

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TBC056/ Date: 16 Dec 2010 Assessed by: de Wit
 Animal Name: CBC1001 Gender: (M) / F
 Total length: 285 cm Weight: 970 kg / (lb) Capture Method: open water boat capture
 Location: FPL, Brevard Event: FPL tagging / HA Air temp: ~22°C Water temp: 13.7°C ~
 Time initiated: 10:36 Time restraint: 10:59 Time blood sampling: 11:05 Time release: 12:16
 (work-up beach)

BODY CONDITION	Score: 1 2 <u>(3)</u> 4 5
	Poor Fair <u>(Good)</u> Very Good Excellent / Undetermined
	Peanut shaped head? Y / <u>(N)</u> Ribs visible? Y / <u>(N)</u>
	Ventrum: <u>(Rounded)</u> / Flat / Concave / Ventral Folds

Comments: (note areas, degree of weight loss)

BEHAVIOR	At Capture <u>(Active)</u> / Calm / Lethargic
	During Work-up Active / <u>(Calm)</u> / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>24.6</u> (°C) / F	Respiratory rate <u>2-4</u> per 5 min.
		Heart rate <u>55</u> per 1 min.

Body heat support: (Y) / N method: space blanket

HEAD	Describe any abnormalities or NGL (no gross lesions)	
	Nares	<u>NGL</u>
	Eyes	<u>NGL</u>
	Ears	<u>NGL</u>

Comments:

INTEGUMENT	Thickened epidermis? Y / <u>(N)</u>		
	Cobblestone epidermis? Y / <u>(N)</u>		
	Head: CS= <u>1</u> / <u>B/L</u>	Cold stress lesions? <u>(Y)</u> / N	
	Trunk: CS= <u>1</u> / <u>B/L</u>	- location	nose / lips / <u>other head</u> / <u>(flippers)</u> / <u>(fluke)</u> / <u>(body)</u>
	Tail: CS= <u>1</u> / <u>B/L</u>	- appearance	<u>(Bleaching)</u> / <u>(Gray mottling)</u> / Skin sloughing Abscess Lesion <u>(superficial)</u> / deep / ulcerating
		Watercraft scars? <u>(Y)</u> / N	
		Watercraft wounds? Y / <u>(N)</u>	number:
		- stage of healing	
		- appearance	superficial / penetrating / both
		Algal mat? Y / <u>(N)</u>	
		Other epibiota?	<u>few barnacles dorsum</u>

Flippers: (Describe abnormalities or else NGL)
cold stress lesions: bleached spots, pitted lesions, superficial lesions - rounded & irregular shaped

Fluke: (Describe abnormalities or else NGL)
Some grey mottling, and some pitted lesions

Comments:

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: yes CG4 CG3

I-stat results	Time:	<u>11:27</u>	<u>11:27</u>			<u>CG4</u>	<u>CG3</u>
	Temp:						
	R rate:					HCO ₃ :	<u>31.4</u> <u>30.5</u>
	pH:	<u>7.1</u>	<u>7.1</u>			TCO ₂ :	<u>34</u> <u>33</u>
	PO ₂ :	<u>162</u>	<u>145</u>			sO ₂ :	<u>99</u> <u>98</u>
	PCO ₂ :	<u>97.9</u>	<u>89.9</u>			Lact.:	<u>14.04</u>
	BEecf:	<u>2</u>	<u>1</u>			Gluc.:	<u>113</u>

Comments: (note water use to stimulate resp. rate)
water / palpation induced resp. 11:27 CG3 { Na 144 Ca 1.2 H4 52 H5 17.7 }
K: 3.7

REPRODUCTION	Lactating?	<u>Y / N</u>	<u>NIA</u>
	Vulva swollen?	<u>Y / N</u>	

Comments:

EXCRETA	Feces? <u>Y</u> (<u>N</u>) description:	
	Urine? <u>Y</u> (<u>N</u>) description:	

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		<u>coarse genetics</u>
Feces			Parasites		
Milk			Microbiology		<u>nasal swab</u>
Tear film			Biopsy		<u>skin lesions</u>

MEDICATIONS ADMINISTERED

COMMENTS
 Blood results unremarkable*. IStat: pH ↓
 Signs of exposure to cold; otherwise in good condition.
 * except SAA ↑

