

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21128

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	05/11/2008
Area:	South Pacific	DateSubmitted:	7/9/2008
State:	South Pacific	DateReceived:	7/9/2008
Country:	United States	DateExamined:	7/10/2008

SPECIMENS SUBMITTED: Carcass-Frozen

History: This animal was hooked during a longline albacore tuna fishing expedition in the South Pacific (13°01.4 S, 168°15.6 W). Trip identification number AS0024, Set#27. Body measurements (cm): SCL-40.0, CCL-42.0, TTL-6.0.

Findings: This was an immature female in good body condition with a very clean shell and translucent scute. A 14.0 offset hook perforated the right maxilla with the barb exiting below the eye. Grossly, no lesions were seen internally. Microscopy revealed severe diffuse pulmonary edema.

Final diagnosis: Accession 1-Trauma suspect.

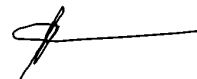
Comments: The appearance of the shell suggested this animal was a pelagic phase turtle that had never been near shore. The changes in the lungs (edema) were most likely a sequela to forced submergence as no other cause could be identified on microscopy. The good body condition indicated this animal died rapidly, and the history, combined with lack of other lesions to explain this mortality, points to forced submergence as the cause of death.

Management: Please see NMFS guidelines on mitigation of longline hooking of sea turtles.

Report Date (mm/dd/yyyy): 8/14/2008

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

N A T I O N A L W I L D L I F E H E A L T H C E N T E R
N E C R O P S Y R E P O R T

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21128
Accession: 1
Date Collected: 05/11/2008
Date Examined: 7/10/2008
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Good) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: () TAG NO.: ()
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Straight carapace length (40 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)

HISTORY: This animal was hooked during a longline albacore tuna fishing expedition in the South Pacific (13°01.4 S, 168°15.6 W). Trip identification number AS0024, Set#27. Body measurements (cm): SCL-40.0, CCL-42.0, TTL-6.0.

External/Internal

EXTERNAL: There is a 14.0 offset circle hook in the right maxilla with the tip of the hook exiting the maxilla ca. 1 cm below and caudal to the right eye. Attached to the hook is 1.8mm monofilament line. The carapace is clean and bereft of growth. The scute margins are translucent.

INTERNAL: The pectoral muscles are adequate and there are moderate amounts of well-formed coelomic fat. The liver is firm homogenous red-brown. The heart is firm, smooth, homogenous red. The lungs are dark and homogenous red. The tracheal lumen is smooth and tan. The spleen is firm, smooth, and homogenous red-brown. The kidneys are firm, smooth, and homogenous brown. The urinary bladder is empty. There are fragments of a single sama bait in the stomach. No lesions are seen in the pericardial sac, heart valves, tracheal lumen, gall bladder, adrenal and thyroid glands, pancreas and superficial and cut surface of liver, heart, kidney, and spleen.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Frozen.
HISTO: Gland salt, Brain (A); Lung, Heart (B); Liver, Kidney, Spleen, Pancreas (C); Intestine small (D); Stomach, Intestine large (E).

Laboratory Results

HISTOPATHOLOGY

Lung: Small airways are filled with homogenous eosinophilic material mixed with occasional red cells.

All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

- 1. Severe, diffuse, acute, edema, lungs.
-

COMMENTS: The appearance of the shell suggested this animal was a pelagic phase turtle that had never been near shore. The changes in the lungs (edema) were most likely a sequela to forced submergence as no other cause could be identified on microscopy. The good body condition indicated this animal died rapidly, and the history, combined with lack of other lesions to explain this mortality, points to forced submergence as the cause of death.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Trauma suspect	(T10050)	(M10000)	(E90020)	()	()	()

Diagnostic findings may not be published without the knowledge and consent of the pathologist. Milt Code: (Trauma)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
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HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21300

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	6/11/2009
Area:	South Pacific	DateSubmitted:	7/22/2009
State:	South Pacific	DateReceived:	7/22/2009
Country:	United States	DateExamined:	7/22/2009

SPECIMENS SUBMITTED: Carcass-Thawed

History: This turtle was hooked during a longline fishing expedition in the South Pacific. It was dead when brought aboard. Trip identification: Trip No. AS0035, Set No. 17.

Findings: Accession 1-green turtle immature female in excellent body condition. No remarkable gross or microscopic lesions were seen.

