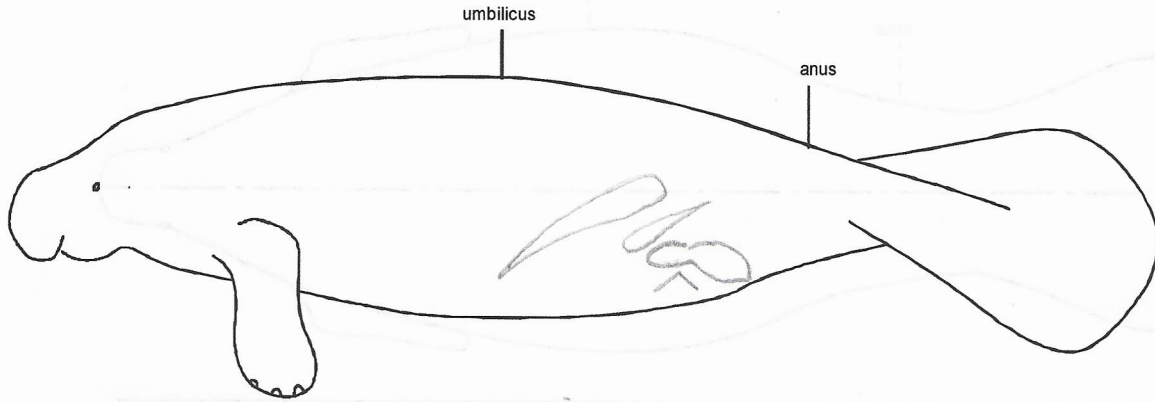
---

---

---

---

FIELD I.D. MNE 21007



## **Bassett, Brandon**

---

**From:** Rood, Kari  
**Sent:** Sunday, February 28, 2021 2:32 PM  
**To:** Howell, Amber; amy\_teague@usgs.gov; Barbeau, Brittany; Barlas, Margie; Bassett, Brandon; Boyd, Denise; Burns, Allison; Davidson, Emily; Deutsch, Chip; deWit, Martine; Edwards, Holly; Faucett, Blake; Fontaine, Christine; Garrett, Andy; Gordon, Nadia; Greer, Bill; Herring, Hada; Honaker, Allison; Jennifer H. Johnson; Johnson, Jennifer; Martz, Meg; Metcalf, Carley; Nader, Ana; Panike, Anna; Peek, Austin; Schubert, Molly; sheri@mote.org; Tamborini, Kyanna; Tennant, Sean; Wappes, Sara; Whitcomb, Tara  
**Subject:** MNE21007=RB367

MNE21007=RB367

Carcass location: Tomoka River, Ormond Beach  
Male

First sighted 1/12/82 at Riviera Beach Power Plant  
Last sighted 1/24/17 at Harbor Branch Oceanographic Institute (St. Lucie County)  
USGS should be able to provide a complete sighting history if needed.

Verifiers: MARTZ & KAH – 2/28/21

Sighting records are not to be used without permission from FWC, MML, and/or USGS, as appropriate.

**Kari A. Rood**  
Manatee Photo-identification  
Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
100 8th Avenue S.E.  
St. Petersburg, FL 33701

---

Direct line: (727) 502-4737  
Main line: (727) 896-8626  
[Kari.Rood@MyFWC.com](mailto:Kari.Rood@MyFWC.com)  
<http://MyFWC.com>  
<http://MyFWC.com/research/>



MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MNE21008  
**Date of Report:** 2021-Feb-01  
**Filed By:** FWC NE Field Station

**FWC Case #** 1914 **FWC Region:** NE

**Sex:** Male **Length:** 285 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-01 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** 2021-Feb-03 **By:** FWC-ACP

**DATE NECROPSIED:** 2021-Feb-04 **By:** FWC-NJG,ACP

**LOCATION: State:** FL **Latitude:** N

**County:** Volusia **Longitude:** W

**Waterway:** Halifax River

**Locality description:** Ormond Beach, beached approximately 140 m W of 2704 John Anderson Drive.

**CONDITION:** Badly Decomposed

**PROBABLE CAUSE OF DEATH:** Natural: Other

**EXPLAIN:** Peanut-shaped head; Depleted fat(s); Serous fat(s); Relatively empty GI tract; Bloody lung(s); Wet lung(s); Bloody kidneys; Fluid in pleural cavities; Congested GI mucosa; Sand in feces; Black specks parietal pleura, lung serosa.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC NE Field Station pending distribution.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. A field necropsy was performed. Monofilament in small intestine. Cold stress lesions; Also FWC case number 1848. Adhered lung. Scavenging.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	285 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:	Male Reproductive:															
<table><tr><td>Side</td><td>Circumference (cm)</td><td>Width (cm)</td></tr><tr><td>Right</td><td></td><td></td></tr><tr><td>Right</td><td></td><td></td></tr><tr><td>Left</td><td></td><td></td></tr><tr><td>Left</td><td></td><td></td></tr></table>	Side	Circumference (cm)	Width (cm)	Right			Right			Left			Left			Fluid in seminal vesicles.
Side	Circumference (cm)	Width (cm)														
Right																
Right																
Left																
Left																

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:		
Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL
Other Brevetoxin Results:		

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MNE21008

**RECOVERY DATE** 03 February 2021

**GENDER** Male **TL** 285 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 04 February 2021

**CONDITION** Badly Decomposed

**HISTORY** **01 February 2021**, at 1005 hrs, FWC biologist-Allison C. Burns (ACP) received a text alert from FWC NE Dispatch-Orlando regarding a dead manatee in the Halifax River, Ormond Beach, Volusia County. FWC case number 1848 was assigned. The complainant, David Angle (717-443-1018), reported the manatee was on its dorsum on the west bank and provided a photo. Due to a planned rescue, carcass recovery was postponed. **02 February**, FWC Officer-Seth Wingard responded but was unable to tow the carcass off the beach with his small boat. ACP requested assistance from Volusia County Marine Mammal Stranding Team (VCMMSST). At 2022 hrs, FWC on-call biologist-Amber R. Howell received a text alert from Dispatch regarding the same manatee. FWC case number 1914 was assigned. The complainant, Jim Hogan, left no contact number but said it was in the same spot. **03 February**, VCMMSST-Jennifer Winters responded and secured the carcass at 1546 hrs. ACP arrived at the boat ramp at 1600 hrs. The carcass was loaded at 1637 hrs and transported to the NE Field Station arriving at 1809 hrs. **04 February**, ACP and FWC biologist-Nadia J. Gordon transported the carcass to Buck Island in Jacksonville. A field necropsy was completed at 1053 hrs.

**EXTERNAL** Approximately 20% of the epidermis was present but sloughing. The carcass was dorsoventrally flattened and had a slight peanut-shaped head. The left eye was missing due to decomposition and/or scavenging. The remaining ventral epidermis was thickened and bleached. Raised cold stress-like lesions were present on the dorsal and ventral fluke. There was a rent at the urogenital opening. A minimum of six well-healed watercraft-related scar patterns was observed. PIT tag scan was negative. A genetics sample was collected.

Commented [B81]: I'm not sure that I'm seeing this

**ABDOMINAL** There was a large amount of water (from the river) in the abdominal cavity that entered through the urogenital opening. There was a small amount of serous abdominal fat. There was moderate mesenteric fat. There was a small amount of omental fat.

**STOMACH** The stomach contained approximately 300 mL of viscous, tan mucus. The mucosa was unremarkable. No parasites were observed.

**DUODENUM** The duodenum contained approximately less than 75 mL of tan fluid. The mucosa had areas of black discoloration. No parasites were observed.

**JEJUNUM & ILEUM** Only a small piece of the proximal small intestine remained which were empty of contents. There were three pieces of clear, thick monofilament line (21.5 cm, 13.5 cm (with a knot), and 11.5 cm (with a knot at the end)). No parasites were observed.

**CECUM** The cecum contained approximately 275 mL of wet, fibrous, red-brown and yellow digesta mixed with dark green fluid. The mucosa was congested. No parasites were observed.

**COLON** Only the proximal-most and distal one-third of the colon was present. The remaining proximal colon contained a small amount of moist, fibrous, poorly formed, well-digested, dark green feces mixed with dark gray sediment. The remaining distal colon contained moist, fibrous, well-formed, moderately digested, green feces mixed with sand and seed pieces. The mucosa was sloughing in some areas and had areas of congestion. No parasites were observed.

**PANCREAS** The pancreas was green on serosal surfaces and pink on cut surfaces.

**SPLEEN** The spleen was firm. Serosal and cut surfaces were dark gray to black.

**LIVER** The liver was soft, friable, and autolyzed.

**GALLBLADDER** The gallbladder contained approximately 10 mL of orange bile. The mucosa was stained orange.

**REPRODUCTIVE** There was a small amount of gassy reproductive fat. The seminal vesicles were moderate in size and contained a small amount of tan fluid. The testes were moderate in size.

**KIDNEYS** There was a small amount of gassy perirenal fat. The right kidney was red to purple on serosal surfaces. The left kidney was light red on serosal surfaces. Cut surfaces of both kidneys were dark red to black and bloody. The corticomedullary boundaries were indistinct.

**URINARY BLADDER** The urinary bladder contained approximately 100 mL of pink urine. The mucosa was unremarkable.

**HEART** There was a small amount of serous epicardial fat. Valves and chambers were unremarkable.

**RESPIRATORY SYSTEM** Both hemidiaphragms were intact. There were black specks on the parietal pleura and left lung serosa. The left pleural cavity contained approximately 1.0 L of red-tinged fluid. The right pleural cavity contained approximately 1.25 L of red-tinged fluid. The lungs were gray to pink on serosal surfaces and dark red, wet, and bloody on cut surfaces. There was a small amount of red fluid in the primary airways. No parasites were observed. The caudal aspect of the right lung was adhered to the pleural cavity.

**HEAD & NECK REGIONS** NVL.

**SKELETON** NVL.

**OTHER**

**COMMENTS**

**SIGNIFICANT FINDINGS**

- Peanut-shaped head
- Depleted, serous fat
- Relatively empty GI tract
- Congested GI mucosa
- Sediment in feces
- Bloody kidneys
- Bloody, wet lungs
- Fluid in pleural cavities
- Black specks parietal pleura, lung serosa
- Cold stress lesions
- Adhered lung
- Monofilament in small intestine
- Scavenging

**PROBABLE CAUSE OF DEATH** Natural; Other

**NECROPSY CONDUCTED BY**

Nadia J. Gordon  
Allison C. Burns

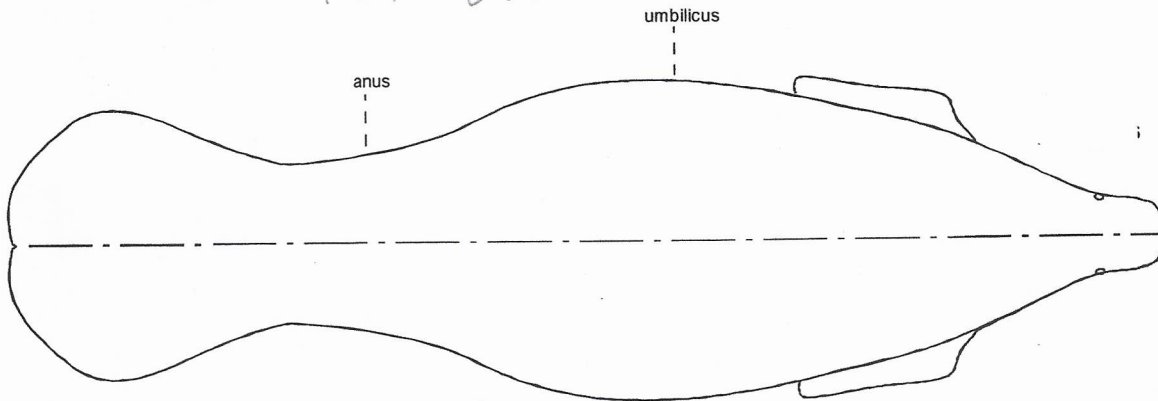
REPORT FILED BY Tamborini / Burns

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

Date 04 Feb 2021  
male 285 cm

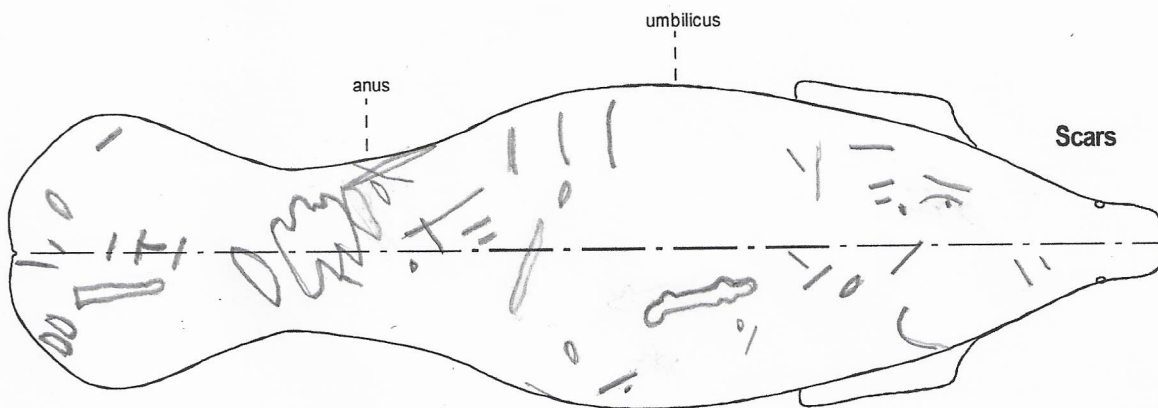
Field I.D. MNF21008

c:\Manuals\1scar2dat\1 26 July02



Number  
 Length  
 Width  
 Depth  
 Distance

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

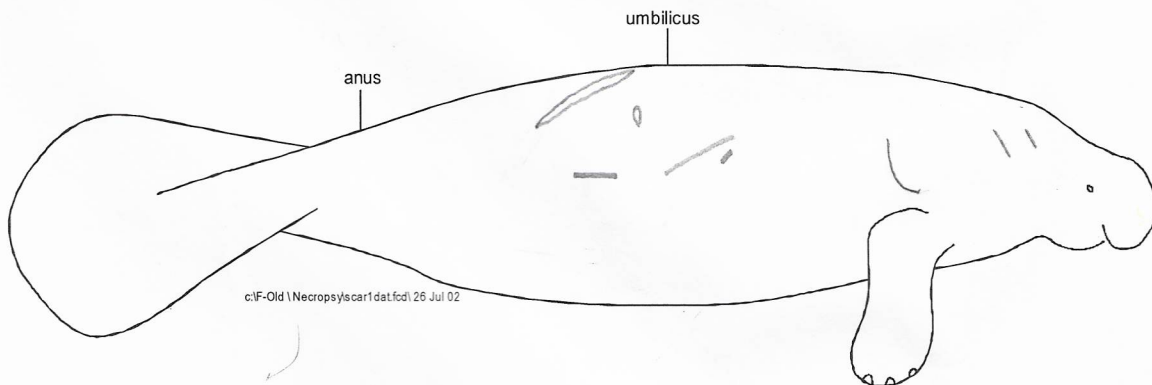
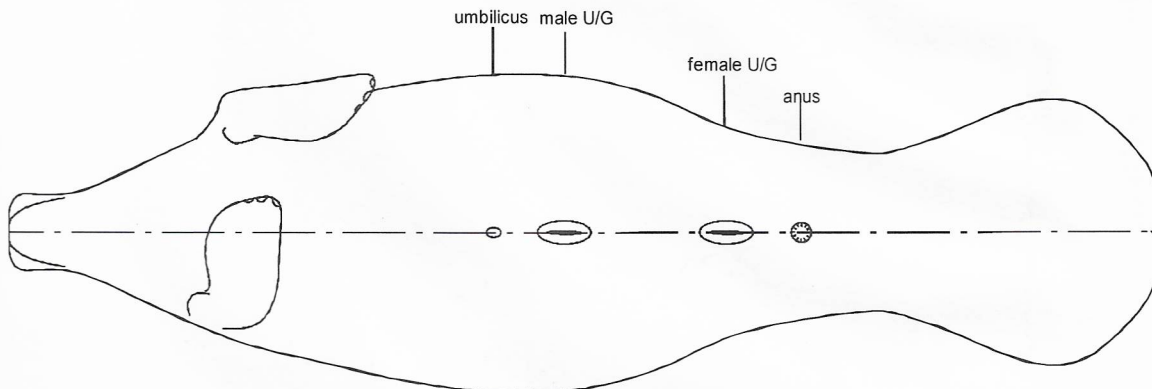
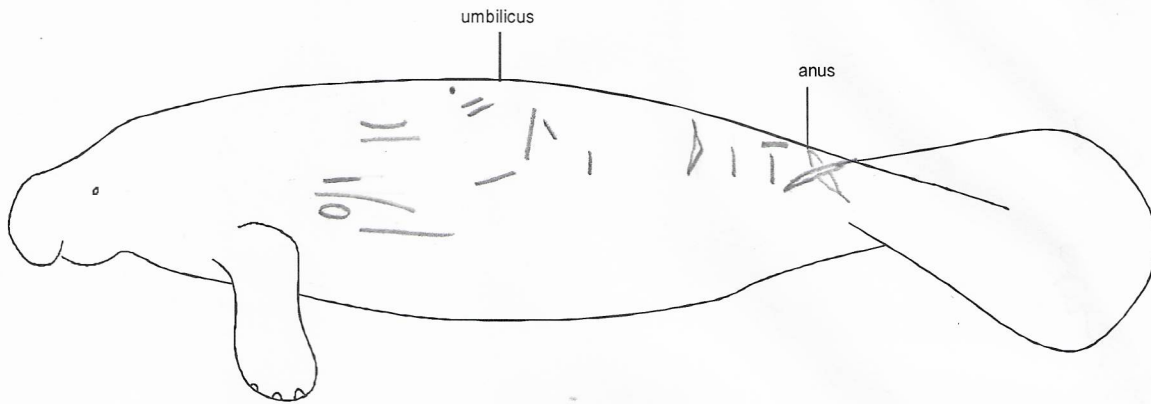


04 Feb 2021

FIELD I.D.

MNE21008

male 285 cm





FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site

☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights

☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MNE21012  
**Date of Report:** 2021-Feb-11  
**Filed By:** FWC NE Field Station

**FWC Case #** **FWC Region:** NE

**Sex:** Male **Length:** 150 cm (estimated-2) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-11 **By:** Citizen to VCMMST to FWC-NJG

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION:** **State:** FL **Latitude:** N

**County:** Volusia **Longitude:** W

**Waterway:** Ponce de Leon Cut

**Locality description:** New Smyrna Beach, beached approximately 255 m NNE of 133 Cunningham Drive.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Fetal folds; Verified through photographs and VCMMST volunteer.