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TBC057/ Date: 16 Dec 2010 Assessed by: deWit
 Animal Name: CBC1002 Gender: (M) / F open water
 Total length: 298 cm Weight: 970 kg (lb) Capture Method: boat capture
 Location: FPL Brevard Event: tagging / HA Air temp: ~22°C Water temp: ~13.7°C
 Time initiated: 11:38 Time restraint: 12:11 Time blood sampling: 12:20 Time release: 13:08
 (e work-up beach)

BODY CONDITION	Score: 1 2 3 4 5
	Poor Fair <u>Good</u> Very Good Excellent / Undetermined
	Peanut shaped head? Y / <u>(N)</u> Ribs visible? Y / <u>(N)</u>
	Ventrum: ? not recorded Rounded / Flat / Concave / Ventral Folds

Comments: (note areas, degree of weight loss)

BEHAVIOR	At Capture	Active / <u>(Calm)</u> / Lethargic
	During Work-up	Active / <u>(Calm)</u> / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>27.3</u> (°C) / F	Respiratory rate <u>4-5</u> per 5 min.
		Heart rate <u>50</u> per 1 min.

Body heat support: (Y) / N method: space blanket

HEAD	Describe any abnormalities or NGL (no gross lesions)	
Nares	NGL	
Eyes	NGL	
Ears	NGL	

Comments:

INTEGUMENT	Thickened epidermis? Y <u>(N)</u>	
	Cobblestone epidermis? Y <u>(N)</u>	
Head: CS= <u>1</u> / <u>G</u>	Cold stress lesions? <u>(Y)</u> / N	
Trunk: CS= <u>1</u> / <u>G</u>	- location	nose / lips / <u>other head</u> / <u>flippers</u> / <u>fluke</u> / <u>body</u>
Tail: CS= <u>1</u> / <u>G</u>	- appearance	Bleaching / <u>Gray mottling</u> / Skin sloughing Abscess Lesion: <u>superficial</u> / deep / ulcerating
	Watercraft scars? <u>(Y)</u> / N	large indented behind <u>(L)</u> flipper
	Watercraft wounds? Y <u>(N)</u>	number:
	- stage of healing	
	- appearance	superficial / penetrating / both
	Algal mat? <u>(Y)</u> / N	thin brown
	Other epibiota?	no

Flippers: (Describe abnormalities or else NGL)

mild spots

Fluke: (Describe abnormalities or else NGL)

mild spots

Comments: CS lesions not major, grey mottling mostly surrounding hair follicles top layer of epi loose, sloughing off when scrubbed.

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: NO

O₂ supplementation: YES CGY CGY CGY

I-stat results	Time:	12:37	12:37			12:37	12:37
	Temp:						
	R rate:					HCO ₃ :	18.6 47
	pH:	7.4	7.4			TCO ₂ :	250 49
	PO ₂ :	132	127			sO ₂ :	99 99
	PCO ₂ :	71.3	68.1			Lact.:	4.8
	BEecf:	24	22			Gluc.:	90

Comments: (note water use to stimulate resp. rate)
 Na: 138 Hct 46 } CGY @ 12:37
 K: 4.2 Hb 10.6 }
 Ca: 1.05

REPRODUCTION	Lactating?	<u>Y</u> / N
	Vulva swollen?	Y / <u>N</u>

Comments:

EXCRETA	Feces? <u>(Y)</u> / N description:	
	Urine? Y / <u>(N)</u> description:	

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		<u>cockle genetics</u>
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS

Displayed some tremors @ flippers

Blood: urea, Hct some dehydration?
 mildly increased ck - only significant if persistently elevated
 SAA ↑

otherwise unremarkable

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TBC 058 Date: 16 Dec 2010 Assessed by: de Wit
 Animal Name: CBC1003 Gender: M / (F) open-water
 Total length: 246 cm Weight: 630 kg / (lb) Capture Method: boat set
 Location: FPI-Brevard Event: tagging/HA Air temp: ~22°C Water temp: ~13.7°C
 Time initiated: 12:11 Time restraint: 12:24 Time blood sampling: ? Time release: 13:19
4 @ work-up site

BODY CONDITION	Score: 1 2 3 4 5
	Poor Fair <u>Good</u> Very Good Excellent / Undetermined
	Peanut shaped head? <u>Y / (N)</u> Ribs visible? <u>Y / (N)</u>
	Ventrum: <u>Rounded</u> / Flat / Concave / Ventral Folds

Comments: (note areas, degree of weight loss)

BEHAVIOR	At Capture	Active / <u>Calm</u> / Lethargic
	During Work-up	Active / <u>Calm</u> / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>21.6</u> (°C) / F	Respiratory rate <u>34</u> per 5 min.
		Heart rate <u>52</u> per 1 min.