Final diagnosis: Accession 1-Forced submergence.

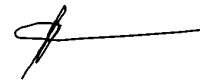
Comments: Gross and microscopic findings pointed to gross submergence as cause of death.

Management: Please refer to NMFS recommendations for mitigation of bycatch of sea turtles in pelagic longline fisheries.

Report Date (mm/dd/yyyy): 8/24/2009

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21300
Accession: 1
Date Collected: 6/11/2009
Date Examined: 7/22/2009
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION:(Excellent) POSTMORTEM:(Good) EUTHANASIA:(Not euthanized)
TAG TYPE:(Reference Number) TAG NO.:(061109)
SPECIES:(Turtle: Green) AGE:(Immature) SEX:(Female)
MORPHOMETRICS: Weight carcass (12 kg), Straight carapace length (43.4 cm), Curved
carapace length (46.5 cm), Tail length (7.5 cm).
COLLECTION-SITE:(Open Ocean-South Pacific) AREA:(South Pacific) STATE:(South
Pacific) COUNTRY:(United States)
HISTORY: This turtle was hooked during a longline fishing expedition in the South
Pacific. It was dead when brought aboard. Trip identification: Trip No. AS0035,
Set No. 17.

External/Internal

EXTERNAL: There is a hook with lead in the left front flippe with the barb
protruding. The barb is out. The hook is size 15 offset with monofilament.

INTERNAL: The stomach contains turbinaria, fish, and plastic sheeting.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.

HISTO: Brain (A); Spleen, Liver (B); Heart (C); Lung (D); Ovary, Kidney (E).

Laboratory Results

HISTOPATHOLOGY

All organs: No remarkable lesions are seen.

COMMENTS:Gross and microscopic findings pointed to gross submergence as cause of
death.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	()	(FY2220)	()	()

Diagnostic findings may not be published without the knowledge and consent of the
pathologist. Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21325

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	9/02/2009
Area:	South Pacific	DateSubmitted:	9/17/2009
State:	South Pacific	DateReceived:	9/17/2009
Country:	United States	DateExamined:	9/17/2009

SPECIMENS SUBMITTED: Carcass-Thawed

History: This turtle was hooked during a longline fishing expedition in the South Pacific. The coordinates where caught are 13°27.3S and 169°18.0W. The trip number is AS0038 Set 12.

Findings: Accession 1-green turtle immature male in good body condition. An offset circle hook perforated the left maxilla, there was blood in the trachea, and the lungs were diffusely red. A single sama was in the stomach. Histology revealed mild lung edema.

Final diagnosis: Accession 1-Forced submergence.

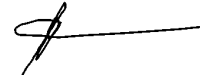
Comments: Gross and microscopic lesions pointed to forced submergence as cause of death.

Management: Please see NMFS recommendations for mitigation of hooking of LL turtles.

Report Date (mm/dd/yyyy): 12/1/2009

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

N A T I O N A L W I L D L I F E H E A L T H C E N T E R
N E C R O P S Y R E P O R T

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21325
Accession: 1
Date Collected: 9/02/2009
Date Examined: 9/17/2009
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Good) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: () TAG NO.: ()
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Male)
MORPHOMETRICS: Weight carcass (11.7 kg), Straight carapace length (44 cm), Curved carapace length (46.5 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This turtle was hooked during a longline fishing expedition in the South Pacific. The coordinates where caught are 13°27.3S and 169°18.0W. The trip number is AS0038 Set 12.

External/Internal

EXTERNAL: There is an offset circle hook completely perforating the left maxilla.
INTERNAL: There is blood in the trachea. The lungs are red. One sardine bait, a squid beak, plastic bag, and plastic pieces are found in the stomach.
PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.
HISTO: Brain (A); Lung (B); Intestine large, Heart (C); Spleen, Liver, Kidney (D).

Laboratory Results

HISTOPATHOLOGY

Lung: Rare clumps of homogenous eosinophilic material are within small airways.
All other Organs: No remarkable lesions are seen.
Morphologic Diagnosis:

1. Mild, acute, diffuse, edema, lung.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death.

Final Diagnosis (in order of importance)
Diagnosis Topog Morpho Etiol Funct Dis Link

1. Forced submergence () () () (FY2220) () ()

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
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HONOLULU, HAWAII 96850
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Case Number: 21392

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	10/31/2009
Area:	South Pacific	DateSubmitted:	3/1/2010
State:	South Pacific	DateReceived:	3/1/2010
Country:	United States	DateExamined:	3/1/2010

SPECIMENS SUBMITTED: Carcass-Thawed

History: This turtle was caught during a longline fishing expedition in the South Pacific. Trip No. AS0039, Set No. 16, MTRP ID date 10/31/09.