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed. Scavenging. Carcass was measured ventrum-up in centimeters.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	150 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

FIELD I.D. MNE21012

RECOVERY DATE N/A

GENDER Male TL 150 cm (est) WT N/T kg

SPECIES *T. manatus latirostris*

NECROPSY DATE N/A

CONDITION Confirmed; Not Necropsied

Commented [BB1]: Reported as 151 cm, I rounded down  
Let me know what you think

**HISTORY** 11 February 2021, at 1456 hrs, FWC biologist-Nadia J. Gordon (NJG) received a text from Volusia County Marine Mammal Stranding Team-Chad Murch regarding a dead manatee calf in Ponce de Leon Cut, New Smyrna Beach, Volusia County. He had received a report of a dolphin but upon arriving, it was the manatee carcass. He measured it ventrum-up in centimeters, took photos, and sent coordinates. Due to the small size and advanced stage of decomposition, the carcass was not recovered or necropsied.

**EXTERNAL** From photographs - Approximately 20% of the ventral epidermis was present but sloughing. There was a rent at the urogenital opening and anus due to decomposition and/or scavenging. The muzzle was eroded due to decomposition. A few transverse folds were present on the ventrum.

### COMMENTS

### SIGNIFICANT FINDINGS

- Verified through photographs and VCMMST volunteer
- Fetal folds
- Scavenging

**PROBABLE CAUSE OF DEATH** Perinatal; Verified (Not Necropsied)

**NECROPSY CONDUCTED BY** N/A

**REPORT FILED BY** Burns

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal (≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site

☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights

☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MNE21017  
**Date of Report:** 2021-Feb-26  
**Filed By:** FWC NE Field Station

**FWC Case #** 3609 **FWC Region:** NE

**Sex:** Unknown **Length:** 180 cm (estimated-4) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-26 **By:** Citizen to FWC NE Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Volusia **Longitude:** W

**Waterway:** Indian River North

**Locality description:** New Smyrna Beach, floating approximately 120 W of 99 Lincoln Avenue.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Verified through complainant photograph.

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	180 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MNE21017

**SPECIES** *T. manatus latirostris*

**RECOVERY DATE** N/A

**NECROPSY DATE** N/A

**GENDER** Undetermined **TL** 180 **cm** (est) **WT** N/T **kg**

**CONDITION** Confirmed; Not Necropsied

---

**HISTORY** 26 February 2021, at 1800 hrs, FWC biologist-Nadia Gordon (NJG) received a text alert from FWC NE Dispatch-Orlando regarding a manatee carcass in the Indian River North, New Smyrna Beach, Volusia County. FWC case number 3609 was assigned. The complainant, Shawn Coughlin (386-847-0760), advised it was free floating north of the North Causeway Bridge and sent photos with coordinates. Due to another carcass recovery, this carcass was not recovered or necropsied.

---

**EXTERNAL** From photograph - All of the ventral epidermis was present.

---

### COMMENTS

---

### SIGNIFICANT FINDINGS

- Verified through complainant photograph

---

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

---

### NECROPSY CONDUCTED BY

N/A

REPORT FILED BY - Tamborini

PRELIMINARY DATA:  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE



FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MNE21018  
**Date of Report:** 2021-Mar-03  
**Filed By:** FWC NE Field Station

**FWC Case #** **FWC Region:** NE

**Sex:** Male **Length:** 189 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-03 **By:** Citizen to Marine Science Center to VCCMST-Debbie Wright

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Volusia **Longitude:** W

**Waterway:** Halifax River

**Locality description:** Port Orange, floating 20 m W of 3948 South Peninsula Drive.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	189 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral	
Skin Thickness:	cm	cm	
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness: cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness: cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MNE21018

**RECOVERY DATE**

**GENDER** Male **TL** 184 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE**

**CONDITION** Confirmed; not necropsied

---

**HISTORY** **03 March 2021**, at 1235 hrs, FWC biologist-Allison C. Burns (ACP) received a text from Volusia County Marine Mammal Stranding Team (VCMMST)-Debbie Wright (DW) about a dead manatee calf in Halifax River, Port Orange, Volusia County. The complainant, Robert (386-275-5267), had called the Marine Science Center who passed his info to DW. At 1246 hrs, ACP received a verification photo from the complainant and he offered to tow it to a secluded spot on an island he owns. ACP requested that he wait until someone with VCCMST could come measure it and get photos and asked DW for volunteer assistance. At 1330 hrs, VCCMST-Brittney Hoyt arrived at the site, measured the carcass ventrum up, and took photos. ACB notified the complainant that he could tow it and the carcass was left verified, not necropsied.

---

**EXTERNAL** Most of the epidermis was remaining. There was a thin brown algal mat on the lateral aspects. There were lateral ventral folds.

---

**ABDOMINAL**

**STOMACH**

**DUODENUM**

**JEJUNUM & ILEUM**

**CECUM**

**COLON**

**PANCREAS**

**SPLEEN**

---

**LIVER**

**GALLBLADDER**

---

**REPRODUCTIVE**

**KIDNEYS**

**URINARY BLADDER**

---

**HEART**

---

**RESPIRATORY SYSTEM**

---

**HEAD & NECK REGIONS**

---

**SKELETON**

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

---

**OTHER**

---

**PHOTOGRAPHS** 2021-03-03\_PUBLIC\_01, 02; 2021-03-03\_FWCVOL\_01, 02.

---

**COMMENTS**

---

**SIGNIFICANT FINDINGS**

- 

---

**PROBABLE CAUSE OF DEATH** Undetermined: not necropsied.

---

**NECROPSY CONDUCTED BY**

REPORT FILED BY Burns

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal (≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21011  
**Date of Report:** 2021-Jan-05  
**Filed By:** FWC SE Field Station

**FWC Case #** 0425 **FWC Region:** SO-A

**Sex:** Male **Length:** 238 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-05 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** 2021-Jan-08 **By:** FWC-BMF

**DATE NECROPSIED:** 2021-Jan-08 **By:** FWC-BMF

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** South Fork St. Lucie River

**Locality description:** Stuart, floating approximately 45 m NE of 2425 SW Hideaway Lane.

**CONDITION:** Badly Decomposed

**PROBABLE CAUSE OF DEATH:** Undetermined: Too Decomposed

**EXPLAIN:** The advanced stage of decomposition did not permit a causal factor to be determined. Autolyzed and/or missing internal organs. Skin lesions; Relatively empty GI tract; Crumbly feces; Dry feces.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal.

**MATERIALS COLLECTED:**  
Genetics, ELISA toxicology samples.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

### REMARKS:

PIT tag scan positive (Left: 00-0783-D88F; Right: 00-07AC-94EA). A field necropsy was performed. Known as REC1702, SWFTm1701b, SWFTm18136b, "Baca", rescued as an orphan calf on 09 January 2017 and released on 07 March 2019. Tracking belt attached. Also FWC case number 0405.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	238 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:



## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21011

**RECOVERY DATE** 08 January 2021

**GENDER** Male **TL** 238 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 08 January 2021

**CONDITION** Badly Decomposed

**HISTORY** 05 January 2021, at 1642 hrs, FWC biologist-Amber Howell (ARH) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Stuart, Martin County. FWC case number 0405 was assigned. The complainant, Jay Martin (860-216-8944), stated that there was a back-up manatee under the dock that smelled bad. He didn't get too close or watch very long, so ARH requested photos which were received by 1654 hrs and confirmed it was a carcass. Due to time of day, no response was available. 06 January, since it was only two miles from the gym ARH goes to, ARH arrived by 0700 hrs and attempted to relocate the carcass to a more secluded location, but it was wedged between a seawall, dock, and boat engine. ARH informed a resident that it may be able to float under the dock at low tide but for the time being, ARH could not move or flip the carcass unless the boat was moved. At 0922 hrs, ARH received a text alert from Dispatch regarding the same carcass. FWC case number 0425 was assigned. The complainant, Pat Shank (613-620-3127), stated that the carcass was floating off the dock but may become beached on a sandbar with low tide. Photo verification was received by 0925 hrs. ARH explained current workload and that staff could respond to move it if the carcass did not drift out at low tide or residents wanted it moved out of the boat basin, and Pat agreed to keep ARH updated if the carcass was still there in the afternoon. 08 January, at 0829 hrs, ARH received a call from Pat who stated that the manatee was still behind his residence. After towing and securing MSE21015, FWC biologist-Blake Faucett (BMF) arrived at the carcass at 1300 hrs. When external workup was started, BMF noted the manatee had a tracking belt attached. The carcass was kayaked to a shallow area near the mangroves by 1555 hrs, and a field necropsy was completed by 1645 hrs. The remains were left on site to decompose.

**EXTERNAL** Approximately 40% of the epidermis was present but sloughing. There was a fresh watercraft-related wound series that extended from the left aspect of the head to the right cranial lateral aspect. The series consisted of four superficial, mostly triangular wounds (wounds#1-4). There was a linear watercraft-related wound on the right cranial lateral aspect (wound #5) that transected wound #4. The watercraft wounds had areas of blue discoloration. There were two linear, parallel indentation marks on the ventrum near the urogenital opening. Linear lesions were observed on the ventral fluke. The flippers and muzzle were eroded due to decomposition. There were small barnacles present on the remaining ventral fluke epidermis. There was a tracking belt present around the base of the fluke. Two large, well-healed irregular scars were present on the dorsum and left lateral aspect. PIT tag scan was positive (Left: 00-0783-D88F; Right: 00-07AC-94EA), known as REC1702, SWFTm1701b, SWFTm18136b, "Baca", rescued as an orphan calf on 09 January 2017 and released on 07 March 2019. A genetics sample was collected.

**ABDOMINAL** The abdominal, mesenteric, and omental fat was rendered.

**STOMACH** The stomach contained 150 mL of moist, fibrous, leafy, moderately chewed, tan, brown, and green ingesta. There were pieces of moderately chewed mangrove root in the contents. The mucosa was autolyzed. No parasites were observed. An ELISA toxicology sample was collected.

**DUODENUM** The duodenum was torn open and empty of contents. The mucosa was autolyzed. No parasites were observed.

**JEJUNUM & ILEUM** The proximal small intestine was empty of contents. The distal small intestine contained a small amount of wet, stringy, poorly chewed, green and brown ingesta. The mucosa was autolyzed. No parasites were grossly observed throughout.

Commented [B81]: I'm not convinced

**CECUM** The cecum contained 50 mL of moist, fibrous, leafy, moderately digested, green and brown ingesta. The mucosa was autolyzed. There was a scant infection of dead trematodes.

**COLON** The proximal colon contained a small amount of moist, fibrous, stringy, moderately digested, well-formed, dark brown feces. The distal colon contained a small amount of dry, crumbly, fibrous, well-digested, moderately formed, dark green to dark brown feces (see photo). The mucosa was autolyzed throughout. No parasites were observed throughout.

**PANCREAS** The pancreas was liquified.

**SPLEEN** The spleen was soft, friable, and autolyzed.

**LIVER** The liver was soft, friable, and autolyzed. An ELISA toxicology sample was collected.

**GALLBLADDER** The gallbladder was empty of contents. The mucosa was bile-stained.

**REPRODUCTIVE** The testes were gassy and moderate in size. The rest of the reproductive organs were liquified. No fluid was expressed on cut surfaces of the testes.

**KIDNEYS** The kidneys were soft, friable, and autolyzed. An ELISA toxicology sample was collected.

**URINARY BLADDER** The urinary bladder contained a scant amount of red-tinged urine. The mucosa was autolyzed.

**HEART** The heart was soft, friable, and autolyzed.

**RESPIRATORY SYSTEM** Both hemidiaphragms were torn due to decomposition. The lungs were liquified. The airways were clear. The mucosa was tan. No parasites were observed. An ELISA toxicology sample was collected.

**HEAD & NECK REGIONS** The tissue on the head was discolored pink deep to wound #1 (see photo). The trachea was clear. The mucosa was tan. No parasites were observed.

**SKELETON** NVL.

**OTHER** The tissue was discolored dark red deep to wounds #2 - 5 (see photo).

**COMMENTS**

**SIGNIFICANT FINDINGS**

- Autolyzed internal organs
- Skin lesions
- Relatively empty GI tract
- Dry, crumbly feces
- Tracking belt
- PIT tag positive, REC1702, SWFTm1701b, SWFTm18136b, "Baca"

**PROBABLE CAUSE OF DEATH** Undetermined; Too Decomposed

**NECROPSY CONDUCTED BY**

Blake M. Faucett

Alexa Herrendorf (FWC intern)

