

From: Strait, Kenneth A. <Kenneth.Strait@pseg.com>
Sent: Friday, September 24, 2021 9:40 AM
To: incidental.take@noaa.gov
Cc: EndangeredSpecies Resource; Kate.Sampson@noaa.gov;
Jolvan.Morris@noaa.gov; susan.rosenwinkel@dep.nj.gov;
david.golden@dep.nj.gov
Subject: [External_Sender] Biological Opinion NER-2010-6581; Sea Turtle Necropsy Reports
Attachments: LR-E21-0082-NMFS ITS Necropsy Reports.pdf

Please find attached a letter from PSEG Nuclear, LLC with four necropsy reports for recent incidental takes of Kemp's Ridley sea turtles at Salem Generating Station. As explained in the letter, the Marine Mammal Stranding Center in Brigantine, New Jersey has been waiting for the New Jersey State Department of Agriculture, Animal Health Diagnostic Lab to provide copies of these reports.

Please let me know if you have any questions or need additional information. Thanks.

Ken

Kenneth A. Strait

Manager-Biological Programs

PSEG Nuclear Environmental Affairs

P.O. Box 236, N33

Hancocks Bridge, NJ 08302 kenneth.strait@pseg.com

www.pseg.com/environment/estuary

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Hearing Identifier: NRR_DRMA
Email Number: 1358

Mail Envelope Properties (254aca16ca89438a8f67a95c574d808c)

Subject: [External_Sender] Biological Opinion NER-2010-6581; Sea Turtle Necropsy Reports
Sent Date: 9/24/2021 9:39:37 AM
Received Date: 9/24/2021 9:41:22 AM
From: Strait, Kenneth A.

Created By: Kenneth.Strait@pseg.com

Recipients:

"EndangeredSpecies Resource" <EndangeredSpecies.Resource@nrc.gov>

Tracking Status: None

"Kate.Sampson@noaa.gov" <Kate.Sampson@noaa.gov>

Tracking Status: None

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Tracking Status: None

"susan.rosenwinkel@dep.nj.gov" <susan.rosenwinkel@dep.nj.gov>

Tracking Status: None

"david.golden@dep.nj.gov" <david.golden@dep.nj.gov>

Tracking Status: None

"incidental.take@noaa.gov" <incidental.take@noaa.gov>

Tracking Status: None

Post Office: pseg.com

Files	Size	Date & Time
MESSAGE	1596	9/24/2021 9:41:22 AM
LR-E21-0082-NMFS ITS Necropsy Reports.pdf		3474287

Options

Priority: Normal

Return Notification: Yes

Reply Requested: No

Sensitivity: Normal

Expiration Date:



SEND VIA EMAIL

September 24, 2021
LR-E21-0082

National Marine Fisheries Service
Greater Atlantic Regional Fisheries Office
ATTN: Section 7 Coordinator
55 Great Republic Drive
Gloucester, MA 01930
Incidental.Take@NOAA.gov

**SALEM AND HOPE CREEK GENERATING STATIONS
BIOLOGICAL OPINION NER-2010-6581
SEA TURTLE NECROPSY REPORTS**

The U.S. Nuclear Regulatory Commission ("USNRC") and the National Marine Fisheries Service ("NMFS") concluded formal consultation under Section 7 of the Endangered Species Act of 1973, as amended, on July 17, 2014, with NMFS's issuance of a final biological opinion and incidental take statement ("ITS") for Salem Nuclear Generating Station, Units 1 and 2 ("Salem"), and Hope Creek Generating Station, Unit 1 ("Hope Creek"). USNRC Amendment Nos. 308 and 290 to Renewed Facility Operating Licenses DPR-70 and DPR-75 for Salem, and USNRC Amendment No. 198 to Renewed Facility Operating License NPF-57 for Hope Creek incorporating provisions of the ITS became effective on the date of issuance, June 17, 2015. Pursuant to Terms and Conditions (T&C) No. 10 of the ITS, PSEG hereby provides copies of the four attached necropsy reports for recent incidental takes of Kemp's Ridley sea turtles.

T&C #10 of the ITS states that necropsy reports should be submitted to the NMFS with the annual review of incident reports or, if not yet available, within 60 days of the incidental take. PSEG would normally submit any available sea turtle necropsy results with the annual report of incidental takes; however, as discussed with NMFS and USNRC on 07/20/2021¹, the necropsy results for recent takes may be important to support efforts related to USNRC re-initiation of the Section 7 Consultation for Salem and Hope Creek. As indicated in PSEG's letter of August 20th, the Marine Mammal Stranding Center in Brigantine, New Jersey has been waiting for the New Jersey State Department of Agriculture, Animal Health Diagnostic Lab to provide copies of these necropsy reports.

¹ <https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML21201A070>

If you have any questions or require additional information, please do not hesitate to contact Ken Strait at kenneth.strait@pseg.com.

Sincerely,



David Sharbaugh

Site Vice President - Salem

Attachments(4)

CC United States Nuclear Regulatory Commission
endangeredspecies@nrc.gov

Kate Sampson
National Marine Fisheries Service
Sea Turtle Stranding & Disentanglement Coordinator
Kate.Sampson@noaa.gov

Jolvan Morris
National Marine Fisheries Service
Marine Resources Management Specialist
Jolvan.Morris@noaa.gov

Susan Rosenwinkel, Manager
New Jersey Department of Environmental Protection
Bureau of Surface Water Permitting
susan.rosenwinkel@dep.nj.gov

Dave Golden, Director
New Jersey Department of Environmental Protection
Division of Fish and Wildlife
david.golden@dep.nj.gov

(Distribute via email)



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Street Address: 3 Schwarzkopf Drive Ewing, NJ 08628
Telephone: (609) 406-6999
Billing: (609) 671-6404
Fax: (609) 671-6414



www.jerseyvetlab.nj.gov
jerseyvetlab@ag.nj.gov

www.nj.gov/agriculture

COMPLETE RESULTS REPORT

Case#: 21-1358

Marine Mammal Stranding Center

3625 Brigantine Blvd

Brigantine, NJ 08203

Referring Submitter: Marine Mammal Stranding Center

MMSC-21-080

Species: Turtle

Breed:

Age:

Sex:

Bill To: Marine Mammal Stranding Center

3625 Brigantine Blvd

Brigantine NJ 08203

Owner: Marine Mammal Stranding C

Date Received: 06/17/21

Date Reported: 09/20/21

Note: The results apply to the samples as received and relate only to the samples tested.

Pathology Section

Gross Pathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 08/24/21

Specimen Collected on: 06/17/21

GROSS EXAMINATION:

A Kemp's Ridley Sea Turtle (MMSC-21-080) of unknown age and sex, weighing 6.2 lbs. was submitted for necropsy. Postmortem body condition was poor due to advanced decomposition affecting multiple tissues and organs. This turtle was thin with a slightly sunken (concave) plastron, loss of lean muscle mass, decreased fat stores in the shoulder, neck, and groin and in the coelomic cavity.

There were multiple superficial abrasions (~1-6 cm in length) on the carapace predominately involving the vertebral scutes (V1-V5; along the vertebral column) and at the junction of the costal (C4-C5) and marginal scutes on the right and left side. The abrasion injuries do not penetrate through the scutes. There was extensive bruising involving the majority of the plastron scutes. There was swelling and edematous expansion of the subcutaneous tissue of the head, neck, and shoulders.

The stomach was empty. The small intestine contained minimal brown digesta and the large intestine had minimal to no fecal material. The brain, heart, lungs, liver, kidneys, all other organs not described were grossly unremarkable.