Body heat support: (Y) N method: space blanket

HEAD		Describe any abnormalities or NGL (no gross lesions)
	Nares	NGL <u>see CS lesions head below</u>
	Eyes	NGL
	Ears	NGL

Comments:

INTEGUMENT	Thickened epidermis? <u>Y (N)</u>		
	Cobblestone epidermis? <u>(Y) N</u>	<u>slightly on ventrum</u>	
	Head: CS= <u>1 / G/L</u>	Cold stress lesions? <u>(Y) N</u>	
	Trunk: CS= <u>1 / G/L</u>	- location	<u>nose / lips / other head / flippers / fluke / body</u>
	Tail: CS= <u>1 / G</u>	- appearance	<u>Bleaching / Gray mottling / Skin sloughing</u>
			<u>Abscess Lesion: superficial / deep / ulcerating</u>
		Watercraft scars? <u>(Y) N</u>	
		Watercraft wounds? <u>Y (N)</u>	number:
		- stage of healing	
		- appearance	<u>superficial / penetrating / both</u>
		Algal mat? <u>(Y) N</u>	
		Other epibiota?	<u>barnacles ventral fluke</u>

Flippers: (Describe abnormalities or else NGL)
superficial CS lesions, various shapes

Fluke: (Describe abnormalities or else NGL)
bleached spots

Comments:

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: yes CGY CGY CGY CGY

I-stat results	Time:	12:58	12:59			12:59	12:59
	Temp:						
	R rate:					HCO ₃ :	35.6 33.7
	pH:	7.25	7.26			TCO ₂ :	39 36
	PO ₂ :	89	85			sO ₂ :	96 95
	PCO ₂ :	78.4	72.7			Lact.:	11.57
	BEecf:	8	6			Gluc.:	107

Comments: (note water use to stimulate resp. rate) Na = 143 Hct 41
 K = 3.7 HS 13.7
 Ca = 1.12

REPRODUCTION	Lactating?	Y / <u>N</u>
	Vulva swollen?	Y / <u>N</u>

Comments:

EXCRETA	Feces? Y / <u>N</u> description:
	Urine? Y / <u>N</u> description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		cookie genetics
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS
 Signs of cold exposure, otherwise good condition.
 Blood: fibrinogen ↑, inflammation? but no leukocytosis
 SAA ↑

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: 428 CGY CG3 CGY CG3

I-stat results	Time:	2:37				2:37		
	Temp:							
	R rate:					HCO ₃ :	37.1	36
	pH:	7.3	7.3			TCO ₂ :	39	38
	PO ₂ :	87	87			sO ₂ :	96	96
	PCO ₂ :	71.5	66.5			Lact.:	10.26	
	BEecf:	10	10			Gluc.:		114

Comments: (note water use to stimulate resp. rate)
 water induced respirations
 Na = 141 Hct 44
 K = 4 Hs 15
 TCO₂ = 110

REPRODUCTION	Lactating?	<u>Y</u> / N
	Vulva swollen?	<u>Y</u> / N

Comments:

EXCRETA	Feces? <u>(Y)</u> / N	description:
	Urine? Y / <u>(N)</u>	description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		coohw genetics
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS
 Rapid breathing @ capture
 overall skin looks ok, cs lesions spotting localized
 blood results unremarkable, except SAA ↑

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TBC060 Date: 16 Dec 2010 Assessed by: de Wit
 Animal Name: CBC1005 Gender: (M) / F open water
 Total length: 267 cm Weight: 800 kg (1b) Capture Method: boat set
 Location: FPL Brevard Event: tagging IHA Air temp: ~22°C Water temp: 13.7°C
 Time initiated: 14:14 Time restraint: 14:53 Time blood sampling: 15:02 Time release: 15:43
@ work-up beach

BODY CONDITION	Score: 1 2 <u>3</u> 4 5
	Poor Fair <u>Good</u> Very Good Excellent / Undetermined
	Peanut shaped head? <u>Y / (N)</u> Ribs visible? <u>Y / (N)</u>
	Ventrum: Rounded <u>(Flat)</u> / Concave / Ventral Folds

Comments: (note areas, degree of weight loss) w/ some folds

BEHAVIOR	At Capture	<u>Active</u> / Calm / Lethargic
	During Work-up	Active <u>(Calm)</u> / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>30.9</u> <u>(C)</u> F	Respiratory rate <u>2-5</u> per 5 min.
		Heart rate <u>54</u> per 1 min.