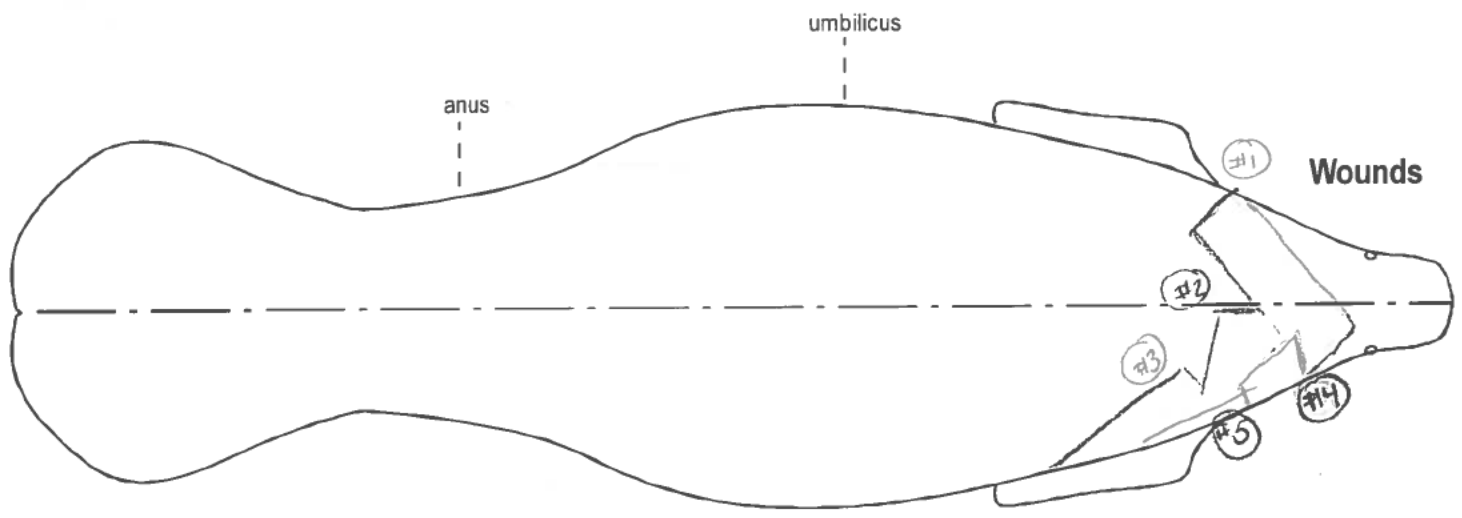
REPORT FILED BY Faucett

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

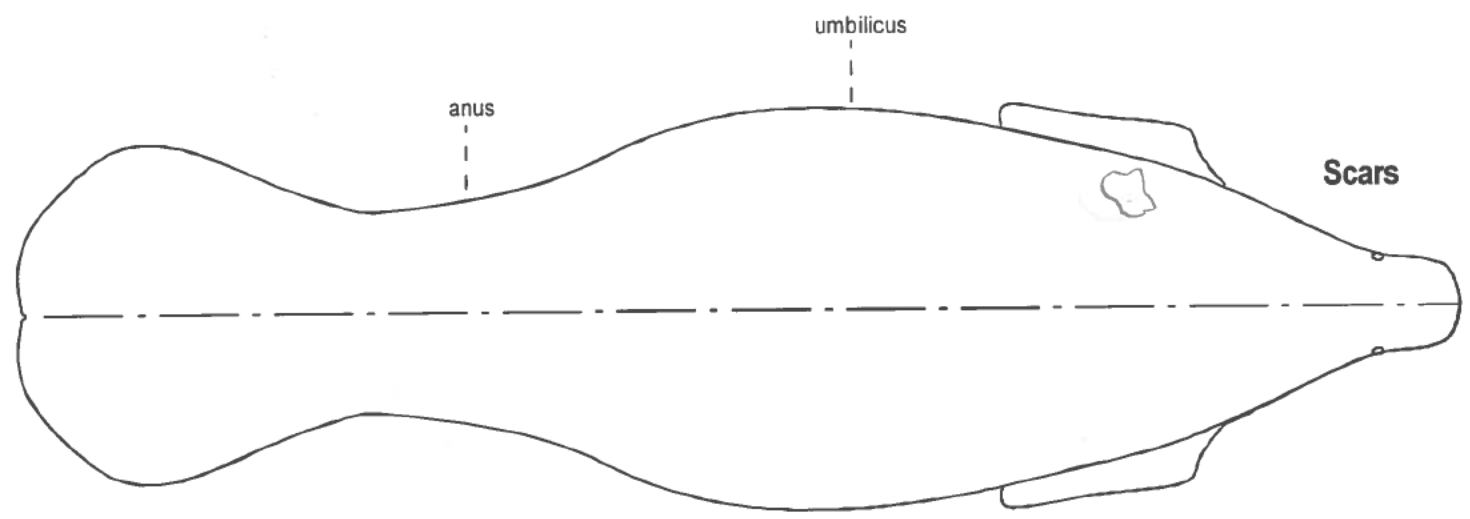
Date 08 JAN 2021

Field I.D. MSE21011

c:\Manuals\scar2dat\ 26 July 02

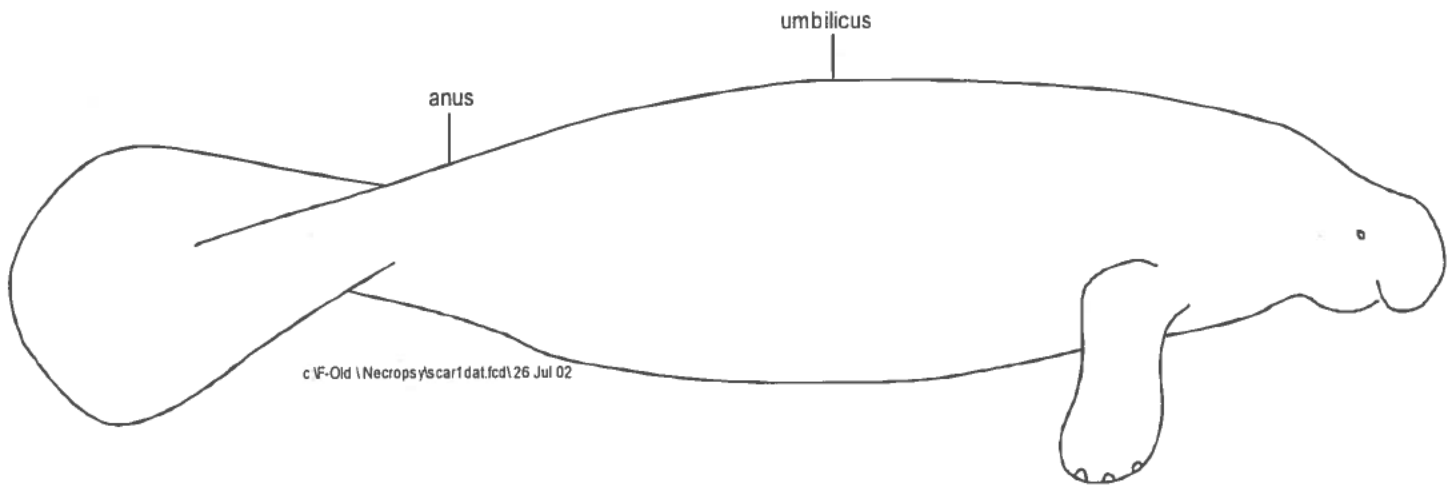
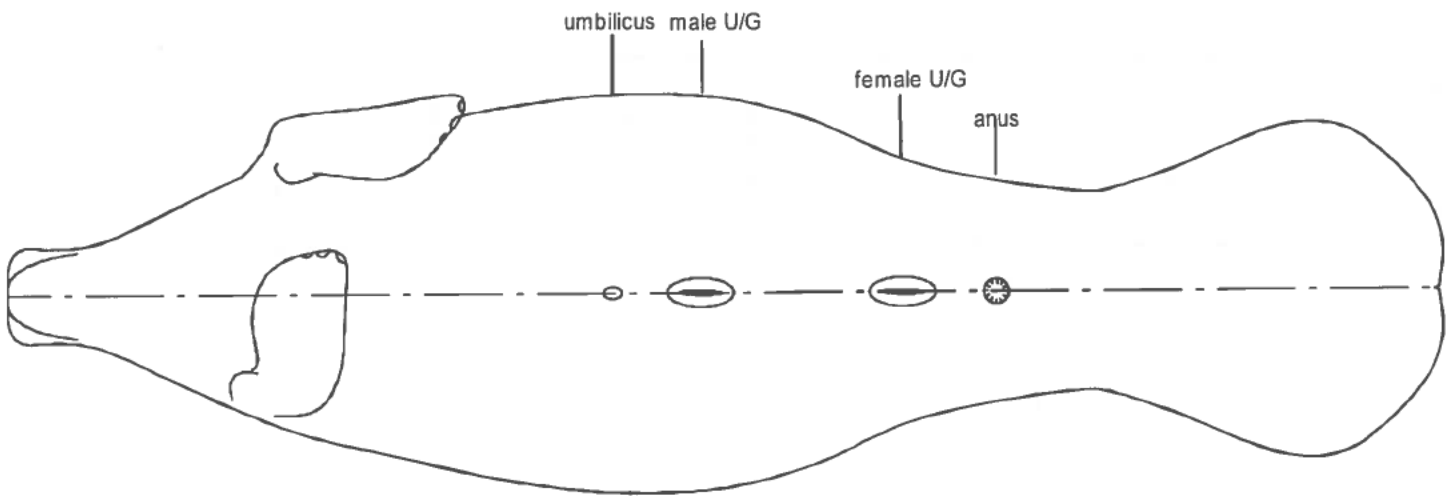
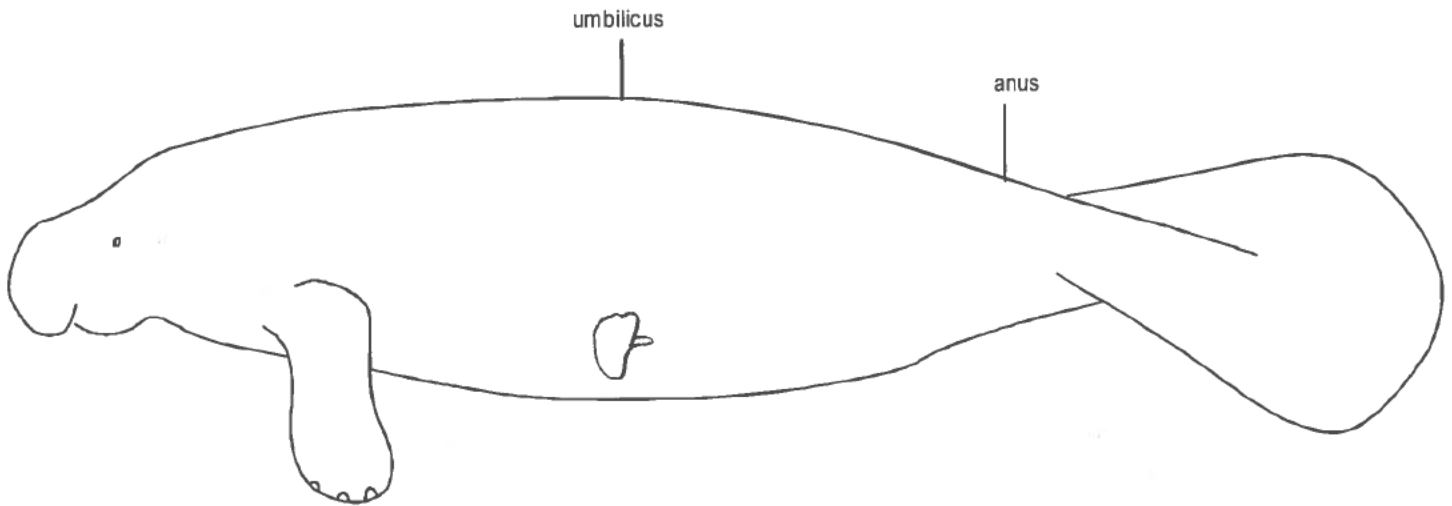


Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



(BMF) over  
→

FIELD I.D. MSEZ1011



c:\F-Old \Necropsy\scart1 dat.fcd\ 26 Jul 02

BMA

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21018  
**Date of Report:** 2021-Jan-10  
**Filed By:** FWC SE Field Station

**FWC Case #** 1075 **FWC Region:** SO-A

**Sex:** Unknown **Length:** 191 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-10 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** 2021-Jan-16 **By:** FWC intern-J. Wheatley

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** North Forth St. Lucie River

**Locality description:** Stuart, beached approximately 350 m SW of 675 NW Flagler Avenue.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Verified through complainant photographs and FWC intern.

**PHOTOGRAPHS TAKEN:** Ventral

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC SE Field Station pending distribution.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed. Also FWC case number 0779. Scavenging.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	191 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:



## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21018

**RECOVERY DATE** N/A

**GENDER** Female **TL** 191 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** **10 January 2021**, at 1501 hrs, FWC biologist-Austin Peek (AP) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Stuart, Martin County. FWC case number 0779 was assigned. The complainant, Rob Jenkins (678-764-8877), stated that there was a large badly decomposed manatee beached on a bank of the St. Lucie River. GPS coordinates and photos were received by 1519 hrs. Due to the advanced stage of decomposition, no plans were made to recover or necropsy the carcass. **14 January**, at 1151 hrs, FWC intern-Alexa Herrendorf received a text alert from Dispatch regarding a dead manatee near the Stuart Hospital in Stuart, Martin County. FWC case number 1075 was assigned. The complainant, Norman (772-223-5741), stated that there was a dead manatee on the rocks east of the helicopter pad. Photo verification and a GPS location were received at 1208 hrs. The photo was not clear enough to confirm it was a dead manatee, and based on pending workload, no response was available to confirm it. **16 January**, FWC intern-Jordan Wheatley arrived at the carcass at 1134 hrs. Ventral photos were taken, but Jordan could not flip the carcass for dorsal photos. The manatee was initially believed to be a new carcass. When Jordan arrived back at the lab, photos on 10 January were matched to Jordan's photos, and it was confirmed to be MSE21018. The remains were left on site to decompose.

**EXTERNAL** From photographs - All of the ventral epidermis was missing. Small portions of the GI tract protruded from the umbilicus. There were multiple rents from scavenging and/or decomposition on the ventrum. The fluke was severely eroded due to decomposition. PIT tag scan was not performed. A genetics sample was collected.

**COMMENTS** The photo label on 16 January has the incorrect carcass number (MSE21025).

### SIGNIFICANT FINDINGS

- Verified through complainant photographs and FWC intern
- Scavenging

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

N/A

**REPORT FILED BY** Peek / Faucett

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:      Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21041  
**Date of Report:** 2021-Jan-24  
**Filed By:** FWC SE Field Station

**FWC Case #** 1949 **FWC Region:** SO-A

**Sex:** Unknown **Length:** 215 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-24 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** St. Lucie Inlet

**Locality description:** Stuart, floating directly behind 6968 SE Harbor Circle.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	215 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21041

**SPECIES** *T. manatus latirostris*

**RECOVERY DATE** N/A

**NECROPSY DATE** N/A

**GENDER** Undetermined **TL** 215 **cm** (est) **WT** N/T **kg**

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 24 January 2021, at 1415 hrs, FWC biologist-Austin Peek (AP) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Stuart, Martin County. FWC case number 1949 was assigned. The complainant, Nick (772-215-2551), stated that there was a dead manatee floating under mangroves off the St. Lucie Inlet. Due to the advanced state of decomposition and location, the carcass was not recovered or necropsied.

**EXTERNAL** From photograph - Approximately 80% of the ventral epidermis was present but sloughing.

### COMMENTS

### SIGNIFICANT FINDINGS

- Verified through complainant photograph

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

N/A

REPORT FILED BY - Peek

PRELIMINARY DATA.

FINDINGS MAY BE ADDED OR

DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21043  
**Date of Report:** 2021-Jan-25  
**Filed By:** FWC SE Field Station

**FWC Case #** 2005 **FWC Region:** SO-A

**Sex:** Male **Length:** 215 cm (estimated-4) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-25 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** St. Lucie **Longitude:** W

**Waterway:** Taylor Creek

**Locality description:** Ft. Pierce, floating approximately 60 m SSW of 1800 N US Highway 1.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Verified through photographs.

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	215 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:



## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21043

**RECOVERY DATE** N/A

**GENDER** Male **TL** 215 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

---

**HISTORY** 25 January 2021, at 0809 hrs, FWC intern-Jordan Wheatley received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Taylor Creek, St. Lucie County. FWC case number 2005 was assigned. The complainant, Justin (772-801-1970), stated that he saw a belly-up manatee while driving over the bridge at Taylor Creek. No photos were available. Jordan called the Harbor Branch Oceanographic Institute (HBOI) hotline to request assistance with verifying the carcass. HBOI-Brittany Baldrice agreed to respond. At 0853 hrs, Brittany confirmed the carcass and sent GPS location and photo verification. Due to location and advanced level of decomposition, the carcass was not recovered or necropsied.

---

**EXTERNAL** From photographs - All of the ventral epidermis was missing. The carcass was distended with gas.

---

### COMMENTS

---

### SIGNIFICANT FINDINGS

- Verified through photographs

---

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

---

**NECROPSY CONDUCTED BY**

N/A

**REPORT FILED BY** Howell

PRELIMINARY DATA  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21046  
**Date of Report:** 2021-Jan-26  
**Filed By:** FWC SE Field Station

**FWC Case #** 2131 **FWC Region:** SO-A

**Sex:** Female **Length:** 175 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Jan-26 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** 2021-Jan-27 **By:** FWC Intern-J. Wheatley

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** St. Lucie River

**Locality description:** Jensen Beach, beached approximately 100 m S of 30 NW Alice Street.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Cobblestone-like epidermis; Verified through complainant photograph and FWC intern. External work-up performed, but necropsy not conducted.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Fluke, Cranial.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	175 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21046

**RECOVERY DATE** 27 January 2021

**GENDER** Female **TL** 175 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** **26 January 2021**, at 1212 hrs, FWC biologist-Blake Faucett (BMF) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in the St. Lucie River, Martin County. FWC case number 2131 was assigned. The complainant, Alice (772-341-4536), stated that a small dead manatee has washed up on the rocks behind her property. Photo verification was received by 1218 hrs. Due to a rescue in progress, BMF advised they would not be able to get to it right away and asked if the complainant could call back if it was still there the next morning, and she was agreed. **27 January**, at 1430 hrs, Alice informed BMF that the carcass was still on her beach and wanted to know when somebody could come remove it. FWC intern-Jordan Wheatley arrived at 1530 hrs and performed an external workup. The carcass was moved and secured in a secluded location nearby to decompose.

**EXTERNAL** Approximately 10% of the epidermis was present but sloughing. Decompositional fluid exuded from the nares. The carcass was distended with gas. There was a thick brown and green algal mat present on the dorsum in the initial complainant's photo. Cobblestone-like epidermis was observed on the dorsum in the initial complainant's photo. PIT tag scan was negative. A genetics sample was collected.

### COMMENTS

### SIGNIFICANT FINDINGS

- Verified through complainant photograph and FWC intern
- Cobblestone-like epidermis

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

N/A

REPORT FILED BY Howell

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21063  
**Date of Report:** 2021-Feb-04  
**Filed By:** FWC SE Field Station

**FWC Case #** 2897 **FWC Region:** SO-A

**Sex:** Female **Length:** 256 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-04 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** 2021-Feb-04 **By:** FWC-BMF

**DATE NECROPSIED:** 2021-Feb-04 **By:** FWC-BMF

**LOCATION: State:** FL **Latitude:** N

**County:** St. Lucie **Longitude:** W

**Waterway:** Indian River

**Locality description:** Ft. Pierce, grounded approximately 30 m NE of 1508 S Indian River Dr

**CONDITION:** Fresh

**PROBABLE CAUSE OF DEATH:** Natural: Other

**EXPLAIN:** Flat ventrum; Depleted fat(s); Serous fat(s); Dry, hard feces; Wet lung(s); Swollen, heavy lungs; Empty colon; Discolored GI mucosa; Froth, fluid in airways; Fluid in pleural cavities; Congested mesenteries, parietal pleura, hemidiaphragms, urinary bladder-, tracheal mucosa.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal, Other (Lesions, Scrape).

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. A field necropsy was performed. Peanut-shaped head; Skin scrapes. Grounded dorsum-up.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	256 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:



## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21063

**RECOVERY DATE** 04 February 2021

**GENDER** Female **TL** 256 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 04 February 2021

**CONDITION** Fresh

---

**HISTORY** 04 February 2021, at 0842 hrs, FWC biologist-Amber Howell (ARH) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Fort Pierce, St. Lucie County. FWC case number 2897 was assigned. The complainant, Tom (772-233-3568), stated that there was a dead manatee beached on the west side of the Indian River behind his residence. Photo verification was received showing the manatee grounded dorsum-up by 0858 hrs. ARH passed information to FWC biologist-Blake Faucett (BMF) for response. BMF arrived at the carcass at 1330 hrs. A field necropsy was completed by 1530 hrs. The remains were secured to nearby mangroves.

---

**EXTERNAL** All of the epidermis was present. The carcass was slightly dorsoventrally flattened and had a peanut-shaped head. The ventrum was flat. A thin, brown and green algal mat was observed. There was a bloody scrape on the right cranial lateral aspect. Several circular and linear cold stress lesions were observed on the lateral aspects. There was a circular impression mark on the chin. A minimum of six well-healed watercraft-related scar patterns was observed. PIT tag scan was negative. A genetics sample was collected.

---

**ABDOMINAL** There was a small amount of serous abdominal, omental, and mesenteric fat. The mesenteries were moderately congested.

**STOMACH** The stomach contained 2.5 L of moist, fibrous, stringy, moderately chewed, green and tan ingesta. The ingesta were coated in a thick layer of viscous, white mucus. The mucosa had an ulcerous area that was discolored red. No parasites were observed.

**DUODENUM** The duodenum contained 1.5 L of wet, fibrous, stringy, moderately chewed, green and tan ingesta. The mucosa had areas of black discoloration. No parasites were observed.

**JEJUNUM & ILEUM** The proximal small intestine contained a small amount of tan paste. The distal small intestine contained a small amount of moist, fibrous, stringy, moderately chewed, green and tan ingesta. The mucosa was rugose and discolored grey throughout. No parasites were grossly observed.

**CECUM** The cecum contained 2 L of moist, fibrous, stringy, moderately digested, green and tan digesta. The mucosa was sloughing with black discoloration. There was a mild infection of dead trematodes.

**COLON** Some sections of the proximal colon were contracted and empty of contents and other sections contained a small amount of moist, fibrous, stringy, moderately digested, moderately formed, green feces. The mucosa was rugose with black discoloration. The distal colon contained a small amount of dry, crumbly, fibrous, leafy, stringy, moderately digested, poorly formed, brown and green feces. The mucosa had regions of pink discoloration. No parasites were observed throughout.

**PANCREAS** The pancreas was firm. Serosal and cut surfaces were tan.

**SPLEEN** The spleen was firm. Serosal surfaces were mottled purple and grey, and cut surfaces were dark red.

---

**LIVER** The liver was firm. The margins of the liver were sharp. Serosal surfaces were dark blue and cut surfaces were dark brown.

**GALLBLADDER** The gallbladder contained 15 mL of viscous, golden yellow bile. The mucosa was bile-stained.

---

**REPRODUCTIVE** There was moderate, serous reproductive fat. The uterine horns were contracted. No uterine scars were observed. The ovaries contained <20 follicles including a few corpora hemorrhagica.

**KIDNEYS** There was a small amount of serous perirenal fat. Serosal surfaces were dark blue. On cut surfaces, the cortices were dark pink and the medullae were dark red. The corticomedullary boundaries were distinct.

**URINARY BLADDER** There was black discoloration on the serosal surfaces. The urinary bladder contained 50 mL of clear, light yellow urine. The mucosa was severely congested (see photo).

---

**HEART** There was a small amount of serous epicardial fat. Valves and chambers were unremarkable.

---

**RESPIRATORY SYSTEM** Both hemidiaphragms were intact and slightly congested. Each pleural cavity contained 1.5 L of watery, tan fluid. The parietal pleura was slightly congested. The lungs were swollen and heavy. Serosal surfaces were light pink to light purple and cut surfaces were dark red and very wet. The airways contained an abundant amount of white froth and light red-tinged fluid (see photos). The mucosa was tan. No parasites were observed.

---

**HEAD & NECK REGIONS** There was a small amount of white froth in the trachea. The tracheal mucosa was moderately congested.