GROSS FINDINGS:

BODY: Thin nutritional condition; CARAPACE: Multifocal superficial scute abrasions; PLASTRON: Extensive scute bruising; HEAD, NECK and SHOULDERS: Subcutaneous edema. INTESTINE: Markedly decreased content;

COMMENTS:

A definitive cause of death for this sea turtle was not apparent by gross examination however the abrasions and bruising on the carapace and plastron suggests that trauma may have been a contributing factor. Additionally, inspection of the gastrointestinal tract revealed that this turtle was not eating well during the immediate antemortem period. No significant pathologic lesions or apparent evidence of active infectious disease, parasitism or neoplasia were noted. Histopathology is pending.

PATHOLOGIST: Shannon Swist, DVM, MS

Histopathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 09/20/21

Specimen Collected on: 06/17/21

Histopathology performed at Texas Veterinary Medical Diagnostic Laboratory, College Station, TX. See attached report. Please direct any questions to the NJ AHDL.



Accession Number: C212380215
Account Number: 14802

Testing Lab:	TVMDL - College Station	Client:	State Of New Jersey, Department of Agriculture
Case Coordinator:	Laura Rice, MS, DVM, DACVP		Division of Animal Health Lab, P. O. Box 330
Date Received:	08/26/2021		Trenton, NJ 08625
Report Date:	09/03/2021	Owner:	MMSC
		Veterinarian:	Shannon Swist, DVM

FINAL REPORT

Medical History: Medical history on file.
Animal ID: 21-1358 NMSC 21-080 Green Sea Turtle :: NFS
Specimen: Tissue :: Fixed **Collection Date:**

HISTOPATHOLOGY

Test: Histopathology - Postmortem 8 or Fewer Tissues

Number of Tissues 8
Sections/Slides 26/6

Histopathologic Diagnosis

Slides 1-6. Sections of the following tissues are examined: brain, liver, trachea, heart, lung, spleen, kidney, fatty tissue, and gastrointestinal tract.

Lung: Multifocal, mild, subacute heterophilic interstitial inflammation.

Stomach: Small numbers of mural encysted adult nematodes.

Brain, Liver, Trachea, Heart, Spleen, Kidney, Fatty tissue, and Gastrointestinal tract: No significant findings.

Comments

The most significant finding was the mild heterophilic inflammation in the lungs. No apparent cause for this inflammation was noted; however, a pulmonary bacterial infection is considered as a possible differential. The clinical significance of this pneumonia is uncertain, but it is possible that it played a role in the death of this turtle. This turtle also had evidence of endoparasitism, and this is considered an incidental finding. There is advanced postmortem decomposition (autolysis) in this case that impedes pathologic examination. Autolysis and putrefaction result in rapid degradation and distortion of the tissues, hampering interpretation of postmortem findings.

Authorized by: Laura Rice, MS, DVM, DACVP
Veterinary Pathologist

TVMDL - College Station
483 Agronomy Road
College Station, TX 77843-4471
Phone: 979.845.3414 Billing: 888.646.5623
Website: <https://tvmdl.tamu.edu/>

finalized_report_C212380215_2021-09-03_18-27-42.pdf

Page 1 of 1



Marine Mammal Stranding Center

P.O. Box 773, 3625 Brigantine Blvd, Brigantine, NJ 08203

Telephone (609) 266-0538 Fax (609) 266-6300 www.mmssc.org



21-1358
06/17/21

MMSC-21-080

Stranding Date: 06/17/2021

Field #: MMSC-21-080

Species: Kemp's Ridley Sea Turtle

Sex: U

Age: U

Weight: 40 lbs (est)

Length: 2 ft (est)

Stranding Location: Salem, Nuclear power plant intake pipe

History: Dead, code 1. Found in intake pipe. Abrasions on carapace. Bruising on ventral side. Taken to NJALDL for necropsy.

If you have any questions feel free to contact us at 609-266-0538.

Note: Please email all results to mmssc@verizon.net



GENERAL SPECIMEN SUBMISSION FORM

U.S. Postal Address
Animal Health Diagnostic Laboratory
NJ Department of Agriculture
PO Box 330
Trenton NJ 08625

Fed Ex/UPS/ Delivery Address
Animal Health Diagnostic
Laboratory, NJPHEAL
3 Schwarzkopf Drive
Ewing, NJ 08628

Contact Information
Phone: (609) 406-6999
Fax: (609) 671-6414
Website: www.jerseyvetlab.nj.gov
E-mail: jerseyvetlab@ag.nj.gov

(Lab Use Only)

Please print **FULL** name and provide requested information. By submitting specimen/s and submission form/s, submitter is entering into an agreement of the proposed work with the Animal Health Diagnostic Laboratory. Please refer to the website for further details on user policies.

Submitter	
Name: Robert Schoelkopf	
Clinic/Institution: Marine Mammal Stranding Center	
Address: PO Box 773, 3625 Brigantine Blvd.	
City: Brigantine	State: NJ Zip: 08203
Phone: 609-266-0538	Fax: 609-266-6300
E-Mail: mmsc@verizon.net	
Lab Report Distribution Preference: <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input checked="" type="checkbox"/> E-Mail <input type="checkbox"/> Phone	
Account Number:	

Owner (Check if same as submitter <input checked="" type="checkbox"/>)	
Name:	
Premise ID/Name:	
Address:	
City:	State: Zip:
Phone:	Fax:
E-Mail:	
Lab Report Distribution Preference: <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> E-Mail <input type="checkbox"/> Phone	

Send Report To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other
Bill To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other

Necropsy: Body Remains Disposal after Necropsy <input checked="" type="checkbox"/> Laboratory <input type="checkbox"/> Crematory

Animal Identification (See reverse side for additional animals)					
Sex Codes: M=Male, F=Female, C=Castrated Male, S=Spayed Female					
	Animal or Sample ID	Species	Breed	Sex	Age
1	MMSC-21-080	Sea Turtle	Kemp's Ridley	U	U
2					
3					
4					
5					

Specimen Description	
Specimen Collection Date:	
<input type="checkbox"/> Blood, EDTA Qty:	<input checked="" type="checkbox"/> Carcass Qty: 1
<input type="checkbox"/> Feces Qty:	<input type="checkbox"/> Fluid Qty:
<input type="checkbox"/> Serum Qty:	<input type="checkbox"/> Slide Qty:
<input type="checkbox"/> Swab Qty:	<input type="checkbox"/> Tissue fixed Qty:
<input type="checkbox"/> Tissue fresh Qty:	<input type="checkbox"/> Other Qty:

Testing Purpose:	<input type="checkbox"/> Clinical <input type="checkbox"/> Regulatory <input type="checkbox"/> Surveillance <input type="checkbox"/> Import <input type="checkbox"/> Export Country of Destination :
Type of flock/herd/group:	Size of flock/herd: Number sick: Number sampled:
History/Clinical Signs (use reverse page for additional description):	