Body heat support: (Y) / N method: space blanket

HEAD		Describe any abnormalities or NGL (no gross lesions)
	Nares	<u>some bleaching & superficial cs lesions</u>
	Eyes	<u>NGL</u>
	Ears	<u>NGL</u>

Comments:

INTEGUMENT	Thickened epidermis? <u>Y / (N)</u>		
	Cobblestone epidermis? <u>Y / (N)</u>		
	Head: CS= <u>1 / b, L</u>	Cold stress lesions? <u>(Y) / N</u>	
	Trunk: CS= <u>1 / b, L</u>	- location	<u>nose / lips / other head / flippers / fluke / body</u>
	Tail: CS= <u>1 / b, L</u>	- appearance	<u>Bleaching / Gray mottling / Skin sloughing</u>
			<u>Abscess Lesion superficial / deep / ulcerating</u>
		Watercraft scars? <u>(Y) / N</u>	
		Watercraft wounds? <u>Y / (N)</u>	number:
		- stage of healing	
		- appearance	<u>superficial / penetrating / both</u>
	Algal mat? <u>(Y) / N</u>	<u>thin brown</u>	
	Other epibiota?	<u>no</u>	

Flippers: (Describe abnormalities or else NGL) bleaching & superficial lesions

Fluke: (Describe abnormalities or else NGL) swelling w/ pit in midline dorsal fluke (firm), bleaching around margin & few superficial lesions

Comments:

Manatee ID TBC060

Manatee Name: CB31005

Date: 16 Dec 2010

RESPIRATORY	Depth of respirations	superficial / <u>deep</u> bi-lateral / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: yes CGY CGF

I-stat results	Time:	3:17	3:17			3:17	3:17		
	Temp:	32.1							
	R rate:					HCO ₃ :	42.8	42.6	
	pH:	7.3	7.4			TCO ₂ :	45	45	
	PO ₂ :	34	33			sO ₂ :	82	82	
	PCO ₂ :	64.2	61.5			Lact.:	5.19		
	BEecf:	16	16			Gluc.:		1.27	

Comments: (note water use to stimulate resp. rate)
 Water-induced respirations

Na: 139 H+ 42
 K: 4.3 H+ 16.3 } CGF 3:17
 TC: 1.15

REPRODUCTION	Lactating?	Y / N
	Vulva swollen?	Y / N

Comments:

EXCRETA	Feces? Y / <u>(N)</u> description:	
	Urine? <u>(Y)</u> / N description:	

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		codex genetics
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS

CS lesions very mild, but ventrum was flat & slightly folded.
 blood results unremarkable, except SAA ↑

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TBC061 Date: 16 Dec 2010 Assessed by: deWit
 Animal Name: CCB1006 Gender: M / (F) open water
 Total length: 268 cm Weight: 815 kg / (lb) Capture Method: boat set
 Location: FPL Brevard Event: tagging 1HA Air temp: ~22°C Water temp: ~13.7°C
 Time initiated: 15:01 Time restraint: 15:20 Time blood sampling: 15:26 Time release: 16:02
@ work-up beach

BODY CONDITION	Score: 1 2 <u>(3)</u> 4 5	
	Poor Fair <u>Good</u> Very Good Excellent / Undetermined	
	Peanut shaped head? Y / <u>(N)</u>	Ribs visible? Y / <u>(N)</u>
	Ventrum:	Rounded / <u>(Flat)</u> / Concave / Ventral Folds
Comments:	(note areas, degree of weight loss) <u>w/folds</u>	

BEHAVIOR	At Capture	<u>(Active)</u> / Calm / Lethargic
	During Work-up	Active / <u>(Calm)</u> / Lethargic
Comments:		