---

**SKELETON** NVL

---

**OTHER**

---

**COMMENTS**

---

**SIGNIFICANT FINDINGS**

- Peanut-shaped head
- Flat ventrum
- Depleted, serous fat
- Empty colon
- Dry, hard feces
- Discolored GI mucosa
- Wet, heavy, swollen lungs
- Froth, fluid in airways
- Fluid pleural cavities
- Congested mesenteries, parietal pleura, hemidiaphragm, urinary bladder-, tracheal mucosa
- Cold stress lesions
- Skin scrapes
- Grounded dorsum-up

---

**PROBABLE CAUSE OF DEATH**

Natural; Other

---

**NECROPSY CONDUCTED BY**

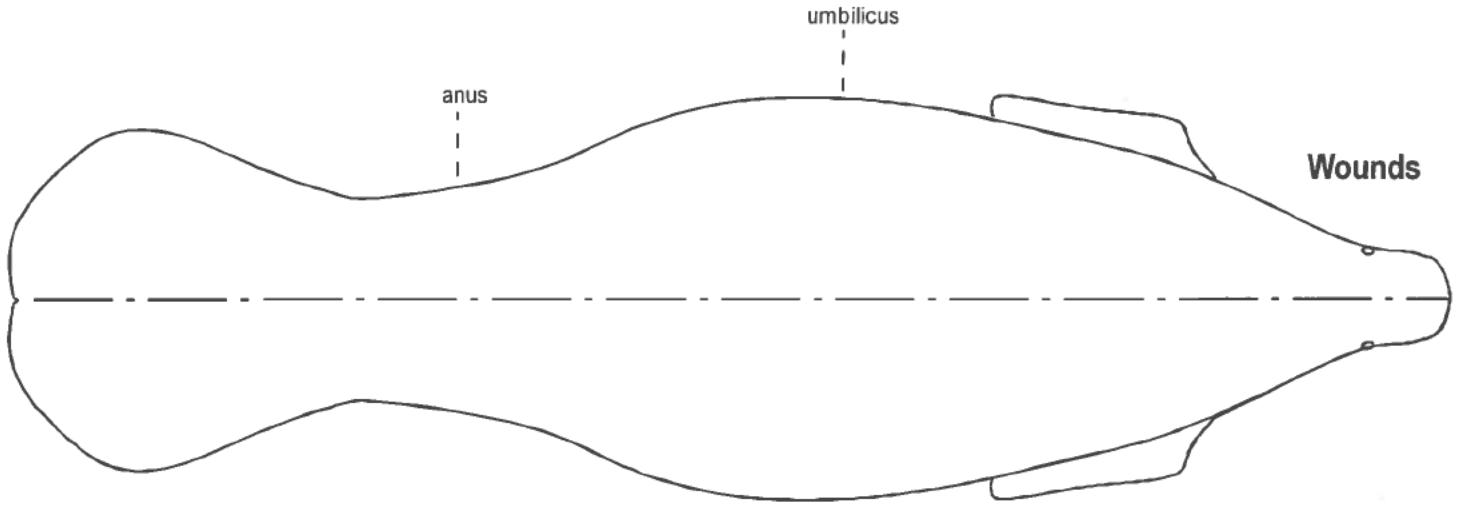
Blake M. Faucett  
Chelsea R. Cameron (FWC intern)

REPORT FILED BY Howell

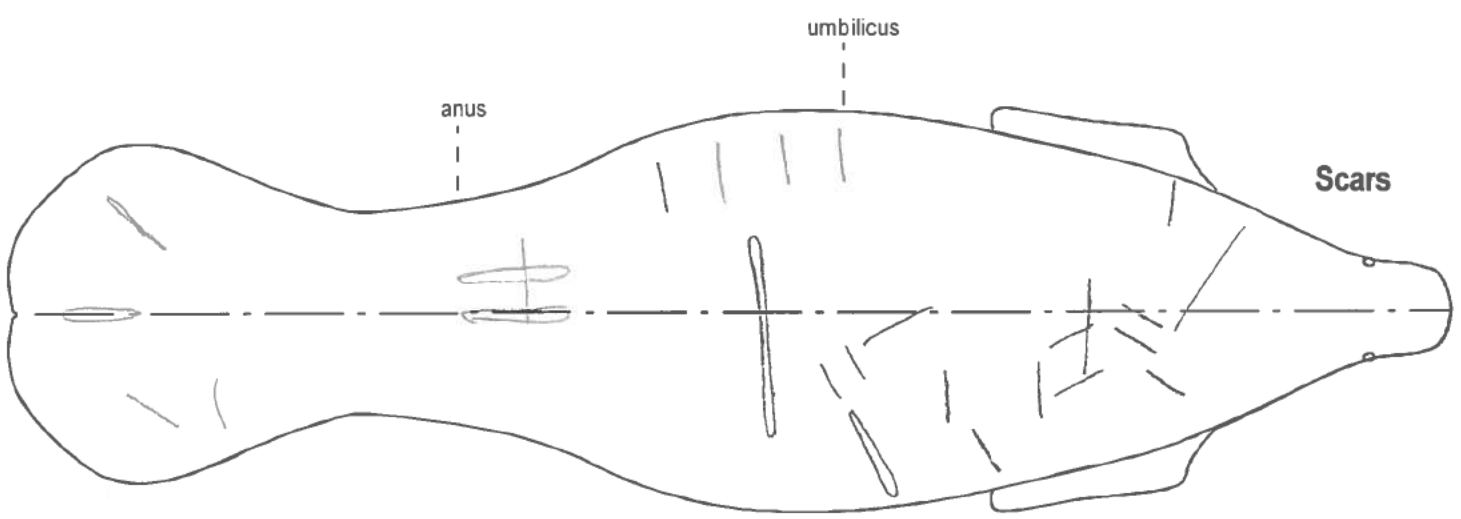
Date 04 Feb 2021

Field I.D. MSE21063

c:\Manuals\scar2dat\ 26 July02

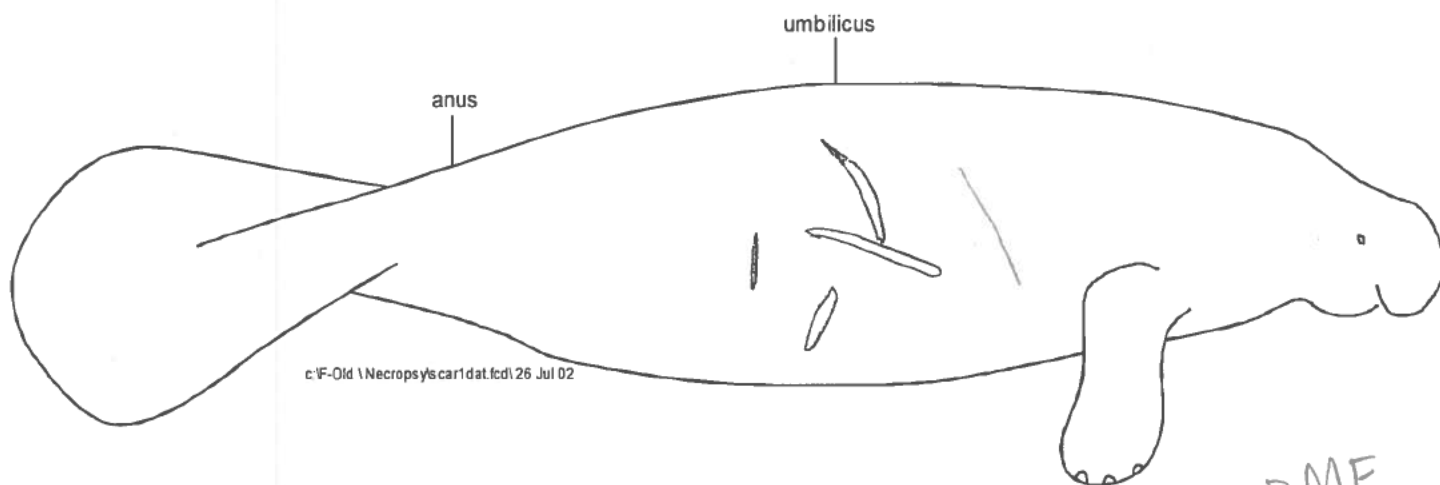
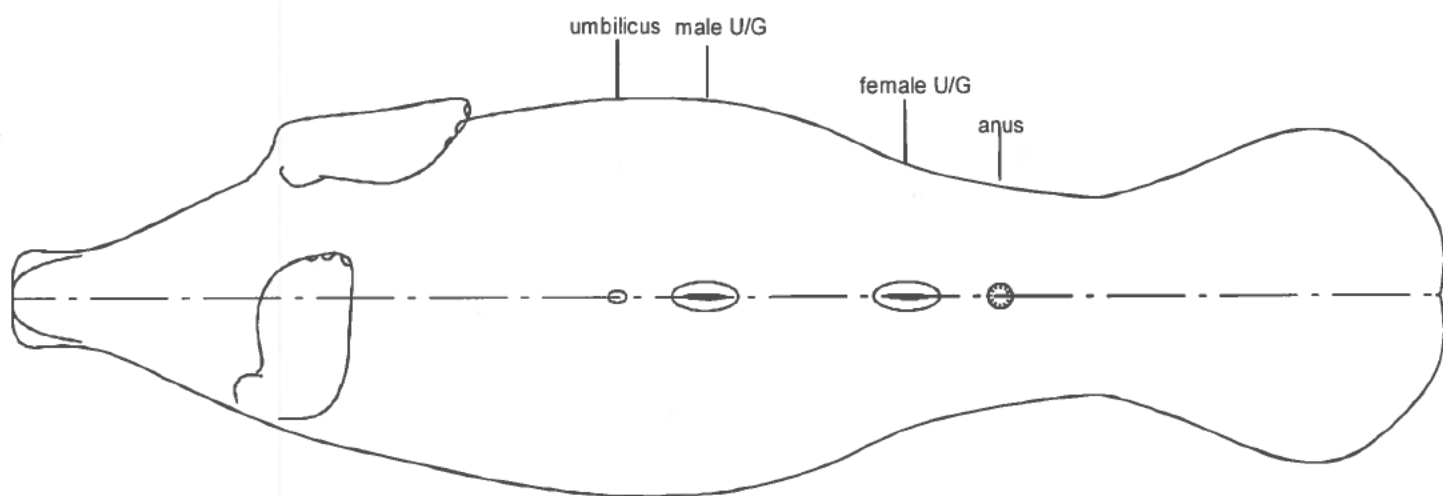
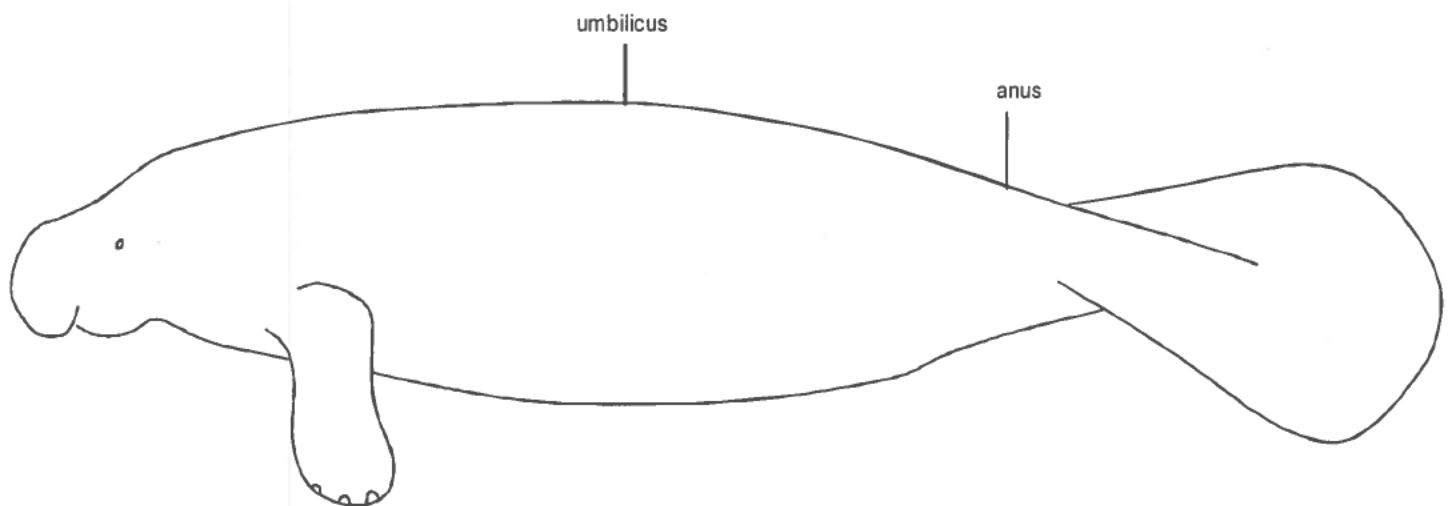


Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



over →  
BMF

FIELD I.D. MSE21063



c:\F-Old \Necropsy\scar1dat.fcd\26 Jul 02

BMF

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21069  
**Date of Report:** 2021-Feb-06  
**Filed By:** FWC SE Field Station

**FWC Case #** 3068 **FWC Region:** SO-A

**Sex:** Male **Length:** 220 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-06 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** 2021-Feb-06 **By:** FWC-BMF

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** Great Pocket

**Locality description:** Stuart, grounded approximately 135 m NE of 5567 SE Reef Way.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Healing watercraft wound(s); Cold stress lesions; Thick algal mat. Verified through complainant photographs and FWC biologist. External work-up performed, but necropsy not conducted.

**PHOTOGRAPHS TAKEN:** Dorsal, Fluke.

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	220 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21069

**RECOVERY DATE** 06 February 2021

**GENDER** Male **TL** 220 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 06 February 2021, at 1020 hrs, FWC biologist-Amber Howell (ARH) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Stuart, Martin County. FWC case number 3068 was assigned. The complainant, Dawn (561-756-0283), stated that there was a dead manatee beached on a sandbar behind her house. She had attempted to call the day before when she thought it was beached alive, but nobody responded. ARH confirmed no calls were received by biologists. Photo verification was received by 1030 hrs. ARH passed the information to FWC biologist-Blake Faucett (BMF) to respond. BMF and FWC intern-Chelsea Cameron arrived at 1420 hrs. A necropsy was planned but due to incoming rain, just an external workup was completed. The carcass was kayaked off the sandbar and secured in mangroves in a secluded location to decompose.

**EXTERNAL** All of the epidermis was present. The carcass was thin. There was a thick brown algal mat on the dorsal and lateral aspects. Numerous circular and linear cold stress lesions were present on the axilla and lateral and ventral aspects. There was a healing watercraft-related wound pattern on the mid left lateral aspect which consisted of a long linear wound and at least three parallel propeller wounds caudal and perpendicular to the long linear wound. There were a few well-healed watercraft-related scars were observed, but due to the incoming rain cell, they were not highlighted or photographed. PIT tag scan was negative. A genetics sample was collected.

**COMMENTS** External work-up performed, but necropsy not conducted.

### SIGNIFICANT FINDINGS

- Verified through photographs and FWC biologist
- Healing watercraft wounds
- Cold stress lesions
- Thick algal mat

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

**NECROPSY CONDUCTED BY**

N/A

**REPORT FILED BY** Howell



FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21070  
**Date of Report:** 2021-Feb-06  
**Filed By:** FWC SE Field Station

**FWC Case #** **FWC Region:** SO-A

**Sex:** Female **Length:** 200 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-06 **By:** Harbor Branch staff to FWC-ARH

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION:** **State:** FL **Latitude:** N  
**County:** St. Lucie **Longitude:** W

**Waterway:** Harbor Branch Channel

**Locality description:** Fort Pierce, floating approximately 495 m NE of the Harbor Branch Oceanographic Institute boat ramp.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:** Verified through photographs.

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	200 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21070

**RECOVERY DATE** N/A

**GENDER** Female **TL** 200 **cm** (est) **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 06 February 2021, at 1215 hrs, FWC biologist-Amber Howell (ARH) received a screenshot text from Harbor Branch (HBOI)-Steve Burton of information he had received regarding a dead manatee in the Harbor Branch Channel, Ft. Pierce, St. Lucie County. ARH passed the screenshot to FWC biologist-Blake Faucett (BMF) since there was a phone number in the text. BMF called the complainant, Brandon (561-632-9810), who stated he saw a dead manatee with vultures on it near the shoreline. BMF contacted the HBOI hotline and Wendy Marks replied that she could go verify the carcass. Wendy sent photos, a length estimate, gender, and coordinates by 1313 hrs. Wendy secured the carcass to the shoreline to decompose.

**EXTERNAL** From photographs - Approximately 20% of the ventral epidermis was present but sloughing. The left flipper and muzzle were eroded due to decomposition.

### COMMENTS

### SIGNIFICANT FINDINGS

- Verified through photographs

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

N/A

REPORT FILED BY Howell

PRELIMINARY DATA  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21087  
**Date of Report:** 2021-Feb-09  
**Filed By:** FWC SE Field Station

**FWC Case #** 3412 **FWC Region:** SO-A

**Sex:** Male **Length:** 150 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-09 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** Willoughby Creek

**Locality description:** Stuart, floating 45m ENE of 2686 SE St. Lucie Boulevard.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Perinatal (<= 150 cm)

**EXPLAIN:** Verified; Not Necropsied;

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	150 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21087

**RECOVERY DATE** N/A

**GENDER** Male **TL** 150 **cm** (est.) **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 09 February 2021, at 1633 hrs, FWC intern- Jordan Wheatley received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Willoughby Creek, Stuart, Martin County. FWC case number 3412 was assigned. The complainant, Christine (503-780-3216), stated the carcass was belly up floating south of the Indian Street Bridge. Photo verification was received by 1640 hrs. 15 February, at 1012 hrs, FWC biologist- Amber Howell (ARH) received a text alert from Dispatch regarding the same dead manatee. FWC case number 3907 was assigned. The complainant, Patricia (772-284-0307), stated the carcass had washed up under her dock in Willoughby Creek and vultures were all over her dock. Photo verification was received. ARH requested FWC LE assist with relocating the carcass. At 1115 hrs, FWC- Officer Paul Godward arrived to the carcass, towed it out of the creek, and secured it to a plastic pole in the water in a secluded location to decompose naturally.

**EXTERNAL** From initial photo: All of the epidermis on the ventrum was present. There was bleached epidermis on the ventral fluke and axilla. There were cold stress lesions on the ventral neck, axilla, left lateral aspect, and ventrum. PIT tag scan was not performed.

### PHOTOGRAPHS

### COMMENTS

### SIGNIFICANT FINDINGS

### PROBABLE CAUSE OF DEATH

Perinatal; Not Necropsied

### NECROPSY CONDUCTED BY

REPORT FILED BY Howell



FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other  
Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied  
Natural: ☐ Cold Stress ☐ Other (includes Red Tide)  
Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21092  
**Date of Report:** 2021-Feb-10  
**Filed By:** FWC SE Field Station

**FWC Case #** **FWC Region:** SO-A

**Sex:** Unknown **Length:** 275 cm (estimated-4) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-10 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION:** **State:** FL **Latitude:** N

**County:** St. Lucie **Longitude:** W

**Waterway:** St. Lucie Cut

**Locality description:** Fort Pierce, grounded 365 m NW of 601 N Causeway Drive.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	275 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21092

**RECOVERY DATE** N/A

**GENDER** Undetermined **TL** 275cm (est.) **WT** N/T kg

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 10 February 2021, at 1835 hrs, FWC biologist- Amber Howell (ARH) noticed she had a Facebook message from 1643 hrs from Manatee Observation and Education Center staff member- Meredith that they received a call about a dead manatee in Ft Pierce, St. Lucie County. No FWC case number was assigned. The complainant, Larry (574-527-0681), stated at 1625 hrs, he observed a large, badly decomposed carcass just on the other side of the drawbridge from Little Jim Bait shop and Stan Blum boat ramp. Photo verification and a screenshot of the location was received by 1848 hrs. Due to level of decomposition, the carcass was left to decompose naturally.