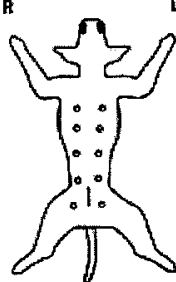
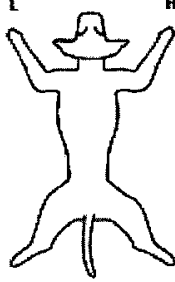
Test/s (Check under multiple species heading if you don't see test under species of interest). Refer to fee list for test fees.	
Avian/Pigeon: <input type="checkbox"/> AI PCR <input type="checkbox"/> AI AGID <input type="checkbox"/> APMV-1/NDV PCR <input type="checkbox"/> EEE PCR <input type="checkbox"/> Necropsy <input type="checkbox"/> West Nile PCR Avian/Pigeon Panels: <input type="checkbox"/> Breeding Pigeon Health Screen I <input type="checkbox"/> Breeding Pigeon Health Screen II <input type="checkbox"/> Pigeon Respiratory Bacterial PCR <input type="checkbox"/> Pigeon Viral PCR <input type="checkbox"/> Racing Pigeon Health Screen I <input type="checkbox"/> Racing Pigeon Health Screen II <input type="checkbox"/> Racing Pigeon Health Screen III <input type="checkbox"/> Thrush & Canker PCR Caprine/Ovine: <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CAE/OPP AGID <input type="checkbox"/> CL Serology <input type="checkbox"/> Scrapie Canine/Feline: <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Lyme Equine: <input type="checkbox"/> CEM (Breeding) <input type="checkbox"/> EEE IgM ELISA <input type="checkbox"/> EEE PCR <input type="checkbox"/> EIA AGID <input type="checkbox"/> EIA ELISA <input type="checkbox"/> EHV1 SN <input type="checkbox"/> EHV1 PCR <input type="checkbox"/> EVA SN <input type="checkbox"/> Influenza HI <input type="checkbox"/> Influenza PCR <input type="checkbox"/> Lyme <input type="checkbox"/> PHF IFA <input type="checkbox"/> PHF PCR <input type="checkbox"/> Strangles PCR <input type="checkbox"/> West Nile IgM ELISA	Equine (continued): <input type="checkbox"/> West Nile PCR Equine Panels: <input type="checkbox"/> Abortion, fetal tissue <input type="checkbox"/> Abortion, maternal serum <input type="checkbox"/> Diarrhea (culture, PHF, parasites) <input type="checkbox"/> Neurologic, serum (EEE, WNV, EHV-1) <input type="checkbox"/> Neurologic, PCR brain <input type="checkbox"/> Respiratory, (EHV-1, S. equi, Influenza A) <input type="checkbox"/> Respiratory, serology Multiple species <input type="checkbox"/> Aerobic Culture & Sensitivity <input type="checkbox"/> Aerobic Culture Only <input type="checkbox"/> Anaerobic Culture <input type="checkbox"/> Biopsy/Histopathology <input type="checkbox"/> Brucellosis <input type="checkbox"/> Campylobacter <input type="checkbox"/> FMD <input type="checkbox"/> Fungal culture/ Mycology <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Listeria <input type="checkbox"/> Leptospira MAT 6 serovars <input type="checkbox"/> Mycobacterium / Acid Fast Bacteria <input checked="" type="checkbox"/> Necropsy <input type="checkbox"/> Necropsy (Field) <input type="checkbox"/> Qualitative Fecal Parasite Exam <input type="checkbox"/> Quantitative Fecal Parasite Exam <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Salmonella <input type="checkbox"/> Virus Isolation Please specify virus: _____ Refer to test fees schedule for more tests Other Test/s _____ See page 2 for additional tests

Signature of Submitter: _____	Date: _____
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Qualtrax # 1130.4

Page 1 of 2

Reference Qualtrax # 1125

Biopsy/Surgical Pathology: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Ventral</p> </div> <div style="text-align: center;">  <p>Dorsal</p> </div> </div>	Describe lesions and fill in the diagram to indicate extent of lesion and site:
---	--

History/Clinical Signs/Provisional Diagnosis:
 (Space provided for additional information)

Animal Identification (Use Continuation Form for additional specimens)					
	Animal or Sample ID	Species	Breed	Sex	Age
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Test/s Requested Continued (Check under multiple species category if you don't see test/s of interest under species of interest)	
Bovine <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Bovine Leucosis AGID <input type="checkbox"/> Brucellosis card <input type="checkbox"/> BSE <input type="checkbox"/> BVD PCR <input type="checkbox"/> Johne's ELISA <input type="checkbox"/> Johne's PCR <input type="checkbox"/> Johne's fecal culture Porcine <input type="checkbox"/> ASF PCR <input type="checkbox"/> CSF PCR <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> PRV Fish (Water Temperature _____) <input type="checkbox"/> Fish Health Certification <input type="checkbox"/> KHV PCR <input type="checkbox"/> VHS PCR <input type="checkbox"/> Virus Isolation _____	Exotic/Zoo/Wild <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CL Serology <input type="checkbox"/> EEE PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Johnes Culture <input type="checkbox"/> Johnes PCR <input type="checkbox"/> TSE <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Yersinia culture Other Tests <input type="checkbox"/> _____

Qualtrax # 1130.4

Page 2 of 2

Reference Qualtrax # 1125

End of Report



US Postal Services: P.O. Box 400 Trenton, NJ 08625
Street Address: 3 Schwarzkopf Drive Ewing, NJ 08628
Telephone: (609) 406-6999
Billing: (609) 671-6404
Fax: (609) 671-6414



www.jerseyvetlab.nj.gov
jerseyvetlab@ag.nj.gov

www.nj.gov/agriculture

COMPLETE RESULTS REPORT

Case#: 21-1470

Marine Mammal Stranding Center

3625 Brigantine Blvd

Brigantine, NJ 08203

Referring Submitter: Marine Mammal Stranding Center

MMSC-210-89

Species: Turtle

Breed:

Age:

Sex:

Bill To: Marine Mammal Stranding Center

3625 Brigantine Blvd

Brigantine NJ 08203

Owner: Marine Mammal Stranding C

Date Received: 06/30/21

Date Reported: 09/20/21

Note: The results apply to the samples as received and relate only to the samples tested.

History

Pathology Section

Gross Pathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 08/24/21

Specimen Collected on: 06/29/21

GROSS EXAMINATION:

A Kemp's Ridley Sea Turtle (MMSC-21-089) of unknown age and sex, weighing 4.65 lbs. was submitted for necropsy. Postmortem body condition was fair. This turtle was very thin with a sunken (concave) plastron, loss of lean muscle mass, decreased fat stores in the shoulder, neck, and groin and in the coelomic cavity.

There was multifocal loss of scales on the head and scutes from the carapace predominately involving the right-side vertebral (V1) and costal (C1-C2) scutes. There was extensive bruising involving the majority of the plastron scutes. Soft tissue (skin, subcutis and skeletal muscle) was missing from the lower jaw with exposure of the bone.

The lungs were mottled pink and red, spongy to rubbery, exuded a small amount of red-tinged fluid on cut sections and representative sections floated in formalin.

The liver was enlarged, light brown to pale yellow, with an accentuated lobular pattern, and was soft and friable. Multifocally, numerous, 1-3 mm, slightly raised, yellow, foci were present on the serosa of the esophagus, crop, and stomach and the lumina were filled with approximately 75 g of partially digested brown ingesta and invertebrate shells. The small and large intestine were filled with abundant, brown digesta similar to the upper gastrointestinal tract and abundant fecal material. The brain, heart, kidneys, all other organs not described were grossly unremarkable.

GROSS FINDINGS:

BODY: Very thin nutritional condition; HEAD and CARAPACE: Multifocal scale and scute loss. LOWER JAW: Soft tissue loss with bone exposure; PLASTRON: Extensive scute bruising; LUNGS: Acute pulmonary congestion and edema; LIVER: Hepatomegaly/Hepatic lipidosis; ESOPHAGUS, CROP and STOMACH: Granulomatous serositis (suspected).