TPR SUMMARY	Oral temperature <u>28.6</u> <u>(°C)</u> F	Respiratory rate <u>3-5</u> per 5 min.
		Heart rate <u>60</u> per 1 min.
Body heat support: <u>(Y)</u> / N method: <u>space blanket</u>		

HEAD		Describe any abnormalities or NGL (no gross lesions)
	Nares	<u>NGL</u>
	Eyes	<u>NGL</u>
	Ears	<u>NGL</u>

Comments:

INTEGUMENT	Thickened epidermis? Y / <u>(N)</u>	
	Cobblestone epidermis? Y / <u>(N)</u>	
Head: CS= <u>0</u> / <u> </u>	Cold stress lesions? <u>(Y)</u> / N	
Trunk: CS= <u>1</u> / <u>bL</u>	- location	nose / lips / other head / <u>(flippers)</u> / <u>(fluke)</u> / <u>(body)</u>
Tail: CS= <u>1</u> / <u>b</u>	- appearance	<u>(Bleaching)</u> / Gray mottling / Skin sloughing Abscess Lesion: <u>(superficial)</u> / deep / ulcerating
	Watercraft scars? <u>(Y)</u> / N	
	Watercraft wounds? Y / <u>(N)</u>	number:
	- stage of healing	
	- appearance	superficial / penetrating / both
	Algal mat? <u>(Y)</u> / N	<u>thin brown</u>
	Other epibiota?	<u>few barnacles</u>

Flippers: (Describe abnormalities or else NGL)
cleft both sides Some bleaching of epidermis

Fluke: (Describe abnormalities or else NGL)
v. mild bleached spotting

Comments:

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: yes C64 C68 C64 C68

I-stat results	Time:	3:50	3:50			3:00	3:00		
	Temp:	38.0							
	R rate:					HCO ₃ :	42.5	41.4	
	pH:	7.3	7.3			TCO ₂ :	45	44	
	PO ₂ :	48	47			sO ₂ :	92	92	
	PCO ₂ :	66.4	62.8			Lact.:	9.27		
	BEecf:	16	15			Gluc.:		98	

Comments: (note water use to stimulate resp. rate) occasional water-induced
 Na = 145 Hct 44
 K = 4.2 Hb 15.0
 PCV = 1.24

REPRODUCTION	Lactating? <u>Y</u> / N
	Vulva swollen? Y / <u>N</u>

Comments:

EXCRETA	Feces? Y / <u>N</u> description:
	Urine? <u>Y</u> / N description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		cockle genetics
Feces			Parasites		
Milk ✓			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS
 Lactating - but was by herself @ capture.
 cleft flippers
 minor cold lesions, but some folds on ventrum.
 blood unremarkable, except for elevated CK. Muscle damage due to capture?
 2 SAA ↑

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TP3C062 Date: 16 Dec 2010 Assessed by: dewit
 Animal Name: CCB1007 Gender: M / F open water
 Total length: 277 cm Weight: 870 kg lb Capture Method: boat set
 Location: FPL Brevard Event: FPL tagging / HA Air temp: ~22°C Water temp: ~13.7°C
 Time initiated: 15:49 Time restraint: 16:09 Time blood sampling: 16:15 Time release: 16:56
 @ work-up site

BODY CONDITION	Score: 1 2 <input checked="" type="radio"/> 3 4 5
	Poor Fair Good Very Good Excellent / Undetermined
	Peanut shaped head? Y / <input checked="" type="radio"/> N Ribs visible? Y / <input checked="" type="radio"/> N
	Ventrum: Rounded / <input checked="" type="radio"/> Flat / Concave / Ventral Folds

Comments: (note areas, degree of weight loss)

BEHAVIOR	At Capture <input checked="" type="radio"/> Active / Calm / Lethargic
	During Work-up Active / <input checked="" type="radio"/> Calm / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>23.8 (°C)</u> / F	Respiratory rate <u>5-9</u> per 5 min.
		Heart rate <u>62</u> per 1 min.