**EXTERNAL** Approximately 20% of the epidermis on the ventrum was present but sloughing. The ventrum was sunbaked. PIT tag scan was not performed.

### PHOTOGRAPHS

### COMMENTS

### SIGNIFICANT FINDINGS

•

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

**NECROPSY CONDUCTED BY**

REPORT FILED BY Howell

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21094  
**Date of Report:** 2021-Feb-11  
**Filed By:** FWC SE Field Station

**FWC Case #** **FWC Region:** SO-A

**Sex:** Female **Length:** 215 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-11 **By:** Citizen to FWC-ARH

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION:** **State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** St. Lucie Inlet

**Locality description:** Stuart, floating approximately 35 m SSE of 7020 SE Harbor Circle.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	215 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21094

**RECOVERY DATE** N/A

**GENDER** Female **TL** 215cm (est.) **WT** N/T kg

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 11 February 2021, at 1032 hrs, FWC biologist- Amber Howell (ARH) received a text from FWRI Fisheries biologist- Sarah Webb that her friend had located a dead manatee near the St Lucie Inlet, Stuart, Martin County. No FWC case number was assigned. Photo verification and coordinates were received in the text. ARH passed the information to FWC intern- Jordan Wheatley since ARH was on a conference call and in the field. Jordan contacted the complainant, Tyler (772-342-6727), who stated there was a large dead manatee floating belly up with the skin starting to peel. At 1400 hrs, Jordan received a text alert from FWC SO Dispatch- Palm Beach regarding two dead manatees near the St Lucie Inlet. FWC case number 3573 was assigned. The complainant, Dustin (772-260-3967), and second complainant Derek (772-486-0429), stated one carcass was on the north side and the other carcass (MSE21100) on the south side once you get inside the inlet. Photo verification of both were received. At 1440 hrs, ARH received a call from Martin County Sheriff's- Deputy Mike Joseph that a boat flagged him down and he was with this carcass on the north side of the inlet. Due to the carcass being too close to the rocks for him to approach by boat, he was unable to move it. Additional photos and GPS were received by 1447 hrs.

**EXTERNAL** From photo: approximately 75% of the epidermis was present on the ventrum but sloughing. The carcass was distended with gas. PIT tag scan was not performed.

### PHOTOGRAPHS

### COMMENTS

### SIGNIFICANT FINDINGS

•

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

REPORT FILED BY Howell



MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural                      ☐ Undetermined              ☐ Not Necropsied  
Natural:                      ☐ Cold Stress                      ☐ Other (includes Red Tide)  
Undetermined:              ☐ Too Decomposed              ☐ Other                      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21100  
**Date of Report:** 2021-Feb-09  
**Filed By:** FWC SE Field Station

**FWC Case #** 3573 **FWC Region:** SO-A

**Sex:** Unknown **Length:** 215 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-09 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** St. Lucie Inlet

**Locality description:** Stuart, beached 570 m ENE of 3650 SE Bowsprit Court.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	215 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21100

**RECOVERY DATE** N/A

**GENDER** Undetermined **TL** 215 **cm** (est.) **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** **09 February 2021**, at 1854 hrs, FWC on call biologist- Denise Boyd (DMB) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee on the south side of the St Lucie Inlet, Stuart, Martin County. FWC case number 3431 was assigned. The complainant, Charles (772-341-8879), did not answer or return the call, but stated it was on the shoreline up on rocks. **11 February**, At 1400 hrs, FWC Intern- Jordan Wheatley received a text alert from Dispatch regarding two dead manatees near the St Lucie Inlet. FWC case number 3573 was assigned. The complainant, Dustin (772-260-3967), and second complainant Derek (772-486-0429), stated one carcass was on the north side (MSE21094) and the other carcass on the south side once you get inside the inlet. Photo verification of both were received. At 1455 hrs after verifying MSE21094, Martin County Sheriff's- Deputy Mike Joseph verified this carcass but due to it being beached on rocks he was unable to move it. Additional photos and GPS were received by 1456 hrs.

**EXTERNAL** Approximately 20% of the epidermis was present but sloughing. PIT tag scan was not performed.

### PHOTOGRAPHS

### COMMENTS

### SIGNIFICANT FINDINGS

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

**NECROPSY CONDUCTED BY**

REPORT FILED BY Howell

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:      Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal      ☐ Ventral      ☐ R. Lateral      ☐ L. Lateral      ☐ Scars      ☐ Fluke      ☐ Cranial      ☐ Internal      ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics      ☐ Earbone      ☐ Skull      ☐ Partial Skeleton      ☐ Complete Skeleton      ☐ Histology      ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach      ☐ Liver      ☐ Kidney      ☐ Blubber      ☐ Lower Jaw      ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach      ☐ Liver      ☐ Lung      ☐ Urine      ☐ Kidney (if no urine)      ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements      ☐ Wound measurements      ☐ Perinatal evaluation      ☐ Organ weights  
☐ Rescue Report/Map      ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21114  
**Date of Report:** 2021-Feb-23  
**Filed By:** FWC SE Field Station

**FWC Case #** 4577 **FWC Region:** SO-A

**Sex:** Male **Length:** 309 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-23 **By:** Citizen to FWC SO Dispatch

**DATE COLLECTED:** 2021-Feb-23 **By:** FWC-BMF, ARH

**DATE NECROPSIED:** 2021-Feb-23 **By:** FWC-BMF, ARH

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** Indian River

**Locality description:** Stuart, grounded approximately 40 m SSW of 322 NE Edgewater Drive.

**CONDITION:** Fresh

**PROBABLE CAUSE OF DEATH:** Natural: Other

**EXPLAIN:** Depleted fat(s); Serous fat(s); Relatively empty GI tract; Wet lung(s); Heavy, swollen lungs; Fluid in pleural cavities.

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal, Other (Scrapes).

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. A field necropsy was performed. Monofilament in mouth. Twine in mouth. Cold stress lesions.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	309 cm	Fluke base:	78 cm	Girth at axillae:	180 cm
Snout to anus:	200 cm	Fluke width:	74 cm		
Snout to U/G:	130 cm	Girth at fluke base:	96 cm		
Snout to umbilicus:	114 cm	Girth at anus:	137 cm		
Flipper width:	19 cm	Girth at umbilicus:	147 cm	Nail count: R: 4	L: 4

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:		
Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:
Fluid in seminal vesicles.

Fetus 1: Sex: Report?:
Length:
Weight:
Samples Taken:

Fetus 2: Sex: Report?:
Length:
Weight:
Samples Taken:

Brevetoxin Results:		
Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL
Other Brevetoxin Results:		

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21114

**RECOVERY DATE** 23 February 2021

**GENDER** Male **TL** 309 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** 23 February 2021

**CONDITION** Fresh

**HISTORY** 23 February 2021, at 1014 hrs, FWC biologist- Amber Howell (ARH) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in the Indian River, Stuart, Martin County. FWC case number 4577 was assigned. The complainant, John (302-650-7714), stated there was a back up manatee in shallow water near the mangroves that was unresponsive when he approached it. No photos were available. ARH passed information to FWC biologist- Blake Faucett (BMF) to see if she could respond to verify. BMF arrived at 1150 hrs and confirmed the manatee was dead. BMF and ARH completed a field necropsy by 1435 hrs. The remains were secured in mangroves in a secluded location to decompose naturally.

**EXTERNAL** All of the epidermis was present. The carcass was thin. A moderate amount of bloody fluid and air bubbles exuded from the nares. There were areas that appeared to be wounds or impressions on the caudal dorsum and dorsal fluke. The carcass had a thin green and thin brown algal mat present. A few small, linear cold stress lesions were present. There was one small tail notch at the 5 o'clock aspect. There were a minimum of x well healed, watercraft-related scar patterns. PIT tag scan was negative. A genetics sample was collected.

**ABDOMINAL** There were moderate serous abdominal, omental, and mesenteric fats. The mesenteries of the stomach and duodenum were severely congested with red banding and black specks (see photo). The mesenteries were moderately congested.

**STOMACH** The stomach was contracted and contained 250mL of tan fluid mixed with thick, viscous, white mucus (see photo). The mucosa was discolored blue and red with ulcerous regions (see photo). No parasites were observed.

**DUODENUM** The duodenum contained 150mL of tan fluid (see photo). The mucosa was sloughing with regions of dark blue to black discoloration (see photo). No parasites were observed.

**JEJUNUM & ILEUM** The proximal small intestines were empty of contents. The mucosa had regions of red discoloration (see photo). The distal small intestines were contracted and contained a small amount of light-yellow to tan paste (see photo). The mucosa was slightly discolored red. No parasites were grossly observed throughout.

**CECUM** The cecum contained 1.5L of moist, fibrous, leafy, stringy, moderately digested, dark green digesta with well chewed pieces of pink, tan, and orange algae (see photo). The mucosa was discolored blue. No parasites were observed. There was a 14cm piece of clear, 40lb test diameter monofilament in the cecum-colon juncture.

**COLON** The proximal most 30cm contained a moderate amount of moist, fibrous, leafy, stringy, moderately digested, moderately formed, dark green digesta with well chewed pieces of pink, tan, and orange algae (see photo). The mucosa was rugose and discolored dark green (see photo). The remainder of the proximal colon contained a small amount of moist, fibrous, leafy, stringy, poorly digested, well formed, green feces with partially digested tan and red leaves (see photo). The mucosa was rugose and tan. The mid and distal colon had regions that were contracted and empty and regions that were enlarged and inflated with gas (see photo). The non-contracted or inflated regions of the mid colon contained a small amount of dry, leafy, woody, moderately digested, well formed, tan to light brown feces with poorly digested orange and tan leaves (see photo). The mucosa was rugose and light pink to tan in the mid colon. The non-contracted or inflated regions of the distal colon contained a small amount of dry, woody, straw-like, moderately digested, well formed, tan to light brown



feces mixed with red and brown acorn fragments. The distal colon mucosa was sloughing with regions of red discoloration (see photo).

**PANCREAS** The pancreas was firm. Serosal surfaces were light pink and cut surfaces were tan.

**SPLEEN** The spleen was firm. Serosal surfaces were mottled pale tan and pale purple. Serosal surfaces were dark pink.

---

**LIVER** The liver was firm. Liver margins were sharp. The liver was blue to purple on serosal surfaces and brown on cut surfaces.

**GALLBLADDER** The gallbladder contained 10mL of viscous, dark yellow bile. The mucosa was bile-stained.

---

**REPRODUCTIVE** There was moderate, serous reproductive fat. The reproductive organs were large in size. A moderate amount of watery, tan fluid was expressed on cut surfaces of the seminal vesicles.

**KIDNEYS** There was a small amount of serous perirenal fat. The kidneys were firm. Serosal surfaces were red. On cut surfaces the cortices were red and the medullae were dark red. The corticomedullary boundaries were mostly indistinct.

**URINARY BLADDER** The urinary bladder contained 50mL of clear, light yellow urine. The mucosa was moderately congested.

---

**HEART** There was small, serous epicardial fat. Valves and chambers were unremarkable.

---

**RESPIRATORY SYSTEM** Both hemidiaphragms were intact. The right pleural cavity contained 2.5L and the left pleural cavity contained 3L of watery, dark red fluid (see photo). There were black specks on the parietal pleura (see photos). The lungs were swollen and heavy. Serosal surfaces were light pink and cut surfaces were dark pink and very wet (see photo). Primary and secondary airways contained a small amount of watery, red tinged fluid. The mucosa was tan. No parasites were observed.

---

**HEAD & NECK REGIONS** There were a couple blades of poorly chewed seagrass and several poorly chewed roots, a piece (37cm) of clear, 20lb test diameter monofilament, and two pieces (13, 33cm) of braided, tan twine in the mouth (see photo).

---

**SKELETON** NVL.

---

**OTHER** There was an inflated, blue discolored region of the mesenteric tissue surrounding the cecum lymph nodes (4.0 x 5.5cm, see photo). When cut into, there was a scant amount of watery, tan fluid. The tissue was discolored blue with pitted red and tan lesions (see photo).

---

**PHOTOGRAPHS** 2021-02-23\_FWC043\_5639 through 5708

---

**COMMENTS**

---

**SIGNIFICANT FINDINGS**

- Thin
- Depleted, serous fats
- Relatively empty upper GI tract
- Fluid in pleural cavities

- Wet lungs
- Inflated, discolored region in the mesenteric tissue
- Discolored, contracted GI mucosa
- Monofilament, twine in mouth, cecum