COMMENTS:

A definitive cause of death for this sea turtle was not apparent by gross examination however there were several lesions present that may have played a contributing role. This turtle was in very thin nutritional body condition, exhibited hepatic lipidosis which is consistent with increased mobilization of fat to the liver secondary to a negative energy balance despite ingestion of abundant food in the immediate antemortem period. The scale/scute loss on the head and carapace and bruising on the plastron suggests that trauma may have been a contributing factor. The soft tissue loss on the jaw may represent antemortem trauma or

postmortem scavenger damage. The cause and significance, if any, of the lesions present on the serosa of the upper gastrointestinal is uncertain. Histopathology is pending to further characterize the gross findings.

PATHOLOGIST: Shannon Swist, DVM, MS

Histopathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 09/20/21

Specimen Collected on: 06/29/21

Histopathology performed at Texas Veterinary Medical Diagnostic Laboratory, College Station, TX. See attached report. Please direct any questions to the NJ AHDL.

Testing Lab:	TVMDL - College Station	Client:	State Of New Jersey, Department of Agriculture
Case Coordinator:	Laura Rice, MS, DVM, DACVP		Division of Animal Health Lab, P. O. Box 330
Date Received:	08/26/2021		Trenton, NJ 08625
Report Date:	09/03/2021	Owner:	MMSC
		Veterinarian:	Dr. Swist

FINAL REPORT

Medical History: Medical history on file.
Animal ID: 21-1470 MMSC 21-089 Turtle :: NFS
Specimen: Tissue :: Fixed **Collection Date:**

HISTOPATHOLOGY

Test: Histopathology - Postmortem 8 or Fewer Tissues

Number of Tissues 8
Sections/Slides 27/8

Histopathologic Diagnosis

Slides 1-8. Sections of the following tissues are examined: brain, liver, trachea, heart, lung, spleen, kidney, and gastrointestinal tract.

Lung: Diffuse, moderate congestion.

Liver: Diffuse, moderate hepatic lipidosis.

Stomach: Multifocal serosal granulomas

Brain, Trachea, Heart, Spleen, Kidney, and Gastrointestinal tract: No significant findings.

Comments

The cause for the death of this turtle is not readily apparent after histologic examination of the submitted tissues. The grossly diagnosed hepatic lipidosis is confirmed, and this likely developed due to increased mobilization of fat to the liver secondary to a negative energy balance. The nodules noted along the serosal surface of the stomach are consistent with chronic granulomas likely secondary to a past parasite infection. No apparent evidence of active infectious disease or neoplasia is noted.

Authorized by: Laura Rice, MS, DVM, DACVP
Veterinary Pathologist



Marine Mammal Stranding Center

P.O. Box 773, 3625 Brigantine Blvd, Brigantine, NJ 08203

Telephone (609) 266-0538 Fax (609) 266-6300 www.mmssc.org



21-1470
06/30/21

MMSC-21-089

Stranding Date: 06/29/2021

Field #: 21-089

Species: Kemp's Ridley Sea Turtle

Sex: U

Age: U

Weight: **15lbs (est)**

Length: 18" est

Stranding Location: Lower Alloways Creek, Salem Nuclear Power Plant and the Delaware Bay

History: Dead, code 1. Found stuck in the intake pipe. Scutes missing on head and carapace. Bruising on plastron. Skin and muscle missing from lower jaw. Taken to NJAHDL for necropsy.

If you have any questions feel free to contact us at 609-266-0538.

Note: Please email all results to mmssc@verizon.net



GENERAL SPECIMEN SUBMISSION FORM

U.S. Postal Address
Animal Health Diagnostic Laboratory
NJ Department of Agriculture
PO Box 330
Trenton NJ 08625

Fed Ex/UPS/ Delivery Address
Animal Health Diagnostic
Laboratory, NJPHEAL
3 Schwarzkopf Drive
Ewing, NJ 08628

Contact Information
Phone: (609) 406-6999
Fax: (609) 671-8414
Website: www.jerseyvetlab.nj.gov
E-mail: jerseyvetlab@ag.nj.gov

(Lab Use Only)

Please print FULL name and provide requested information. By submitting specimen/s and submission form/s, submitter is entering into an agreement of the proposed work with the Animal Health Diagnostic Laboratory. Please refer to the website for further details on user policies.

Submitter	
Name: Robert Schoelkopf	
Clinic/Institution: Marine Mammal Stranding Center	
Address: PO Box 773, 3625 Brigantine Blvd.	
City: Brigantine	State: NJ Zip: 08203
Phone: 609-266-0538	Fax: 609-266-6300
E-Mail: mmsc@verizon.net	
Lab Report Distribution Preference: <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input checked="" type="checkbox"/> E-Mail <input type="checkbox"/> Phone	
Account Number:	

Owner (Check if same as submitter <input checked="" type="checkbox"/>)	
Name:	
Premise ID/Name:	
Address:	
City:	State: Zip:
Phone:	Fax:
E-Mail:	
Lab Report Distribution Preference: <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> E-Mail <input type="checkbox"/> Phone	

Send Report To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other _____
Bill To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other _____

Necropsy: Body Remains Disposal after Necropsy <input checked="" type="checkbox"/> Laboratory <input type="checkbox"/> Crematory _____

Animal Identification (See reverse side for additional animals)					
Sex Codes: M=Male, F=Female, C=Castrated Male, S=Spayed Female					
	Animal or Sample ID	Species	Breed	Sex	Age
1	MMSC-21-089	Kemps Ridley Sea Turtle		U	U
2					
3					
4					
5					

Specimen Description	
Specimen Collection Date:	
<input type="checkbox"/> Blood, EDTA Qty:	<input checked="" type="checkbox"/> Carcass Qty: 1
<input type="checkbox"/> Feces Qty:	<input type="checkbox"/> Fluid Qty:
<input type="checkbox"/> Serum Qty:	<input type="checkbox"/> Slide Qty:
<input type="checkbox"/> Swab Qty:	<input type="checkbox"/> Tissue fixed Qty:
<input type="checkbox"/> Tissue fresh Qty:	<input type="checkbox"/> Other _____ Qty:

Testing Purpose:	<input type="checkbox"/> Clinical <input type="checkbox"/> Regulatory <input type="checkbox"/> Surveillance <input type="checkbox"/> Import <input type="checkbox"/> Export Country of Destination :
Type of flock/herd/group:	Size of flock/herd: Number sick: Number sampled:
History/Clinical Signs (use reverse page for additional description):	