Body heat support: Y / N method: space blanket

HEAD	Describe any abnormalities or NGL (no gross lesions)	
	Nares	<u>NGL</u>
	Eyes	<u>NGL</u>
	Ears	<u>NGL</u>

Comments:

INTEGUMENT	Thickened epidermis? Y / <input checked="" type="radio"/> N		
	Cobblestone epidermis? Y / <input checked="" type="radio"/> N		
	Head: CS= <u>1 / b</u>	Cold stress lesions? <input checked="" type="radio"/> Y / N	
	Trunk: CS= <u>1 / b, L</u>	- location	nose / lips / other head <input checked="" type="radio"/> flippers <input checked="" type="radio"/> fluke <input checked="" type="radio"/> body
	Tail: CS= <u>1 / b, L</u>	- appearance	<input checked="" type="radio"/> Bleaching / Gray mottling / Skin sloughing
			Abscess Lesion: <input checked="" type="radio"/> superficial / deep / ulcerating
		Watercraft scars? <input checked="" type="radio"/> Y / N	
		Watercraft wounds? Y / <input checked="" type="radio"/> N	number:
		- stage of healing	
		- appearance	superficial / penetrating / both
		Algal mat? Y / <input checked="" type="radio"/> N	
		Other epibiota?	<u>no</u>

Flippers: (Describe abnormalities or else NGL)
bleached spots

Fluke: (Describe abnormalities or else NGL)
mildly bleached spots

Comments: bleaching on face & in ventral body creates bleached spots on body. v. mild superficial lesions

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: yes

I-stat results	Time:	CGY CG7 CGY	CGY CG7 CGY
		4:37 4:37 4:55	4:37 4:37 4:55
	Temp:	30	
	R rate:		HCO ₃ : 20.9 21.7 23.5
	pH:	7.13 7.14 7.17	TCO ₂ : 23 24 26
	PO ₂ :	122 100 77	sO ₂ : 98 97 96
	PCO ₂ :	56.4 56.8 58	Lact.: 720 . 720.00
	BE _{ecf} :	-10 -9 -6	Gluc.: 117

Comments: (note water use to stimulate resp. rate)
 water-induced resp. Wk = 150 } CG7 @ 4:37
 K = 3.8 }
 Ca = 1.16 }
 Hb = 51 }
 Hs = 123 }

REPRODUCTION	Lactating? Y / <u>(N)</u>
	Vulva swollen? Y / <u>(N)</u>

Comments:

EXCRETA	Feces? Y / <u>(N)</u> description:
	Urine? Y / <u>(N)</u> description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		codic genetics
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS
 cold exposure lesions = mostly bleaching
 blood. I stat: lactate ↑, still > 20 before release.
 pH ↓, HCO₃ ↓, BE - : metabolic acidosis.
 - slight recovery @ 2nd blood sample.
 Istat findings consistent with ck ↑ in chemistry
 SAA ↑

[Handwritten mark]

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TPC063 Date: 17 Dec 10 Assessed by: de Wit
 Animal Name: CCB1008 Gender: M / F open water
 Total length: 277 cm Weight: 875 kg / lb Capture Method: boat set
 Location: FPL Brevard Event: FPL tagging / HA Air temp: 24.5°C Water temp: 14°C @ release
 Time initiated: 9:40 Time restraint: 9:44 Time blood sampling: 10:23 Time release: 11:04
10:16 @ work-up beach ~10°C @ capture site

BODY CONDITION	Score: 1 2 <input checked="" type="radio"/> 3 4 5
	Poor Fair <u>Good</u> Very Good Excellent / Undetermined
	Peanut shaped head? Y / <input checked="" type="radio"/> N Ribs visible? Y / <input checked="" type="radio"/> N
	Ventrum: Rounded / <input checked="" type="radio"/> Flat / Concave / Ventral Folds

Comments: (note areas, degree of weight loss) w/ some folds

BEHAVIOR	At Capture	<input checked="" type="radio"/> Active / Calm / Lethargic
	During Work-up	Active / <input checked="" type="radio"/> Calm / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>28.2</u> <input checked="" type="radio"/> C / F	Respiratory rate <u>3-7</u> per 5 min.
		Heart rate <u>60</u> per 1 min.