---

**PROBABLE CAUSE OF DEATH**

Natural; Other

---

**NECROPSY CONDUCTED BY**

Amber R. Howell  
Blake M. Faucett

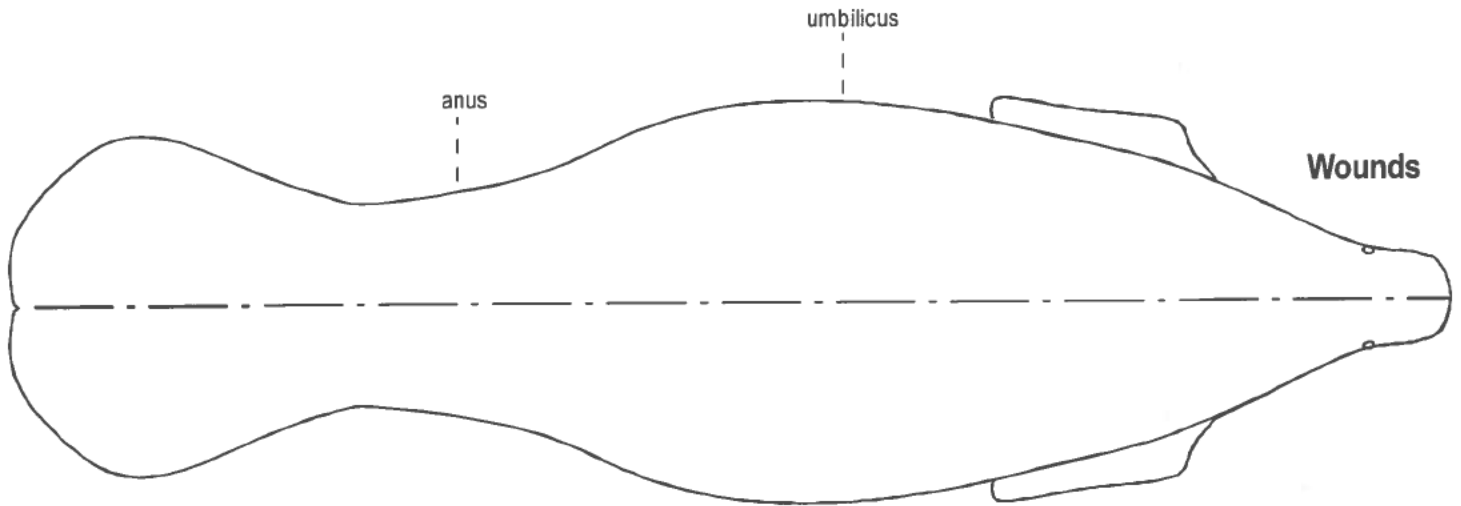
REPORT FILED BY Howell

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

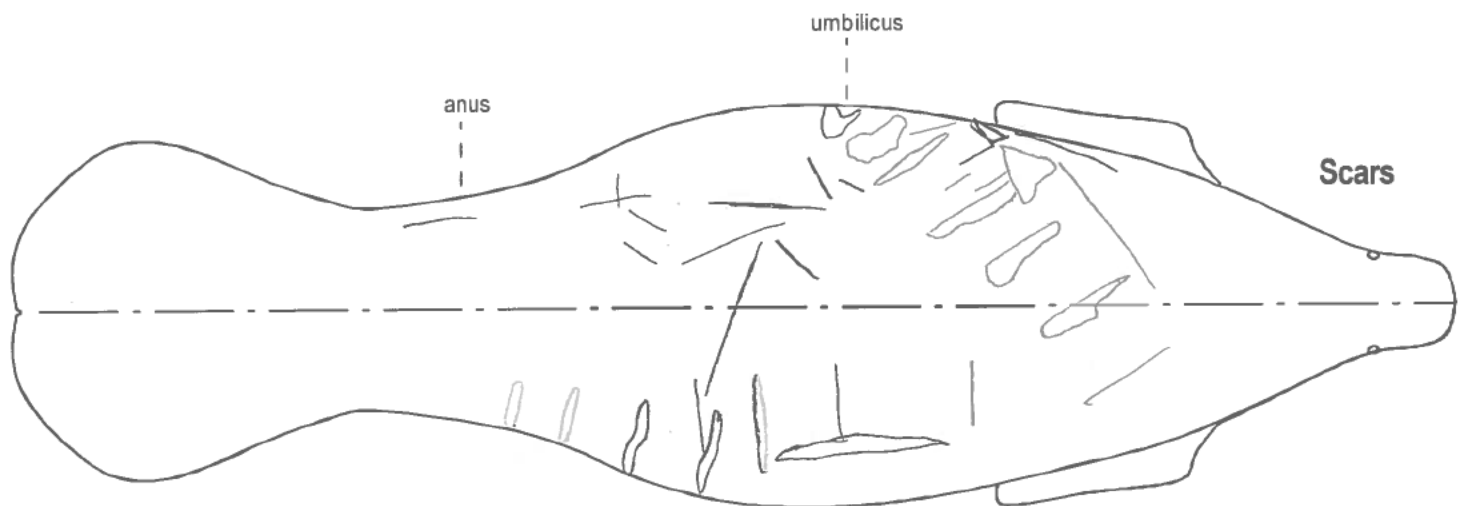
Date 23 Feb 2021

Field I.D. MSE21114

c:\Manuals\scar2dat\ 26 July 02

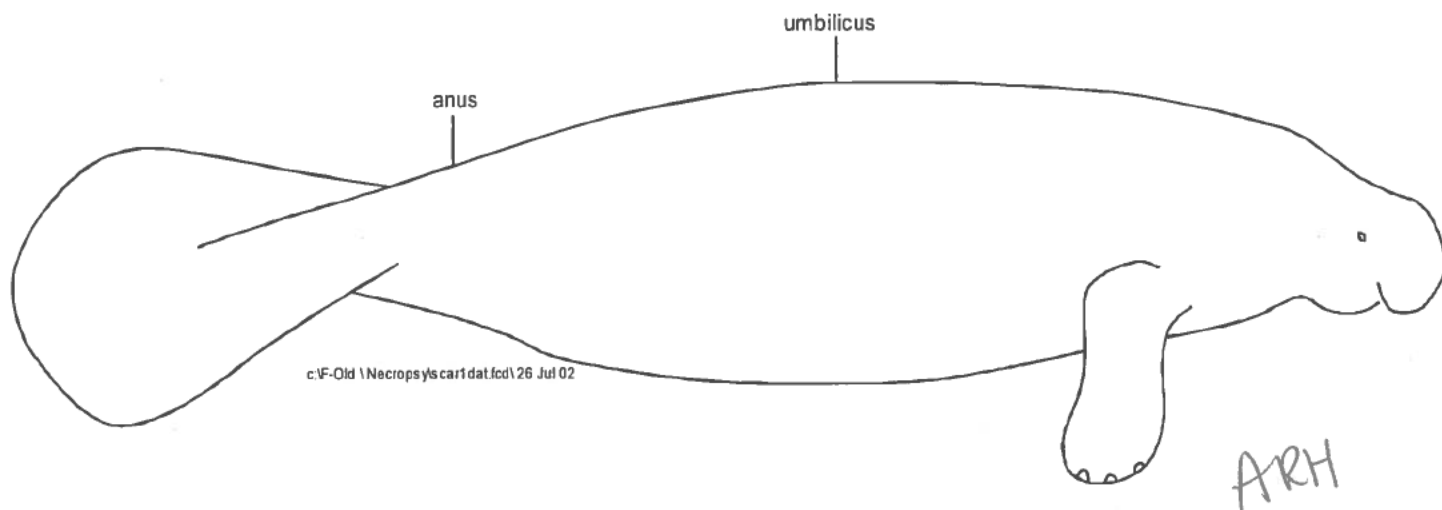
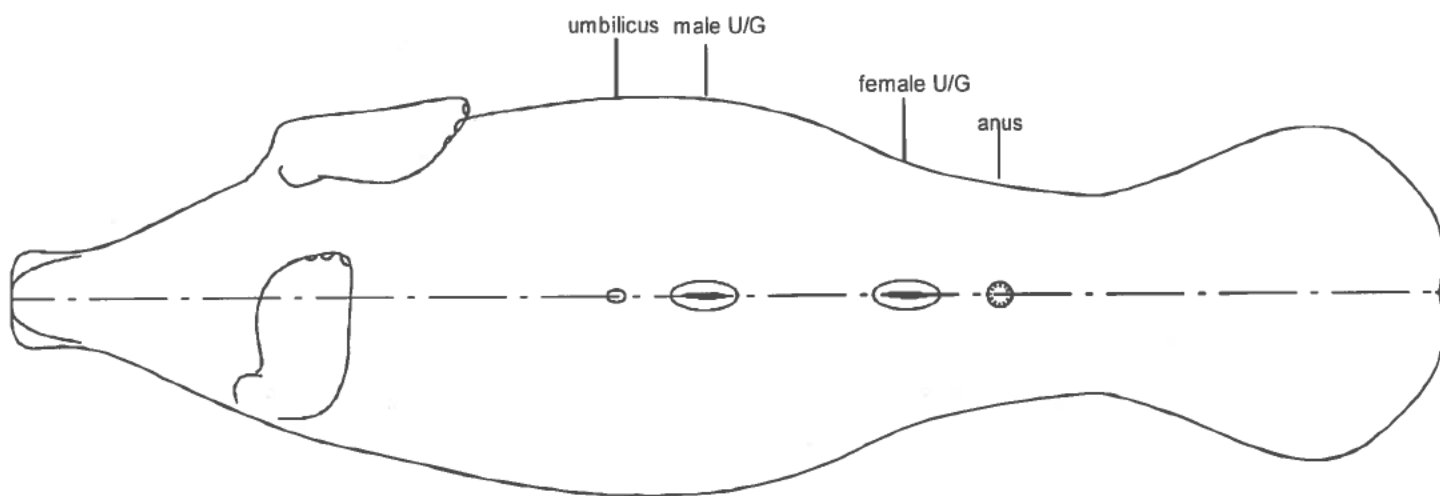
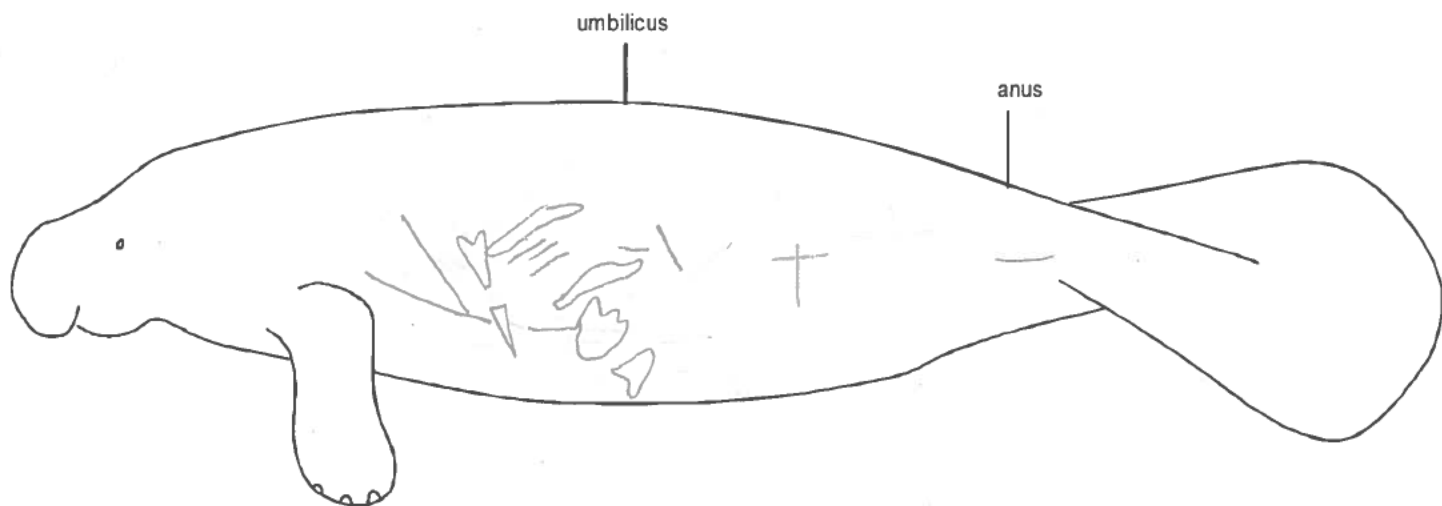


Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



ARH  
over →

FIELD I.D. MSE21114



c:\F-Old \Necropsys\car1 dat.fcd\26 Jul 02

ARH

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

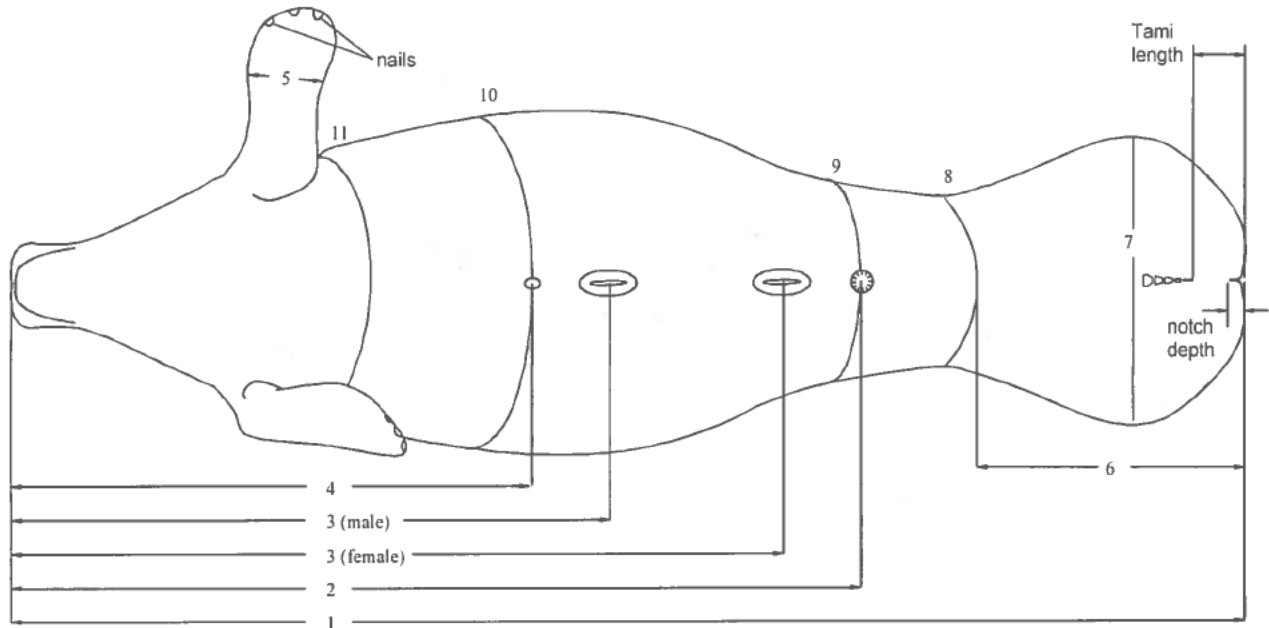
REMARKS:

Field ID # MSE21114

**Morphometrics:** All measurements are straight-line, unless indicated by an asterisk (\*). Measure to center of openings marked with C below. Record girths\* and flipper lengths on fresh (non-bloated) carcasses only.

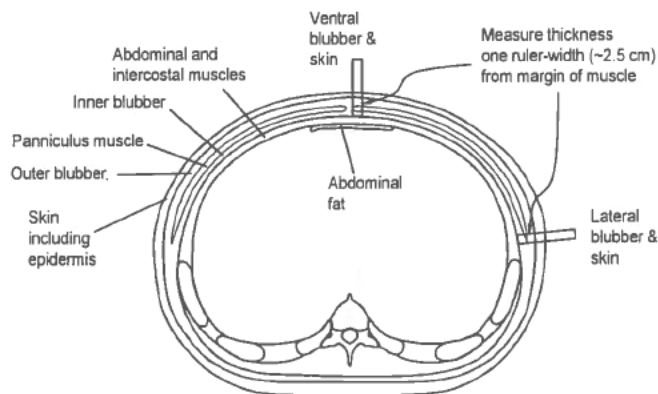
USE METRIC SYSTEM FOR ALL MEASUREMENTS. Measurement in parenthesis are optional.

1. Total length 309 cm
2. Snout to anus -C 200 cm
3. Snout to U/G -C 130 cm
4. Snout to umbilicus -C 114 cm
5. Flipper width 19 cm
6. Fluke base 78 cm
7. Fluke width 74 cm
8. \*Girth at fluke base 96 cm
9. \*Girth at anus 137 cm
10. \*Girth at umbilicus 147 cm
11. \*Girth at axillae 180 cm  
(Depth of notch      cm)  
(Tami ln      cm)



**Skin and Blubber (cm).**

	Ventral	Lateral	
Skin.....	_____ cm	_____ cm	(Epidermis _____ cm)
Outer blubber.....	_____ cm	_____ cm	(Abdominal fat _____ cm)
Inner blubber.....	_____ cm	_____ cm	



Mammary dimensions R:      x      x      cm L:      x      x      cm

Lactating: R: ☐ Y / ☐ N L: ☐ Y / ☐ N

Placental Scaring: ☐ R / ☐ L:      x      x      cm

Pregnant: ☐ Y / ☐ N - Fetus length      cm Fetus gender ☐ M / ☐ F Fetus weight      kg

Gonads: R:      x      x      cm;      kg; L:      x      x      cm;      kg

Sperm: in testes ☐ Y / ☐ N; in epididymes ☐ Y / ☐ N Method: ☐ visual / ☐ microscope slide

Fluid in seminal vesicles ☐ Y / ☐ N; if yes, then vesicle dimensions R:      x      x      cm L:      x      x      cm

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21118  
**Date of Report:** 2021-Feb-24  
**Filed By:** FWC SE Field Station

**FWC Case #** 4673 **FWC Region:** SO-A

**Sex:** Unknown **Length:** 170 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-24 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION:** **State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** Negro Cove

**Locality description:** Stuart, beached approximately 260 m NW of 260 SE Macarthur Boulevard.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	170 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:



## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21118

**RECOVERY DATE** N/A

**GENDER** Undetermined **TL** 170 **cm** (est.) **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 24 February 2021, at 0936 hrs, FWC biologist-Blake Faucett (BMF) received a text alert from FWC SO Dispatch-Palm Beach regarding a dead manatee in Negro Cove, Stuart, Martin County. FWC case number 4673 was assigned. The complainant, Ted (954-465-4805), stated there was a dead manatee with vultures on top of it near the mangroves. No photos were available, and Ted was no longer in the area. BMF requested FWC LE assistance for verification. At 1245 hrs, BMF received a call from FWC-Officer Matt Pecko who stated he located the carcass. Photo verification and GPS coordinates were received at 1253 hrs. Due to the level of decomposition and secluded area, the carcass was left verified, not necropsied.

**EXTERNAL** All of the ventral epidermis was missing. The exposed dermis was sunbaked. There were scavenging rents on the ventrum.

### PHOTOGRAPHS

### COMMENTS

### SIGNIFICANT FINDINGS

•

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

**NECROPSY CONDUCTED BY**

REPORT FILED BY Faucett

PRELIMINARY DATA  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21127  
**Date of Report:** 2021-Feb-28  
**Filed By:** FWC SE Field Station

**FWC Case #** 5145 **FWC Region:** SO-A

**Sex:** Female **Length:** 308 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-28 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** 2021-Mar-01 **By:** FWC-AP

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** Willoughby Creek

**Locality description:** Stuart, floating

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Scar, Other (Wounds.). Verification Photo(s)

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative. Known as MIPS ID PE281, first sighted on 09 Jan 2002 at Port Everglades power plant.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	308 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21127

**RECOVERY DATE** 01 March 2021

**GENDER** Female **TL** 308 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** **28 February 2021**, at 1140 hrs, FWC biologist-Austin Peek (AP) received a text alert from FWC SO Dispatch-Palm Beach regarding a manatee carcass in the Willoughby Creek, Stuart, Martin County. FWC case number 5069 was assigned. The complainant, Kenan (305-491-2013), reported a dead manatee floating behind their residence. Photo verification received by 1149 hrs. AP requested FWC LE and Martin County SO for assistance but was advised no marine units were available until later that evening. No Officers ended up making it out to this call. **01 March**, at 0915 hrs, FWC biologist- Amber Howell (ARH) received a text alert from Dispatch regarding the same carcass. FWC case number 5145 was assigned. The complainant, Sandy (772-341-3700), reported the carcass was in mangroves fully enclosed inside of her half circle dock. ARH requested FWC LE assistance. By 1100 hrs, FWC- Officer Matt Pecko and FWC- Officer Eric Rogers contacted ARH and a plan was made for AP to meet them in order to access the carcass. AP arrived to the carcass by 1204 hrs to get it out from the dock for LE to access. The carcass was then towed to a secluded location where AP completed external workup by 1319 hrs. The carcass was secured on site to decompose naturally.

**EXTERNAL** Approximately 15% of the epidermis was present but sloughing. Bloody fluid exuded from the nares. There was a healing wound series on the peduncle and dorsal aspect of the fluke. The carcass was scavenged on the right ventral neck. There was a minimum of five well healed, watercraft-related scar patterns observed. PIT tag scan was negative. A genetics sample was collected.

**OTHER**

**PHOTOGRAPHS** 2021-03-01\_FWC043\_6010 through 6024

**COMMENTS**

**SIGNIFICANT FINDINGS**

•

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

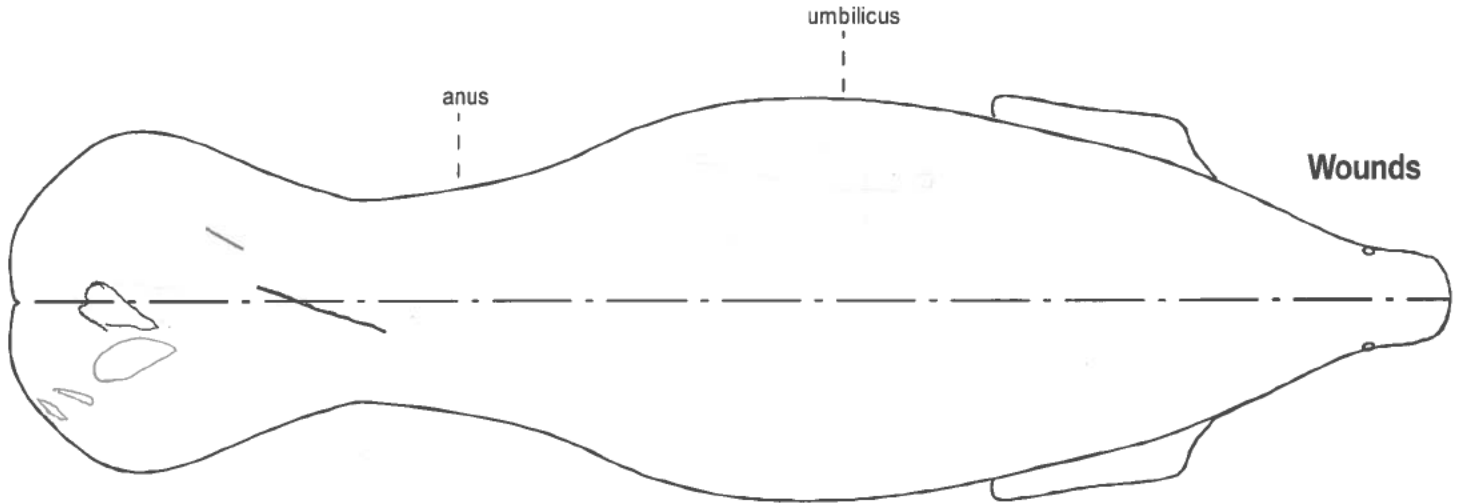
**NECROPSY CONDUCTED BY**

REPORT FILED BY Peek

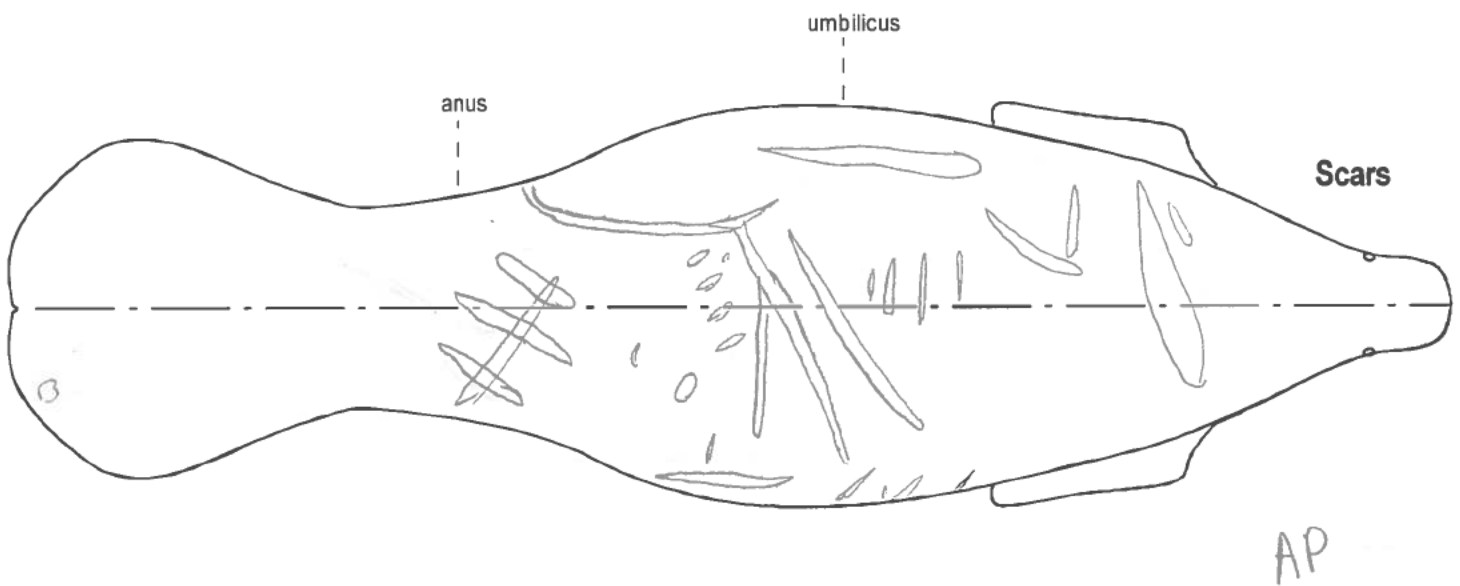
Date 01 March 2021

Field I.D. MSE21127

c:\Manuals\scar2dat\ 26 July 02



Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				



## **Bassett, Brandon**

---

**From:** Rood, Kari  
**Sent:** Monday, March 15, 2021 8:41 AM  
**To:** Howell, Amber; amy\_teague@usgs.gov; Barbeau, Brittany; Barlas, Margie; Bassett, Brandon; Boyd, Denise; Burns, Allison; Davidson, Emily; Deutsch, Chip; deWit, Martine; Edwards, Holly; Faucett, Blake; Fontaine, Christine; Garrett, Andy; Gordon, Nadia; Greer, Bill; Herring, Hada; Honaker, Allison; Jennifer H. Johnson; Johnson, Jennifer; Martz, Meg; Metcalf, Carley; Nader, Ana; Panike, Anna; Peek, Austin; Schubert, Molly; sheri@mote.org; Tamborini, Kyanna; Tennant, Sean; Wappes, Sara; Whitcomb, Tara  
**Subject:** PE281=MSE21127