Test/s (Check under multiple species heading if you don't see test under species of interest). Refer to fee list for test fees.	
Avian/Pigeon: <input type="checkbox"/> AI PCR <input type="checkbox"/> AI AGID <input type="checkbox"/> APMV-1/NDV PCR <input type="checkbox"/> EEE PCR <input type="checkbox"/> Necropsy <input type="checkbox"/> West Nile PCR Avian/Pigeon Panels: <input type="checkbox"/> Breeding Pigeon Health Screen I <input type="checkbox"/> Breeding Pigeon Health Screen II <input type="checkbox"/> Pigeon Respiratory Bacterial PCR <input type="checkbox"/> Pigeon Viral PCR <input type="checkbox"/> Racing Pigeon Health Screen I <input type="checkbox"/> Racing Pigeon Health Screen II <input type="checkbox"/> Racing Pigeon Health Screen III <input type="checkbox"/> Thrush & Canker PCR Caprine/Ovine: <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CAE/OPP AGID <input type="checkbox"/> CL Serology <input type="checkbox"/> Scrapie Canine/Feline: <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Lyme Equine: <input type="checkbox"/> CEM (Breeding) <input type="checkbox"/> EEE IgM ELISA <input type="checkbox"/> EEE PCR <input type="checkbox"/> EIA AGID <input type="checkbox"/> EIA ELISA <input type="checkbox"/> EHV1 SN <input type="checkbox"/> EHV1 PCR <input type="checkbox"/> EVA SN <input type="checkbox"/> Influenza HI <input type="checkbox"/> Influenza PCR <input type="checkbox"/> Lyme <input type="checkbox"/> PHF IFA <input type="checkbox"/> PHF PCR <input type="checkbox"/> Strangles PCR <input type="checkbox"/> West Nile IgM ELISA	Equine (continued): <input type="checkbox"/> West Nile PCR Equine Panels: <input type="checkbox"/> Abortion, fetal tissue <input type="checkbox"/> Abortion, maternal serum <input type="checkbox"/> Diarrhea (culture, PHF, parasites) <input type="checkbox"/> Neurologic, serum (EEE, WNV, EHV-1) <input type="checkbox"/> Neurologic, PCR brain <input type="checkbox"/> Respiratory, (EHV-1, S. equi, Influenza A) <input type="checkbox"/> Respiratory, serology Multiple species <input type="checkbox"/> Aerobic Culture & Sensitivity <input type="checkbox"/> Aerobic Culture Only <input type="checkbox"/> Anaerobic Culture <input type="checkbox"/> Biopsy/Histopathology <input type="checkbox"/> Brucellosis <input type="checkbox"/> Campylobacter <input type="checkbox"/> FMD <input type="checkbox"/> Fungal culture/ Mycology <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Listeria <input type="checkbox"/> Leptospira MAT 6 serovars <input type="checkbox"/> Mycobacterium / Acid Fast Bacteria <input checked="" type="checkbox"/> Necropsy <input type="checkbox"/> Necropsy (Field) <input type="checkbox"/> Qualitative Fecal Parasite Exam <input type="checkbox"/> Quantitative Fecal Parasite Exam <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Salmonella <input type="checkbox"/> Virus Isolation Please specify virus: _____ Refer to test fees schedule for more tests Other Test/s _____ See page 2 for additional tests

Signature of Submitter: _____	Date: _____
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Qualtrax # 1130.4

Page 1 of 2

Reference Qualtrax # 1125

Biopsy/Surgical Pathology: <div style="text-align: center; margin-top: 10px;"> </div>	Describe lesions and fill in the diagram to indicate extent of lesion and site:
---	--

History/Clinical Signs/Provisional Diagnosis:
 (Space provided for additional information)

Animal Identification (Use Continuation Form for additional specimens)					
	Animal or Sample ID	Species	Breed	Sex	Age
6					
7					
8					
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12					
13					
14					
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Test/s Requested Continued (Check under multiple species category if you don't see test/s of interest under species of interest)	
Bovine <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Bovine Leucosis AGID <input type="checkbox"/> Brucellosis card <input type="checkbox"/> BSE <input type="checkbox"/> BVD PCR <input type="checkbox"/> Johne's ELISA <input type="checkbox"/> Johne's PCR <input type="checkbox"/> Johne's fecal culture Porcine <input type="checkbox"/> ASF PCR <input type="checkbox"/> CSF PCR <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> PRV Fish (Water Temperature _____) <input type="checkbox"/> Fish Health Certification <input type="checkbox"/> KHV PCR <input type="checkbox"/> VHS PCR <input type="checkbox"/> Virus Isolation _____	Exotic/Zoo/Wild <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CL Serology <input type="checkbox"/> EEE PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Johnes Culture <input type="checkbox"/> Johnes PCR <input type="checkbox"/> TSE <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Yersinia culture Other Tests <input type="checkbox"/> _____

Qualtrax # 1130.4

Page 2 of 2

Reference Qualtrax # 1125

End of Report



US Postal Services: P.O. Box 400 Trenton, NJ 08625
Street Address: 3 Schwarzkopf Drive Ewing, NJ 08628
Telephone: (609) 406-6999
Billing: (609) 671-6404
Fax: (609) 671-6414



www.jerseyvetlab.nj.gov
jerseyvetlab@ag.nj.gov

www.nj.gov/agriculture

COMPLETE RESULTS REPORT

Case#: 21-1542

Marine Mammal Stranding Center
3625 Brigantine Blvd
Brigantine, NJ 08203
Referring Submitter: Marine Mammal Stranding Center

MMSC-21-095
Species: Turtle
Breed:
Age:
Sex:

Bill To: Marine Mammal Stranding Center
3625 Brigantine Blvd
Brigantine NJ 08203

Owner: Marine Mammal Stranding C

Date Received: 07/09/21

Date Reported: 09/20/21

Note: The results apply to the samples as received and relate only to the samples tested.

Pathology Section

Gross Pathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 08/24/21

Specimen Collected on: 07/08/21

GROSS EXAMINATION:

A male, Kemp's Ridley Sea Turtle (MMSC-21-095) of unknown age weighing 2.46 lbs. was submitted for necropsy. Postmortem body condition was fair to poor. Muscle mass and fat stores were adequate. There was moderate bruising of the plastron scutes. There was swelling, mild hemorrhage and edematous expansion of the subcutaneous tissue of the head, around the eyes, neck, and shoulders. The esophagus, crop, and stomach were empty. The small and large intestine were filled with a small to moderate amount of brown digesta and fecal material. The brain, heart, lungs, liver, kidneys, all other organs not described were grossly unremarkable.

GROSS FINDINGS:

PLASTRON: Moderate scute bruising; HEAD, EYE, NECK and SHOULDERS: Subcutaneous hemorrhage and edema; UPPER GASTROINTESTINAL TRACT: Decreased content;

COMMENTS:

A definitive cause of death for this sea turtle was not apparent by gross examination however the plastron bruising and the subcutaneous hemorrhage and edema of the head, eyes, neck, and shoulders, suggests that trauma may have been a contributing factor. No significant pathologic lesions or apparent evidence of active infectious disease, parasitism or neoplasia were noted. Histopathology is pending.

PATHOLOGIST: Shannon Swist, DVM, MS

Histopathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 09/20/21

Specimen Collected on: 07/08/21

Histopathology performed at Texas Veterinary Medical Diagnostic Laboratory, College Station, TX. See attached report. Please direct any questions to the NJ AHDL.

Testing Lab:	TVMDL - College Station	Client:	State Of New Jersey, Department of Agriculture
Case Coordinator:	Laura Rice, MS, DVM, DACVP		Division of Animal Health Lab, P. O. Box 330
Date Received:	08/26/2021		Trenton, NJ 08625
Report Date:	09/03/2021	Owner:	MMSC

FINAL REPORT

Medical History: Medical history on file.
Animal ID: 21-1542 mmsc21-095 Turtle :: NFS
Specimen: Tissue :: Fixed **Collection Date:**

HISTOPATHOLOGY

Test: Histopathology - Postmortem 8 or Fewer Tissues

Number of Tissues 8
Sections/Slides 14/4

Histopathologic Diagnosis

Slides 1-4. Sections of the following tissues are examined: brain, liver, trachea, heart, lung, spleen, kidney, and gastrointestinal tract.

Brain, Liver, Trachea, Heart, Lung, Spleen, Kidney, and Gastrointestinal tract: No significant findings.

Comments

The cause for the death of this turtle is not readily apparent after histologic examination of the submitted tissues. There is advanced postmortem decomposition (autolysis) in this case that impedes pathologic examination. Autolysis and putrefaction result in rapid degradation and distortion of the tissues, hampering interpretation of postmortem findings. No obvious lesions are identified that explain the cause of death; however, the autolysis could be masking underlying abnormalities. No apparent evidence of active infectious disease or neoplasia is noted.