Body heat support: Y / N method: space blanket

HEAD	Describe any abnormalities or NGL (no gross lesions)	
	Nares	<u>NGL</u>
	Eyes	<u>NGL</u>
	Ears	<u>NGL</u>

Comments:

INTEGUMENT	Thickened epidermis? Y / <input checked="" type="radio"/> N	
	Cobblestone epidermis? Y / <input checked="" type="radio"/> N	
Head: CS= <u>0</u> / <u> </u>	Cold stress lesions? <input checked="" type="radio"/> Y / N	
Trunk: CS= <u>1</u> / <u>g.L</u>	- location	nose / lips / other head / flippers / <input checked="" type="radio"/> fluke / <input checked="" type="radio"/> body
Tail: CS= <u>1</u> / <u>g</u>	- appearance	Bleaching / <input checked="" type="radio"/> Gray mottling / Skin sloughing Abscess Lesion: <input checked="" type="radio"/> superficial / deep / ulcerating
	Watercraft scars? <input checked="" type="radio"/> Y / N	
	Watercraft wounds? Y / <input checked="" type="radio"/> N	number:
	- stage of healing	
	- appearance	superficial / penetrating / both
	Algal mat? Y / <input checked="" type="radio"/> N	
	Other epibiota?	<u>no</u>

Flippers: (Describe abnormalities or else NGL)
NGL

Fluke: (Describe abnormalities or else NGL)
NGL

Comments: v. few pitted lesions on lateral aspects (maybe 3 on each side)

Manatee ID TBC063

Manatee Name:

Date: 17 Dec 2010

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double long breaths
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: *nc*

O₂ supplementation: *yes*

I-stat results	Time:	<i>10:47</i>					
	Temp:	<i>30°C</i>					
	R rate:			HCO ₃ :	<i>37</i>		
	pH:	<i>7.412</i>		TCO ₂ :	<i>39</i>		
	PO ₂ :	<i>85</i>		sO ₂ :	<i>98</i>		
	PCO ₂ :	<i>53.8</i>		Lact.:			
	BEecf:	<i>11</i>		Gluc.:	<i>128</i>		

Comments: (note water use to stimulate resp. rate) *water-induced resp → not always responsive, so also lip stimulation*
Nx = 177 Hw 42
K = 3.9 Hb 143
TC = 1.21

REPRODUCTION	Lactating?	<input checked="" type="radio"/> Y / N
	Vulva swollen?	Y / <input checked="" type="radio"/> N

Comments:

EXCRETA	Feces?	<input checked="" type="radio"/> Y / N	description:
	Urine?	Y / <input checked="" type="radio"/> N	description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin	<i>cookie genetics</i>	
Feces			Parasites		
Milk	<i>✓ 12ml</i>		Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS

Minor cold stress lesions, good looking manatee except for flat ventrum.

*Blood: CKT, probably capture-related.
 SAA ↑*

West Indian Manatee (*Trichechus manatus*) CLINICAL ASSESSMENT FORM

Manatee ID: TBC064, CCB1009 Date: 17 Dec 10 Assessed by: de Wit
 Animal Name: _____ Gender: M / F open water
 Total length: 245 cm Weight: 740 kg / lb Capture Method: boat set
 Location: FPL Brevard Event: FPL tagging HA Air temp: 24.5 °C Water temp: 14 °C @ ^{release} site
 Time initiated: 10:43 Time restraint: 10:46 Time blood sampling: 11:09 Time release: 12:00
11:07 @ beach ~10°C @ capture site

BODY CONDITION	Score: 1 2 <input checked="" type="radio"/> 3 4 5
	Poor Fair <input checked="" type="radio"/> Good Very Good Excellent / Undetermined
	Peanut shaped head? Y / <input checked="" type="radio"/> N Ribs visible? Y / <input checked="" type="radio"/> N
	Ventrum: Rounded / <input checked="" type="radio"/> Flat / Concave / Ventral Folds

Comments: (note areas, degree of weight loss)

BEHAVIOR	At Capture	<input checked="" type="radio"/> Active / Calm / Lethargic
	During Work-up	Active / <input checked="" type="radio"/> Calm / Lethargic

Comments:

TPR SUMMARY	Oral temperature <u>29.6</u> (°C) / F	Respiratory rate <u>3-5</u> per 5 min.
		Heart rate <u>81-93</u> per 1 min.