PE281=MSE21127

Carcass location: Willoughby Creek, Stuart  
Female

First sighted 1/9/02 at Port Everglades Power Plant  
Last sighted 12/11/17 at Indian River FPL Canaveral Power Plant  
USGS should be able to provide a complete sighting history if needed.

Verifiers: MARTZ 3/14/21 & KAH 3/15/21

Sighting records are not to be used without permission from FWC, MML, and/or USGS, as appropriate.

**Kari A. Rood**  
Manatee Photo-identification  
Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
100 8th Avenue S.E.  
St. Petersburg, FL 33701

---

Direct line: (727) 502-4737  
Main line: (727) 896-8626  
[Kari.Rood@MyFWC.com](mailto:Kari.Rood@MyFWC.com)  
<http://MyFWC.com>  
<http://MyFWC.com/research/>

MMPL, FWRI, Florida Fish and Wildlife Conservation Commission      Field ID # MEC21082  
3700 54<sup>th</sup> Ave. South, St. Petersburg, FL, 33711; (727) 893-2904

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined      Length (cm): \_\_\_\_\_ Est 305      Confidence 3      Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021      By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_      By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_      By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL      County: Brevard      Waterway: Indian River

Latitude: N \_\_\_\_\_      Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related:      ☐ Watercraft Collision: -  
                                 ☐ Flood Gate/Canal Lock:    Structure ID/Name (if applicable)  
                                 ☐ Other  
Perinatal ( ≤150 cm):      ☐ Natural      ☐ Undetermined      ☐ Not Necropsied  
Natural:      ☐ Cold Stress      ☐ Other (includes Red Tide)  
Undetermined:      ☐ Too Decomposed      ☐ Other      ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal    ☐ Ventral    ☐ R. Lateral    ☐ L. Lateral    ☐ Scars    ☐ Fluke    ☐ Cranial    ☐ Internal    ☐ Site  
☒ Verification photograph      ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics    ☐ Earbone    ☐ Skull    ☐ Partial Skeleton    ☐ Complete Skeleton    ☐ Histology    ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach    ☐ Liver    ☐ Kidney    ☐ Blubber    ☐ Lower Jaw    ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach    ☐ Liver    ☐ Lung    ☐ Urine    ☐ Kidney (if no urine)    ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements    ☐ Wound measurements    ☐ Perinatal evaluation    ☐ Organ weights  
☐ Rescue Report/Map    ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_      Right side: \_\_\_\_\_

REMARKS:



## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21129  
**Date of Report:** 2021-Feb-28  
**Filed By:** FWC SE Field Station

**FWC Case #** 5127 **FWC Region:** SO-A

**Sex:** Unknown **Length:** 215 cm (estimated-3) **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Feb-28 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** **By:**

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** St. Lucie **Longitude:** W

**Waterway:** Taylor Creek

**Locality description:** Ft. Pierce, grounded 625 m NE of 1401 N 2nd Street.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Verification Photo(s)

**MATERIALS COLLECTED:**

**DISPOSITION OF MATERIAL:**

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan not performed.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	215 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21129

**RECOVERY DATE** N/A

**GENDER** Undetermined **TL** 215cm (est.) **WT** N/T kg

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

**HISTORY** 01 March 2021, at 0604hrs, FWC biologist-Amber Howell (ARH) received a text alert from FWC FWC SO Dispatch-Palm Beach regarding a manatee carcass in the Taylor Creek, Ft Pierce, St. Lucie County. FWC case number 5127 was assigned. The complainant, Rhonda (786-284-2053), sent an email via Tip@myfwc.com at 1446 on 28 February 2021 stating she called the FWC hotline the day before but never got a response from anybody and the dead manatee was still at Harbor Pointe Park. ARH left a voicemail at 0750 hrs, sent an email at 0815 hrs, and attempted to call again at 0950 hrs when Rhonda answered to advise she was no longer there and did not take any photos. Based on location given, ARH contacted FWC LE for assistance with verification. At 1108 hrs, FWC- Officer James Payne arrived to the carcass and sent photo verification and GPS coordinates. Due to level of decomposition and secluded location, the carcass was left to decompose naturally.

**EXTERNAL** The ventral and lateral aspects were missing due to scavenging. Epidermis was present on the fluke but sloughing. PIT tag scan was not performed.

### PHOTOGRAPHS

### COMMENTS

### SIGNIFICANT FINDINGS

•

### PROBABLE CAUSE OF DEATH

Verified; Not Necropsied

### NECROPSY CONDUCTED BY

REPORT FILED BY Howell

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other

Perinatal (  $\leq 150$  cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied

Natural: ☐ Cold Stress ☐ Other (includes Red Tide)

Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:

## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

**Field ID #:** MSE21132  
**Date of Report:** 2021-Mar-02  
**Filed By:** FWC SE Field Station

**FWC Case #** **FWC Region:** SO-A

**Sex:** Male **Length:** 196 cm **Weight:** Not Taken kg

**DATE REPORTED:** 2021-Mar-02 **By:** Citizen to FWC SO-A Dispatch

**DATE COLLECTED:** 2021-Mar-03 **By:** FWC Intern-C. Cameron

**DATE NECROPSIED:** **By:**

**LOCATION: State:** FL **Latitude:** N

**County:** Martin **Longitude:** W

**Waterway:** Willoughby Creek

**Locality description:** Stuart, floating 65 m NE of 2647 SE Golden Gate Avenue.

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:** Verified; Not Necropsied

**EXPLAIN:**

**PHOTOGRAPHS TAKEN:** Dorsal, Ventral, Lateral, Fluke, Cranial, Other (Wounds.). Verification Photo(s)

**MATERIALS COLLECTED:**

Genetics.

**DISPOSITION OF MATERIAL:** FWC MMPL.

**ADDITIONAL DATA:**

**REMARKS:**

PIT tag scan negative.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	196 cm	Fluke base:	cm	Girth at axillae:	cm
Snout to anus:	cm	Fluke width:	cm		
Snout to U/G:	cm	Girth at fluke base:	cm		
Snout to umbilicus:	cm	Girth at anus:	cm		
Flipper width:	cm	Girth at umbilicus:	cm	Nail count: R:	L:

	Ventral	Lateral		
Skin Thickness:	cm	cm		
Outer Blubber Thickness:	cm	cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	cm	cm	Epidermis Thickness:	cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:

Side	Circumference (cm)	Width (cm)
Right		
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Fetus 2: Sex: Report?:

Length:  
Weight:  
Samples Taken:

Brevetoxin Results:

Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL

Other Brevetoxin Results:

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** MSE21132

**RECOVERY DATE** 03 March 2021

**GENDER** Male **TL** 196 **cm** **WT** N/T **kg**

**SPECIES** *T. manatus latirostris*

**NECROPSY DATE** N/A

**CONDITION** Confirmed; Not Necropsied

---

**HISTORY** **02 March 2021**, at 1347hrs, FWC biologist-Amber Howell (ARH) received a text from a resident at one of the Photo ID sites that there was a manatee carcass in the Willoughby Creek, Stuart, Martin County. No FWC case number was assigned. The complainant, Ben (917-716-6347), provided a photo with the text stating the carcass was in the mangroves. At 1623 hrs, ARH received a text from another resident, Trish (610-405-7738), with a photo stating the carcass was in the mangroves off the docks. At 1746 hrs, ARH received a text from another resident, Carol (215-588-8746), with a photo stating the carcass was in the mangroves. Due to staff being on numerous rescues all day, a plan was created to respond the following morning to move the carcass. **03 March**, FWC intern- Chelsea Cameron arrived to the carcass at 0916 hrs, completed external workup, and kayaked it to a secluded location away from the resident's docks by 1012 hrs.

---

**EXTERNAL** Approximately 25% of the epidermis was present but sloughing. There was one penetrating propeller series consisting of five wounds on the dorsal left lateral aspect of the peduncle extending to the tip of the fluke. No watercraft-related scars were observed. PIT tag scan was negative. A genetics sample was collected.

---

**PHOTOGRAPHS** 2021-03-03\_FWC044\_6433 through 6449

---

**COMMENTS**

---

**SIGNIFICANT FINDINGS**

---

**PROBABLE CAUSE OF DEATH**

Verified; Not Necropsied

---

**NECROPSY CONDUCTED BY**

REPORT FILED BY Howell

FWC Case # 1820, 1826

FWC District Northeast

Sex: Undetermined Length (cm): \_\_\_\_\_ Est 305 Confidence 3 Weight (kg) \_\_\_\_\_

Date reported: 31 January 2021 By: Citizen to FWC NE Dispatch-Orlando

Date collected: \_\_\_\_\_ By: \_\_\_\_\_

Date necropsied: \_\_\_\_\_ By: \_\_\_\_\_

**LOCATION INFORMATION:** State FL County: Brevard Waterway: Indian River

Latitude: N \_\_\_\_\_ Longitude: W \_\_\_\_\_

Locality description: Merritt Island, approximately 3.95 km S of the intersection of Peacock's Pocket Road and Playalinda Beach Road

Carcass Orientation: Grounded

**CONDITION:** Confirmed; Not Necropsied

**PROBABLE CAUSE OF DEATH:**

Human related: ☐ Watercraft Collision: -  
☐ Flood Gate/Canal Lock: Structure ID/Name (if applicable)  
☐ Other  
Perinatal ( ≤150 cm): ☐ Natural ☐ Undetermined ☐ Not Necropsied  
Natural: ☐ Cold Stress ☐ Other (includes Red Tide)  
Undetermined: ☐ Too Decomposed ☐ Other ☒ Not Necropsied

Explain:

**PHOTOGRAPHS:**

☐ Dorsal ☐ Ventral ☐ R. Lateral ☐ L. Lateral ☐ Scars ☐ Fluke ☐ Cranial ☐ Internal ☐ Site  
☒ Verification photograph ☐ Other \_\_\_\_\_

**MTLS COLLECTED:**

☐ Genetics ☐ Earbone ☐ Skull ☐ Partial Skeleton ☐ Complete Skeleton ☐ Histology ☐ Other \_\_\_\_\_

Archive Tox: ☐ Stomach ☐ Liver ☐ Kidney ☐ Blubber ☐ Lower Jaw ☐ Other \_\_\_\_\_

ELISA Tox: ☐ Stomach ☐ Liver ☐ Lung ☐ Urine ☐ Kidney (if no urine) ☐ Other \_\_\_\_\_

Genetics Box # \_\_\_\_\_

LACTATING: -

PREGNANT: -

UTERINE SCAR: -

UTERINE HORNS: -

**ADDITIONAL DATA:**

☐ External measurements ☐ Wound measurements ☐ Perinatal evaluation ☐ Organ weights  
☐ Rescue Report/Map ☐ Other \_\_\_\_\_

**PIT TAG Scan:** Not Performed

Left side: \_\_\_\_\_ Right side: \_\_\_\_\_

REMARKS:



## Report of a Dead Manatee

Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Mammal Pathobiology Laboratory  
3700 54th Avenue South St. Petersburg, FL 33711 (727) 893-2904

Field ID #: SWFTm2114b

Date of Report: 2021-Feb-19

Filed By: FWC MMPL

FWC Case #

FWC Region: NE

Sex: Female

Length: 321 cm

Weight: 512.0 kg

DATE REPORTED: 2021-Feb-19

By: SWF-Bob Wagner to MMPL-AJG

DATE COLLECTED: 2021-Feb-19

By: MMPL-SMT

DATE NECROPSIED: 2021-Feb-20

By: MMPL-MdW,BDB,SMT

LOCATION: State: FL

Latitude: N

County: Brevard

Longitude: W

Waterway: Indian River

Locality description: Port St. John, in the FPL warm water discharge,

CONDITION: Fresh

PROBABLE CAUSE OF DEATH: Natural: Other

EXPLAIN: Emaciated; Depleted fat(s); Serous fat(s); Serous muscle; Wet lung(s); Relatively empty GI tract; Dark line kidney(s); Cobblestone-like epidermis; Asymmetric carcass; Lung bulla, hemorrhage; Frothy lungs; Fluid, mucus, froth airways; Fluid pleural cavities; Congested mesenteries, meninges, hemidiaphragms, GI wall, urinary bladder mucosa, neck tissue, fat; Petechiae, ecchymoses, mesentery, duodenum serosa, hemidiaphragm; Bloody kidneys; Dark red ascites; Vegetation in mouth; Specks abdominal fat.

PHOTOGRAPHS TAKEN: Dorsal, Ventral, Lateral, Scar, Fluke, Cranial, Internal, Other (Ventral lesion, Wrinkled ventrum).

MATERIALS COLLECTED:

Genetics, Histology: -80 samples: liver, lung, kidney, brain, muscle, fat, feces. Burgess samples: feces.

DISPOSITION OF MATERIAL: FWC MMPL.

ADDITIONAL DATA:

Rescue report.

REMARKS:

PIT tag scan negative. Uterine Scar. Died on 19 Feb 2021. Died in facility. Monofilament in colon. Plastic bag in colon. See rescue report REC2109., rescued on 18 Feb 2021 for emaciation and sideways positive bouyance. Straight length dorsum up was 314cm.

Page 1&2	
Necropsy Report	
Lat/Long	

MORPHOMETRICS:

Total length:	321 cm	Fluke base:	102 cm	Girth at axillae:	164 cm
Snout to anus:	205 cm	Fluke width:	83 cm		
Snout to U/G:	189 cm	Girth at fluke base:	114 cm		
Snout to umbilicus:	115 cm	Girth at anus:	153 cm		
Flipper width:	19 cm	Girth at umbilicus:	215 cm	Nail count: R: 4	L: 4

	Ventral	Lateral		
Skin Thickness:	1.6 cm	2.8 cm		
Outer Blubber Thickness:	1.3 cm	0.2 cm	Abdominal Fat Thickness:	cm
Inner Blubber Thickness:	0.6 cm	0.4 cm	Epidermis Thickness:	0.1 cm

Perinatal:	Ductus Arteriosis Diameter:	cm
	Left Pulmonary Artery Diameter:	cm
	Right Pulmonary Artery Diameter:	cm

Uterine Scarring Measurements:		
Side	Circumference (cm)	Width (cm)
Right	8.2	5.2
Right		
Left		
Left		

Male Reproductive:

Fetus 1: Sex: Report?:
Length:
Weight:
Samples Taken:

Fetus 2: Sex: Report?:
Length:
Weight:
Samples Taken:

Brevetoxin Results:		
Tissue	Concentration	Units
Liver		ng/g
Stomach Contents		ng/g
Kidney		ng/g
Lung		ng/g
Urine		ng/mL
Other Brevetoxin Results:		

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** SWFTm2114b  
**RECOVERY DATE**  
**GENDER TL cm WT kg**

**SPECIES** *T. manatus latirostris*  
**NECROPSY DATE**  
**CONDITION**

---

**HISTORY** 19 February 2021, at approximately 1100 hrs, FWC veterinarian-Martine de Wit received a call from SeaWorld Orlando staff informing her that REC2109/SWFTm2114b had died. At approximately 1300 hrs, FWC biologist-Sean Tennant (SMT) departed from the ECFL with a carcass trailer and arrived at SeaWorld Orlando at 1455 hrs. The carcass was loaded by 1520 hrs, and transported to the MMPL, arriving at approximately 1830 hrs due to heavy traffic.

---

**EXTERNAL**

---

**ABDOMINAL**

**STOMACH**

**DUODENUM**

**JEJUNUM & ILEUM**

**CECUM**

**COLON**

**PANCREAS**

**SPLEEN**

---

**LIVER**

**GALLBLADDER**

---

**REPRODUCTIVE**

**KIDNEYS**

**URINARY BLADDER**

---

**HEART**

---

**RESPIRATORY SYSTEM**

---

**HEAD & NECK REGIONS**

---

**SKELETON**

---

**OTHER**

---

**PHOTOGRAPHS**

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

---

**COMMENTS**

---

**SIGNIFICANT FINDINGS**

- 

---

**PROBABLE CAUSE OF DEATH**

---

**NECROPSY CONDUCTED BY**

Martine de Wit, DVM  
Andrew J. Garrett  
Brandon L. Bassett  
Anna L. Panike  
Brittany Barbeau  
Tara D. Whitcomb  
Sean M. Tennant  
Christine M. Fontaine

**REPORT FILED BY**

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

## MARINE MAMMAL NECROPSY REPORT FORM

**FIELD I.D.** SWFTm2114b  
**RECOVERY DATE** 19 February 2021  
**GENDER** Female **TL** 321 **cm** **WT** 517 **kg**

**SPECIES** *T. manatus latirostris*  
**NECROPSY DATE** 20 February 2021  
**CONDITION** Fresh

---

### HISTORY

---

**EXTERNAL** All of the epidermis was present. The carcass was dorsoventrally flattened due to emaciation. A moderate amount of viscous pink mucus and dead trematodes exuded from the nares. The carcass was distended on the right side. The epidermis had thin flaky cobblestone-like patches. There was a thin green and brown algal mat on the dorsal aspect. The ventrum was flat and had longitudinal folds. There was a minimum of x well-healed watercraft-related scar patterns on the dorsal aspect. The fluke margin had several well-healed mutilations between the 3 and 8 o'clock positions. PIT tag scan was negative. A genetics sample was collected.