Authorized by: Laura Rice, MS, DVM, DACVP
Veterinary Pathologist



Marine Mammal Stranding Center

P.O. Box 773, 3625 Brigantine Blvd, Brigantine, NJ 08203

Telephone (609) 266-0538 Fax (609) 266-6300 www.mmsc.org



21-1542
07/09/21

MMSC-21-095

Stranding Date: 07/08/2021

Field #: 21-095

Species: Kemp's Ridley Sea Turtle

Sex: U

Age: U

Weight: **1113.7g (actual)**

Length: 8.5" (actual)

Stranding Location: Lower Alloways Creek, Salem Nuclear Power Plant and the Delaware Bay

History: Dead, code 1. Found in outflow of intake pipe. Bruising on plastron and head. Eyes swollen. Taken to NJAHDH for necropsy.

If you have any questions feel free to contact us at 609-266-0538.

Note: Please email all results to mmsc@verizon.net



GENERAL SPECIMEN SUBMISSION FORM

U.S. Postal Address
Animal Health Diagnostic Laboratory
NJ Department of Agriculture
PO Box 330
Trenton NJ 08625

Fed Ex/UPS/ Delivery Address
Animal Health Diagnostic
Laboratory, NJPHEAL
3 Schwarzkopf Drive
Ewing, NJ 08628

Contact Information
Phone: (609) 406-6999
Fax: (609) 671-6414
Website: www.jerseyvetlab.nj.gov
E-mail: jerseyvetlab@ag.nj.gov

(Lab Use Only)

Please print **FULL** name and provide requested information. By submitting specimen/s and submission form/s, submitter is entering into an agreement of the proposed work with the Animal Health Diagnostic Laboratory. Please refer to the website for further details on user policies.

Submitter	
Name: Robert Schoelkopf	
Clinic/Institution: Marine Mammal Stranding Center	
Address: PO Box 773, 3625 Brigantine Blvd.	
City: Brigantine	State: NJ Zip: 08203
Phone: 609-266-0538	Fax: 609-266-6300
E-Mail: mmsc@verizon.net	
Lab Report Distribution Preference: <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input checked="" type="checkbox"/> E-Mail <input type="checkbox"/> Phone	
Account Number:	

Owner (Check if same as submitter <input checked="" type="checkbox"/>)	
Name:	
Premise ID/Name:	
Address:	
City:	State: Zip:
Phone:	Fax:
E-Mail:	
Lab Report Distribution Preference: <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> E-Mail <input type="checkbox"/> Phone	

Send Report To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other _____
Bill To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other _____

Necropsy: Body Remains Disposal after Necropsy <input checked="" type="checkbox"/> Laboratory <input type="checkbox"/> Crematory _____

Animal Identification (See reverse side for additional animals)					
Sex Codes: M=Male, F=Female, C=Castrated Male, S=Spayed Female					
	Animal or Sample ID	Species	Breed	Sex	Age
1	MMSC 21-095	Sea Turtle Kemps		U	U
2					
3					
4					
5					

Specimen Description	
Specimen Collection Date:	
<input type="checkbox"/> Blood, EDTA Qty:	<input checked="" type="checkbox"/> Carcass Qty: 1
<input type="checkbox"/> Feces Qty:	<input type="checkbox"/> Fluid Qty:
<input type="checkbox"/> Serum Qty:	<input type="checkbox"/> Slide Qty:
<input type="checkbox"/> Swab Qty:	<input type="checkbox"/> Tissue fixed Qty:
<input type="checkbox"/> Tissue fresh Qty:	<input type="checkbox"/> Other _____ Qty:

Testing Purpose:	<input type="checkbox"/> Clinical <input type="checkbox"/> Regulatory <input type="checkbox"/> Surveillance <input type="checkbox"/> Import <input type="checkbox"/> Export Country of Destination :
Type of flock/herd/group:	Size of flock/herd: Number sick: Number sampled:
History/Clinical Signs (use reverse page for additional description):	

Test/s (Check under multiple species heading if you don't see test under species of interest). Refer to fee list for test fees.	
Avian/Pigeon: <input type="checkbox"/> AI PCR <input type="checkbox"/> AI AGID <input type="checkbox"/> APMV-1/NDV PCR <input type="checkbox"/> EEE PCR <input type="checkbox"/> Necropsy <input type="checkbox"/> West Nile PCR Avian/Pigeon Panels: <input type="checkbox"/> Breeding Pigeon Health Screen I <input type="checkbox"/> Breeding Pigeon Health Screen II <input type="checkbox"/> Pigeon Respiratory Bacterial PCR <input type="checkbox"/> Pigeon Viral PCR <input type="checkbox"/> Racing Pigeon Health Screen I <input type="checkbox"/> Racing Pigeon Health Screen II <input type="checkbox"/> Racing Pigeon Health Screen III <input type="checkbox"/> Thrush & Canker PCR Caprine/Ovine: <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CAE/OPP AGID <input type="checkbox"/> CL Serology <input type="checkbox"/> Scrapie Canine/Feline: <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Lyme Equine: <input type="checkbox"/> CEM (Breeding) <input type="checkbox"/> EEE IgM ELISA <input type="checkbox"/> EEE PCR <input type="checkbox"/> EIA AGID <input type="checkbox"/> EIA ELISA <input type="checkbox"/> EHV1 SN <input type="checkbox"/> EHV1 PCR <input type="checkbox"/> EVA SN <input type="checkbox"/> Influenza HI <input type="checkbox"/> Influenza PCR <input type="checkbox"/> Lyme <input type="checkbox"/> PHF IFA <input type="checkbox"/> PHF PCR <input type="checkbox"/> Strangles PCR <input type="checkbox"/> West Nile IgM ELISA	Equine (continued): <input type="checkbox"/> West Nile PCR Equine Panels: <input type="checkbox"/> Abortion, fetal tissue <input type="checkbox"/> Abortion, maternal serum <input type="checkbox"/> Diarrhea (culture, PHF, parasites) <input type="checkbox"/> Neurologic, serum (EEE, WNV, EHV-1) <input type="checkbox"/> Neurologic, PCR brain <input type="checkbox"/> Respiratory, (EHV-1, S. equi, Influenza A) <input type="checkbox"/> Respiratory, serology Multiple species <input type="checkbox"/> Aerobic Culture & Sensitivity <input type="checkbox"/> Aerobic Culture Only <input type="checkbox"/> Anaerobic Culture <input type="checkbox"/> Biopsy/Histopathology <input type="checkbox"/> Brucellosis <input type="checkbox"/> Campylobacter <input type="checkbox"/> FMD <input type="checkbox"/> Fungal culture/ Mycology <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Listeria <input type="checkbox"/> Leptospira MAT 6 serovars <input type="checkbox"/> Mycobacterium / Acid Fast Bacteria <input checked="" type="checkbox"/> Necropsy <input type="checkbox"/> Necropsy (Field) <input type="checkbox"/> Qualitative Fecal Parasite Exam <input type="checkbox"/> Quantitative Fecal Parasite Exam <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Salmonella <input type="checkbox"/> Virus Isolation Please specify virus: _____ Refer to test fees schedule for more tests Other Test/s _____ See page 2 for additional tests

Signature of Submitter: _____	Date: _____
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Qualtrax # 1130.4