Body heat support: Y / N method: space blanket

HEAD		Describe any abnormalities or NGL (no gross lesions)
	Nares	<u>slightly bleached</u>
	Eyes	<u>NGL</u>
	Ears	<u>NGL</u>

Comments:

INTEGUMENT	Thickened epidermis? <input checked="" type="radio"/> Y / N	<u>fluke margin</u>
	Cobblestone epidermis? Y / <input checked="" type="radio"/> N	
	Head: CS= <u>1 / b</u>	
	Cold stress lesions? <input checked="" type="radio"/> Y / N	<u>bleaching</u>
	Trunk: CS= <u>1 / L</u>	<u>nose / lips / other head / flippers / fluke / body</u>
	Tail: CS= <u>1 / L</u>	<u>Bleaching / Gray mottling / Skin sloughing</u>
		Abscess Lesion: <u>superficial / deep / ulcerating</u>
	Watercraft scars? <input checked="" type="radio"/> Y / N	
	Watercraft wounds? Y / <input checked="" type="radio"/> N	number:
		- stage of healing
	- appearance	<u>superficial / penetrating / both</u>
	Algal mat? <input checked="" type="radio"/> Y / N	<u>thin brown</u>
	Other epibiota?	<u>no</u>

Flippers: (Describe abnormalities or else NGL)
NGL

Fluke: (Describe abnormalities or else NGL)
hard pustule on caudal aspect

Comments: healing linear wounds on left side; caudal to flipper and on caudal-ventral aspect

Manatee ID T13C064

Manatee Name:

Date: 17 Dec 2010

RESPIRATORY	Depth of respirations	superficial / <u>deep</u> bi-lateral / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: no

O₂ supplementation: yes CGY CGY

I-stat results	Time:	1145	1145				
	Temp:	30	30				
	R rate:				HCO ₃ :	40.2	40.2
	pH:	7.39	7.4		TCO ₂ :	43	43
	PO ₂ :	25	23		sO ₂ :	67	63
	PCO ₂ :	50.7	59		Lact.:	5.1	
	BEecf:	14	14		Gluc.:		84

Comments: (note water use to stimulate resp. rate)
 water splash - induced resp
 Na = 147 Hct = 49 } CGY 11:45
 K = 4.0 Hb = 16.7
 Ca = 1.19

REPRODUCTION	Lactating?	Y / (N)
	Vulva swollen?	Y / (N)

Comments:

EXCRETA	Feces?	(Y) / N	description:
	Urine?	Y / (N)	description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		cookie genetics
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS

No significant cold stress lesions, linear wounds not cs related and are healing.
 Manatee looked ok, except for flat ventrum.
 Blood results unremarkable, except SAA ↑

Manatee ID TBC065 ^{CGE1010}

Manatee Name:

Date: 17 Dec '10

RESPIRATORY	Depth of respirations	superficial / <u>deep bi-lateral</u> / deep uni-lateral
	Inspiration pattern	<u>single</u> / double
	Symmetry of body	<u>symmetric</u> / asymmetric

Auscultation: *no*

O₂ supplementation: *yes CGY CGT*

I-stat results	Time:	<i>1:12 1:12</i>					
	Temp:						
	R rate:				HCO ₃ :	<i>42.5</i>	<i>39.5</i>
	pH:	<i>7.39</i>	<i>7.41</i>		TCO ₂ :	<i>43</i>	<i>42</i>
	PO ₂ :	<i>72</i>	<i>69</i>		sO ₂ :	<i>97</i>	<i>77</i>
	PCO ₂ :	<i>61.2</i>	<i>57.5</i>		Lact.:	<i>7.07</i>	
	BEecf:	<i>14</i>	<i>13</i>		Gluc.:		<i>93</i>

Comments: (note water use to stimulate resp. rate) *water-induced respirations*
Na = 154 Hct 47
K = 3.9 Hb 11.0 } CGY E 117
TCa = 1.28

REPRODUCTION	Lactating?	<i>Y / N</i>
	Vulva swollen?	<i>Y / N</i>

Comments:

EXCRETA	Feces? <input checked="" type="radio"/> Y / N	description:
	Urine? <input checked="" type="radio"/> Y / <input checked="" type="radio"/> N	description:

Samples	Preservative	Purpose	Samples	Preservative	Purpose
Blood			Hairs		
Urine			Skin		<i>coarse genetics</i>
Feces			Parasites		
Milk			Microbiology		
Tear film			Biopsy		

MEDICATIONS ADMINISTERED

COMMENTS

Significant cold stress lesions on fluke only.

*Blood: hematology - white blood cells slightly ↑ → Inflammation?
 (bands, heterophils ↑↑ - left shift)*

chemistry & GT ↑, but other liver values ok.

SAA ↑