---

**ABDOMINAL** There was a small amount of serous abdominal, mesenteric, and omental fat. The abdominal fat had black specks. The cranial abdominal fat was very gassy. The abdomen contained 400 mL of watery dark red fluid.

**STOMACH** The stomach was distended with gas and contained 2.5 L of watery green fluid and 0.5 L of wet, well-chewed, leafy, green to yellow vegetation. The mucosa had a few patches of mild congestion in the minor curvature and was otherwise pink. No parasites were observed.

**DUODENUM** The dorsal serosal surface of the duodenum which contacted the hemidiaphragm was severely congested. The duodenum contained 500 mL of watery green fluid and approximately 250 mL of wet, well-chewed, leafy, green to yellow vegetation. The mucosa was unremarkable. No parasites were observed.

**JEJUNUM & ILEUM** The mesentery was moderately congested and had diffuse petechiae. The proximal most one meter contained a large amount of light brown fluid. The remainder of the small contained a scant of light brown fluid. The mucosa was sloughing. No parasites were grossly observed.

**CECUM** The cecum was contracted and contained 50 mL of moist, well-digested, pasty, dark green digesta. The mucosa was sloughing. No parasites were observed.

**COLON** The mesentery was severely congested and had petechiae. Most of the colon was contracted and the proximal colon had a few gas-distended regions. The mid- and proximal colon were empty of contents. The distal colon contained a scant amount of moist, well-digested, pasty, moderately formed, sticky, olive green feces. There were one 10 x 6 cm piece of plastic bag and a 5 x 9 cm nest of 40 lb test diameter clear monofilament line in the most distal feces. The mucosa was unremarkable throughout. A few dead trematodes were observed in the proximal colon.

**PANCREAS** The pancreas was dark pink on serosal surfaces and pink on cut surfaces.

**SPLEEN** The spleen was dark purple to black on serosal surfaces, and red on cut surfaces.

---

**LIVER** The liver was firm. The margins were rounded. The serosal surfaces were dark grey to dark purple, and the cut surfaces were brown.

**GALLBLADDER** The gallbladder contained 200 mL of golden yellow bile. The mucosa was bile-stained.

---

**REPRODUCTIVE** There was a small amount of serous reproductive fat. The uterus was contracted. The

mucosa was red. The right horn had a scar (5.2 cm wide x 8.2 cm circumference). The ovaries had numerous corpora albicantia and a few small fluid-filled follicles and corpora hemorrhagica.

**KIDNEYS** There was a small amount of gassy, severely congested perirenal fat with petechiae. The kidneys were purple to dark pink on serosal surfaces. The cut surfaces were bloody. The cortices were light red and the medullae tan to dark red and gritty. The corticomedullary boundaries were distinct and some had a dark red band.

**URINARY BLADDER** The bladder was contracted and empty of contents. The mucosa was mildly congested.

**HEART** There was scant serous epicardial fat. The AV valves were opaque. Chambers were unremarkable.

**RESPIRATORY SYSTEM** Both hemidiaphragms were intact. The left pleural cavity contained 250 mL and the right pleural cavity contained 500 mL of watery red fluid. The right hemidiaphragm was taut. The caudal half of the abdominal aspect of the right hemidiaphragm had streaks of severe congestion, ecchymoses and petechiae. The cranial and caudal tips of the right lung were light pink on serosal and cut surfaces. The cut surfaces were wet and frothy. The mid three quarters of the right lung were swollen and dark red to purple on serosal surfaces. The dorsal aspect was coated with flat, adhered blood clots. The cut surface of this portion was a large cavity filled with air, bloody fluid and blood clots. The cavity was coated with firm tan to grey tissue and resolving blood clots. The surrounding lung parenchyma was firm, fibrotic, hemorrhagic, wet, and pink, tan and red. The left lung was light pink, tan and light purple on serosal surfaces, and wet, frothy, and light pink to red on cut surfaces. Both lung airways contained a large amount of tan froth, fluid, and mucus. The mucosa was pink. No parasites were observed. The parietal pleura was severely congested at the rib heads of the left pleural cavity

**HEAD & NECK REGIONS** The muscle was moderately congested and had regions of petechiae. The nares contained viscous red mucus. The trachea contained a moderate amount of white froth. The mucosa was light pink. There were a few poorly chewed pieces of vegetation in the mouth. The meninges were moderately congested.

**SKELETON NVL.**

**OTHER** The muscle and connective tissue was slightly serous, and some portions were slightly gassy. The cortex:medulla ratio of the adrenal glands was 2:1.

**PHOTOGRAPHS**

**COMMENTS**

**SIGNIFICANT FINDINGS**

- Emaciated
- Asymmetric carcass
- Depleted, serous fat
- Serous tissue
- Lung bulla, hemorrhage
- Wet, frothy lungs
- Fluid, mucus, froth airways
- Fluid pleural cavities
- Relatively empty GI tract
- Congested mesenteries, meninges, hemidiaphragm, GI wall, urinary bladder mucosa, neck tissue, fat

- Petechiae, ecchymoses mesentery, duodenum serosa, hemidiaphragm
- Bloody kidneys
- Dark line kidneys
- Dark red ascites
- Vegetation in mouth
- Gassy abdominal fat
- Cobblestone-like epidermis
- Specks abdominal fat
- Plastic bag, monofilament nest in feces
- Uterine scar

---

**PROBABLE CAUSE OF DEATH**

Natural; Other

---

**NECROPSY CONDUCTED BY**

Martine de Wit, DVM  
Brittany D. Barbeau  
Sean M. Tennant

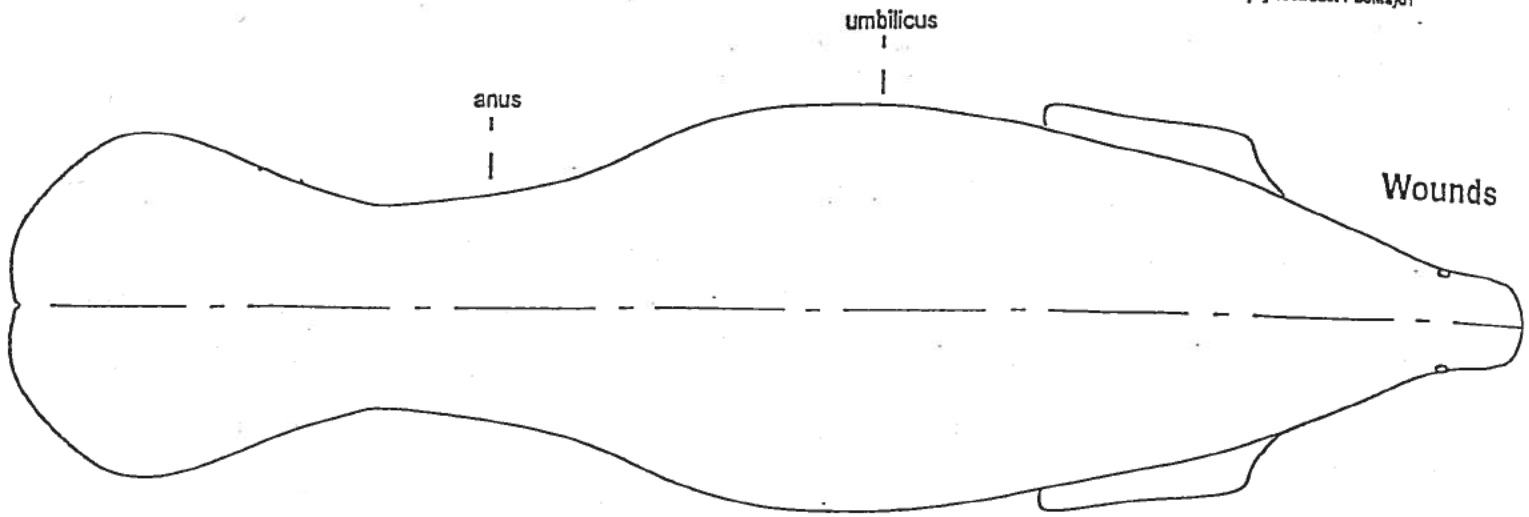
REPORT FILED BY de Wit

PRELIMINARY DATA.  
FINDINGS MAY BE ADDED OR  
DELETED AFTER REVIEW AND CAUSE OF DEATH MAY CHANGE

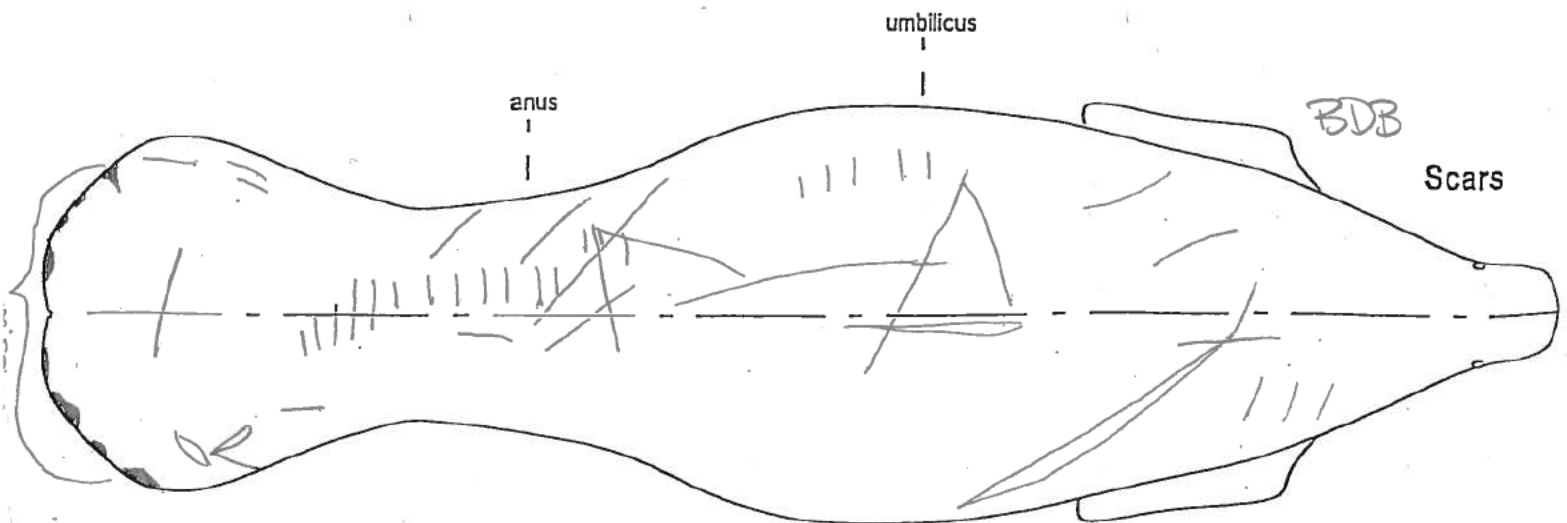
Date 20 Feb 2021

Field I.D. SWFTm2114b

c:\D-Old\Necropsy\scar2dat\ 30May01



Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Length																				
Width																				
Depth																				
Distance																				





FIELD I.D. \_\_\_\_\_

umbilicus

anus

umbilicus male U/G

female U/G

anus

umbilicus

anus

FWC Case # \_\_\_\_\_ FWC District: \_\_\_\_\_  
Sex: M ☒ F / Undetermined Length: 321 cm (estimated \_\_\_\_\_) Weight 1130 kg.  
Date reported: 19 Feb 2021 By: SWE - Bob Wagner  
Date collected: 19 Feb 2021 By: SMT  
Date necropsied: 20 Feb 2021 By: MDL, BDB, SMT

LOCATION: State: FL ( ) County: \_\_\_\_\_ Waterway: \_\_\_\_\_  
Latitude: \_\_\_\_\_ N Longitude: \_\_\_\_\_ W  
Locality description: \_\_\_\_\_

CONDITION: ☒ Fresh - Moderate - Bad - Dried carcass/loose bones - Confirmed; not recovered

PROBABLE CAUSE OF DEATH:

Human related: (1) Watercraft Collision: Impact - Propeller - Both - Sharp (Acute - Chronic)  
(2) Flood Gate/Canal Lock: Structure ID/Name \_\_\_\_\_  
(3) Other human  
(4) Perinatal ( ≤150 cm): Natural - Undetermined  
Natural: (5) Cold Stress - (6) Other natural (includes Red Tide)  
Undetermined: (7) Not Recovered - (8) Too Decomposed - (9) Other  
Explain: \_\_\_\_\_

PHOTOGRAPHS: ☒ Dorsal ☒ Ventral ☒ R. Lateral ☒ L. Lateral ☒ Scars ☒ Fluke ☒ Cranial ☒ Internal ☒ Site ☒ Other

MTLS COLLECTED: ☒ Genetics ☒ Earbone ☒ Partial Skeleton ☒ Complete Skeleton -

☒ Histology ☒ Other feces Lit Burgess

Archive Tox: Stomach - Liver - Kidney - Fat - Lower Jaw - Other \_\_\_\_\_

-80° ELISA Tox: Stomach ☒ Liver ☒ Lung ☒ Urine ☒ Kidney (if no urine) ☒ Other brain, muscle, fat  
Genetics Box # 101 feces

Female reproductive findings or N/A

LACTATING Yes ☒ No ☒ UNK PREGNANT Yes ☒ No ☒ UNK UTERINE SCAR ☒ Yes ☒ No ☒ UNK

UTERINE HORNS: Small diameter - ☒ Contracted ☒ Distended - UNK

ADDITIONAL DATA: ☒ External measurements - Wound measurements - Perinatal evaluation

Organ weights ☒ Rescue Report/Map - Other \_\_\_\_\_

PIT TAG Scan ☒ Negative; Positive (Left \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_) (Right \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_); N/T

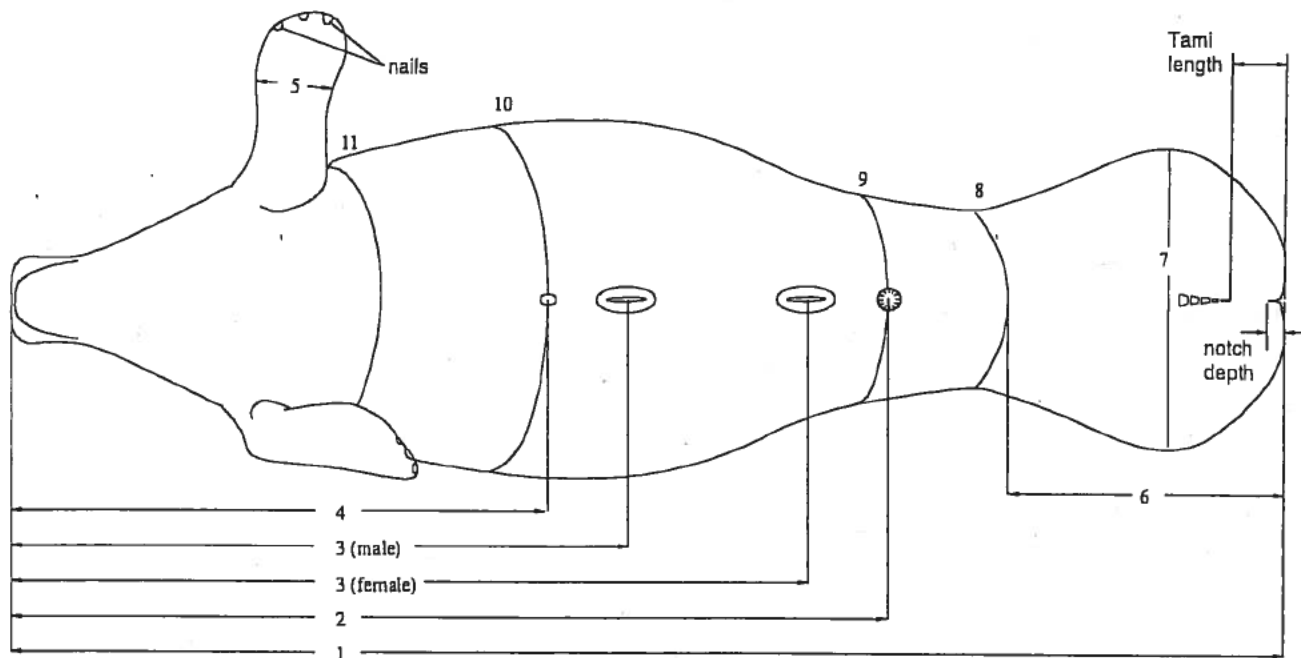
REMARKS: SL dorsum up 314 cm

Field ID # SWFTm2114b

**Morphometrics:** All measurements are straight-line, unless indicated by an asterisk (\*). Measure to center of openings marked with C below. Record girths\* and flipper lengths on fresh (non-bloated) carcasses only.

USE METRIC SYSTEM FOR ALL MEASUREMENTS. Measurement in parenthesis are optional.

- |  |                                       |                                      |
|--|---------------------------------------|--------------------------------------|
| 1. Total length <u>321</u> cm          | 6. Fluke base <u>102</u> cm           | 11. *Girth at axillae <u>164</u> cm  |
| 2. Snout to anus -C <u>205</u> cm      | 7. Fluke width <u>83</u> cm           |                                      |
| 3. Snout to U/G -C <u>189</u> cm       | 8. *Girth at fluke base <u>114</u> cm |                                      |
| 4. Snout to umbilicus -C <u>115</u> cm | 9. * Girth at anus <u>153</u> cm      |                                      |
| 5. Flipper width <u>19</u> cm          | 10. *Girth at umbilicus <u>215</u> cm | (Nail count: L <u>4</u> R <u>4</u> ) |



**Skin and Blubber (cm).**

	Ventral	Lateral	
Skin.....	<u>1.10</u> cm	<u>2.8</u> cm	(Epidermis <u>0.1</u> cm)
Outer fat.....	<u>1.3</u> cm	<u>0.2</u> cm	(Abdominal fat <u>NT</u> cm)
Inner fat.....	<u>0.60</u> cm	<u>0.4</u> cm	(serous)