Page 1 of 2

Reference Qualtrax # 1125

Biopsy/Surgical Pathology: <div style="text-align: center; margin-top: 10px;"> </div>	Describe lesions and fill in the diagram to indicate extent of lesion and site:
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History/Clinical Signs/Provisional Diagnosis:
 (Space provided for additional information)

Animal Identification (Use Continuation Form for additional specimens)					
	Animal or Sample ID	Species	Breed	Sex	Age
6					
7					
8					
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12					
13					
14					
15					

Test/s Requested Continued (Check under multiple species category if you don't see test/s of interest under species of interest)	
Bovine <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Bovine Leucosis AGID <input type="checkbox"/> Brucellosis card <input type="checkbox"/> BSE <input type="checkbox"/> BVD PCR <input type="checkbox"/> Johne's ELISA <input type="checkbox"/> Johne's PCR <input type="checkbox"/> Johne's fecal culture Porcine <input type="checkbox"/> ASF PCR <input type="checkbox"/> CSF PCR <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> PRV Fish (Water Temperature _____) <input type="checkbox"/> Fish Health Certification <input type="checkbox"/> KHV PCR <input type="checkbox"/> VHS PCR <input type="checkbox"/> Virus Isolation _____	Exotic/Zoo/Wild <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CL Serology <input type="checkbox"/> EEE PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Johnes Culture <input type="checkbox"/> Johnes PCR <input type="checkbox"/> TSE <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Yersinia culture Other Tests <input type="checkbox"/> _____

Qualtrax # 1130.4

Page 2 of 2

Reference Qualtrax # 1125

End of Report



US Postal Services: P.O. Box 400 Trenton, NJ 08625
Street Address: 3 Schwarzkopf Drive Ewing, NJ 08628
Telephone: (609) 406-6999
Billing: (609) 671-6404
Fax: (609) 671-6414



www.jerseyvetlab.nj.gov
jerseyvetlab@ag.nj.gov

www.nj.gov/agriculture

COMPLETE RESULTS REPORT

Case#: 21-1543

Marine Mammal Stranding Center
3625 Brigantine Blvd
Brigantine, NJ 08203
Referring Submitter: Marine Mammal Stranding Center

MMSC-21-096
Species: Turtle
Breed:
Age:
Sex:

Bill To: Marine Mammal Stranding Center
3625 Brigantine Blvd
Brigantine NJ 08203

Owner: Marine Mammal Stranding C

Date Received: 07/09/21

Date Reported: 09/20/21

Note: The results apply to the samples as received and relate only to the samples tested.

Pathology Section

Gross Pathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 08/24/21

Specimen Collected on: 07/08/21

GROSS EXAMINATION:

A male, Kemp's Ridley Sea Turtle (MMSC-21-096) of unknown age weighing 3.18 lbs. was submitted for necropsy. Postmortem body condition was fair to poor. Muscle mass and fat stores were adequate. There was moderate bruising of the plastron scutes. There was swelling, mild hemorrhage and edematous expansion of the subcutaneous tissue of the head, around the eyes, neck, and shoulders. The esophagus, crop, and stomach were empty. The small and large intestine contained minimal green-brown digesta and fecal material. The brain, heart, lungs, liver, kidneys, all other organs not described were grossly unremarkable.

GROSS FINDINGS:

PLASTRON: Moderate scute bruising; HEAD, EYE, NECK and SHOULDERS: Subcutaneous hemorrhage and edema;
GASTROINTESTINAL TRACT: Decreased content;

COMMENTS:

A definitive cause of death for this sea turtle was not apparent by gross examination however the plastron bruising and the subcutaneous hemorrhage and edema of the head, eyes, neck, and shoulders, suggests that trauma may have been a contributing factor. Additionally, inspection of the gastrointestinal tract revealed that this turtle was not eating well during the immediate antemortem period. No significant pathologic lesions or apparent evidence of active infectious disease, parasitism or neoplasia were noted. Histopathology is pending.

PATHOLOGIST: Shannon Swist, DVM, MS

Histopathology

Authorized by: Shannon Swist, DVM, MS, Vet. Pathologist on 09/20/21

Specimen Collected on: 07/08/21

Histopathology performed at Texas Veterinary Medical Diagnostic Laboratory, College Station, TX. See attached report. Please direct any questions to the NJ AHDL.

Testing Lab:	TVMDL - College Station	Client:	State Of New Jersey, Department of Agriculture
Case Coordinator:	Laura Rice, MS, DVM, DACVP		Division of Animal Health Lab, P. O. Box 330
Date Received:	08/26/2021		Trenton, NJ 08625
Report Date:	09/03/2021	Owner:	MMSC
		Veterinarian:	Dr. Shannon Swist

FINAL REPORT

Medical History: Medical history on file.
Animal ID: 21-1543 mmSC21-096 Turtle :: NFS
Specimen: Tissue :: Fixed **Collection Date:** 07/08/2021

HISTOPATHOLOGY

Test: Histopathology - Postmortem 8 or Fewer Tissues

Number of Tissues 8
Sections/Slides 23/6

Histopathologic Diagnosis

Slides 1-6. Sections of the following tissues are examined: brain, liver, trachea, heart, lung, spleen, kidney, gastrointestinal tract, and eye.

Liver: Diffuse, mild hepatic lipodosis.

Brain, Trachea, Heart, Lung, Spleen, Kidney, Gastrointestinal tract, and Eye: No significant findings.

Comments

The cause for the death of this turtle is not readily apparent after histologic examination of the submitted tissues. The liver had changes consistent with early hepatic lipodosis, and this likely developed due to increased mobilization of fat to the liver secondary to a negative energy balance. There is advanced postmortem decomposition (autolysis) in this case that impedes pathologic examination. Autolysis and putrefaction result in rapid degradation and distortion of the tissues, hampering interpretation of postmortem findings. No obvious lesions are identified that explain the cause of death; however, the autolysis could be masking underlying abnormalities. No apparent evidence of active infectious disease or neoplasia is noted.

Authorized by: Laura Rice, MS, DVM, DACVP
Veterinary Pathologist



Marine Mammal Stranding Center

P.O. Box 773, 3625 Brigantine Blvd, Brigantine, NJ 08203

Telephone (609) 266-0538 Fax (609) 266-6300 www.mmsc.org



21-1543
07/09/21

MMSC-21-096

Stranding Date: 07/08/2021

Field #: 21-096

Species: Kemp's Ridley Sea Turtle

Sex: U

Age: U

Weight: **1443.9g (actual)**

Length: 10" (actual)

Stranding Location: Lower Alloways Creek, Salem Nuclear Power Plant and the Delaware Bay

History: Dead, code 1. Found in outflow of intake pipe. Bruising on plastron and head. Neck and eyes bloated. Taken to NJAHDL for necropsy.

If you have any questions feel free to contact us at 609-266-0538.

Note: Please email all results to mmsc@verizon.net



GENERAL SPECIMEN SUBMISSION FORM

U.S. Postal Address
Animal Health Diagnostic Laboratory
NJ Department of Agriculture
PO Box 330
Trenton NJ 08625

Fed Ex/UPS/ Delivery Address
Animal Health Diagnostic
Laboratory, NJPHEAL
3 Schwarzkopf Drive
Ewing, NJ 08628

Contact Information
Phone: (609) 406-6999
Fax: (609) 671-6414
Website: www.jerseyvetlab.nj.gov
E-mail: jerseyvetlab@ag.nj.gov

(Lab Use Only)

Please print FULL name and provide requested information. By submitting specimen/s and submission form/s, submitter is entering into an agreement of the proposed work with the Animal Health Diagnostic Laboratory. Please refer to the website for further details on user policies.

Submitter			
Name: Robert Schoelkopf			
Clinic/Institution: Marine Mammal Stranding Center			
Address: PO Box 773, 3625 Brigantine Blvd.			
City: Brigantine	State: NJ	Zip: 08203	
Phone: 609-266-0538	Fax: 609-266-6300		
E-Mail: mmsc@verizon.net			
Lab Report Distribution Preference:		Account Number:	
<input type="checkbox"/> Mail <input type="checkbox"/> Fax <input checked="" type="checkbox"/> E-Mail <input type="checkbox"/> Phone			

Owner (Check if same as submitter <input checked="" type="checkbox"/>)			
Name:			
Premise ID/Name:			
Address:			
City:	State:	Zip:	
Phone:	Fax:		
E-Mail:			
Lab Report Distribution Preference:			
<input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> E-Mail <input type="checkbox"/> Phone			

Send Report To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other
Bill To: <input checked="" type="checkbox"/> Submitter <input type="checkbox"/> Owner <input type="checkbox"/> Other

Necropsy: Body Remains Disposal after Necropsy
<input checked="" type="checkbox"/> Laboratory <input type="checkbox"/> Crematory

Animal Identification (See reverse side for additional animals)				
Sex Codes: M=Male, F=Female, C=Castrated Male, S=Spayed Female				
	Animal or Sample ID	Species	Breed	Sex
1	MMSC 21-096	Sea Turtle	Kemps	U
2				
3				
4				
5				

Specimen Description	
Specimen Collection Date:	
<input type="checkbox"/> Blood, EDTA Qty:	<input checked="" type="checkbox"/> Carcass Qty: 1
<input type="checkbox"/> Feces Qty:	<input type="checkbox"/> Fluid Qty:
<input type="checkbox"/> Serum Qty:	<input type="checkbox"/> Slide Qty:
<input type="checkbox"/> Swab Qty:	<input type="checkbox"/> Tissue fixed Qty:
<input type="checkbox"/> Tissue fresh Qty:	<input type="checkbox"/> Other Qty:

Testing Purpose:	<input type="checkbox"/> Clinical <input type="checkbox"/> Regulatory <input type="checkbox"/> Surveillance <input type="checkbox"/> Import <input type="checkbox"/> Export Country of Destination :
Type of flock/herd/group:	Size of flock/herd: Number sick: Number sampled:
History/Clinical Signs (use reverse page for additional description):	

Test/s (Check under multiple species heading if you don't see test under species of interest). Refer to fee list for test fees.	
Avian/Pigeon: <input type="checkbox"/> AI PCR <input type="checkbox"/> AI AGID <input type="checkbox"/> APMV-1/NDV PCR <input type="checkbox"/> EEE PCR <input type="checkbox"/> Necropsy <input type="checkbox"/> West Nile PCR Avian/Pigeon Panels: <input type="checkbox"/> Breeding Pigeon Health Screen I <input type="checkbox"/> Breeding Pigeon Health Screen II <input type="checkbox"/> Pigeon Respiratory Bacterial PCR <input type="checkbox"/> Pigeon Viral PCR <input type="checkbox"/> Racing Pigeon Health Screen I <input type="checkbox"/> Racing Pigeon Health Screen II <input type="checkbox"/> Racing Pigeon Health Screen III <input type="checkbox"/> Thrush & Canker PCR Caprine/Ovine: <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CAE/OPP AGID <input type="checkbox"/> CL Serology <input type="checkbox"/> Scrapie Canine/Feline: <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Lyme Equine: <input type="checkbox"/> CEM (Breeding) <input type="checkbox"/> EEE IgM ELISA <input type="checkbox"/> EEE PCR <input type="checkbox"/> EIA AGID <input type="checkbox"/> EIA ELISA <input type="checkbox"/> EHV1 SN <input type="checkbox"/> EHV1 PCR <input type="checkbox"/> EVA SN <input type="checkbox"/> Influenza HI <input type="checkbox"/> Influenza PCR <input type="checkbox"/> Lyme <input type="checkbox"/> PHF IFA <input type="checkbox"/> PHF PCR <input type="checkbox"/> Strangles PCR <input type="checkbox"/> West Nile IgM ELISA	Equine (continued): <input type="checkbox"/> West Nile PCR Equine Panels: <input type="checkbox"/> Abortion, fetal tissue <input type="checkbox"/> Abortion, maternal serum <input type="checkbox"/> Diarrhea (culture, PHF, parasites) <input type="checkbox"/> Neurologic, serum (EEE, WNV, EHV-1) <input type="checkbox"/> Neurologic, PCR brain <input type="checkbox"/> Respiratory, (EHV-1, S. equi, Influenza A) <input type="checkbox"/> Respiratory, serology Multiple species <input type="checkbox"/> Aerobic Culture & Sensitivity <input type="checkbox"/> Aerobic Culture Only <input type="checkbox"/> Anaerobic Culture <input type="checkbox"/> Biopsy/Histopathology <input type="checkbox"/> Brucellosis <input type="checkbox"/> Campylobacter <input type="checkbox"/> FMD <input type="checkbox"/> Fungal culture/ Mycology <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Listeria <input type="checkbox"/> Leptospira MAT 6 serovars <input type="checkbox"/> Mycobacterium / Acid Fast Bacteria <input checked="" type="checkbox"/> Necropsy <input type="checkbox"/> Necropsy (Field) <input type="checkbox"/> Qualitative Fecal Parasite Exam <input type="checkbox"/> Quantitative Fecal Parasite Exam <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Salmonella <input type="checkbox"/> Virus Isolation Please specify virus: _____ Refer to test fees schedule for more tests Other Test/s _____ See page 2 for additional tests

Signature of Submitter: _____	Date: _____
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Qualtrax # 1130.4

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Reference Qualtrax # 1125

Biopsy/Surgical Pathology: <div style="text-align: center; margin-top: 10px;"> </div>	Describe lesions and fill in the diagram to indicate extent of lesion and site:
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History/Clinical Signs/Provisional Diagnosis:
 (Space provided for additional information)

Animal Identification (Use Continuation Form for additional specimens)					
	Animal or Sample ID	Species	Breed	Sex	Age
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Test/s Requested Continued (Check under multiple species category if you don't see test/s of interest under species of interest)	
Bovine <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Bovine Leucosis AGID <input type="checkbox"/> Brucellosis card <input type="checkbox"/> BSE <input type="checkbox"/> BVD PCR <input type="checkbox"/> Johne's ELISA <input type="checkbox"/> Johne's PCR <input type="checkbox"/> Johne's fecal culture Porcine <input type="checkbox"/> ASF PCR <input type="checkbox"/> CSF PCR <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> PRV Fish (Water Temperature _____) <input type="checkbox"/> Fish Health Certification <input type="checkbox"/> KHV PCR <input type="checkbox"/> VHS PCR <input type="checkbox"/> Virus Isolation _____	Exotic/Zoo/Wild <input type="checkbox"/> Blue tongue AGID <input type="checkbox"/> Brucellosis <input type="checkbox"/> CL Serology <input type="checkbox"/> EEE PCR <input type="checkbox"/> Influenza A AGID <input type="checkbox"/> Influenza A PCR <input type="checkbox"/> Johnes Culture <input type="checkbox"/> Johnes PCR <input type="checkbox"/> TSE <input type="checkbox"/> West Nile PCR <input type="checkbox"/> Yersinia culture Other Tests <input type="checkbox"/> _____

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Reference Qualtrax # 1125

End of Report