Findings: Accession 1-green turtle immature female in fair body condition. Significant gross lesions included a small perforation in the right gular area. There was red fluid in the bronchi and small white nodules in the intestines. There were at least 4 sama bait, pyrosoma, and plastic fragments in the stomach and intestines. Histology revealed pulmonary edema and the white nodules in the intestines were probable parasite cysts.

Final diagnosis: Accession 1-Forced submergence.

Comments: Gross and microscopic lesions pointed to drowning as cause of death.

Management: Please see NMFS recommendations on mitigation of hooking of sea turtles on longline vessels.

Report Date (mm/dd/yyyy): 4/21/2010

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

N A T I O N A L W I L D L I F E H E A L T H C E N T E R
N E C R O P S Y R E P O R T

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21392
Accession: 1
Date Collected: 10/31/2009
Date Examined: 3/1/2010
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Fair) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (AS0039)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Weight carcass (11.1 kg), Straight carapace length (43.5 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This turtle was caught during a longline fishing expedition in the South Pacific. Trip No. AS0039, Set No. 16, MTRP ID date 10/31/09.

External/Internal

EXTERNAL: There is a small perforation in the right gular area presumably where the turtle was hooked.

INTERNAL: There is red fluid in the bronchi. There are at least 4 sama bait in the stomach along with pyrosomes and a large amount of thin plastic material. There are white nodules on the intestinal serosa.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.

HISTO: Brain (A); Skin (B); Intestine small, Intestine large (C); Lung (D); Heart, Liver, Spleen (E).

Laboratory Results

HISTOPATHOLOGY

Intestine small: Smooth muscle wall contains large granulomas comprising foamy macrophages surrounding central cavity lined by homogenous eosinophilic laminated material (parasite cyst).

Lung: Diffusely, airways contain variable amounts of eosinophilic material mixed with sloughing edicular epithelium.

All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

1. Moderate, diffuse, acute, edema, lung.

COMMENTS:Gross and microscopic lesions pointed to drowning as cause of death.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Func	Dis	Link
1. Forced submergence	()	()	(FY2220)	(

Diagnostic findings may not be published without the knowledge and consent of the pathologist. Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21462

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	5/20/2010
Area:	South Pacific	DateSubmitted:	7/23/2010
State:	South Pacific	DateReceived:	7/23/2010
Country:	United States	DateExamined:	7/23/2010

SPECIMENS SUBMITTED: Carcass-Thawed

History: This turtle was hooked during a longline fishing expedition in the South Pacific. Trip No. AS0045, Set No. 15. MTRP ID date is 05-20-10.

Findings: Accession 1-green turtle immature unknown sex in good body condition. Significant gross findings included collapsed lungs, a single bait in the stomach and gooseneck barnacles and plastic in intestines. Histology revealed mild inflammation of skeletal muscle and severe edema of the lungs.

Final diagnosis: Accession 1-Forced submergence.

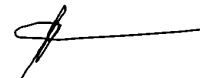
Comments: Gross and microscopic findings pointed to forced submergence as cause of death. The animal had a mild inflammation of skeletal muscle the cause of which could not be determined but which was not considered contributory to cause of death.

Management: See NMFS guidelines for mitigation of longline bycatch of sea turtles.

Report Date (mm/dd/yyyy): 10/8/2010

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

N A T I O N A L W I L D L I F E H E A L T H C E N T E R
N E C R O P S Y R E P O R T

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21462
Accession: 1
Date Collected: 5/20/2010
Date Examined: 7/23/2010
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Good) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (05-20-10)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Unknown)
MORPHOMETRICS: Weight carcass (7.2 kg), Straight carapace length (36.5 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This turtle was hooked during a longline fishing expedition in the South Pacific. Trip No. AS0045, Set No. 15. MTRP ID date is 05-20-10.

External/Internal

EXTERNAL: There are small healed notches in the hind flipper.

INTERNAL: The lungs are collapsed. The bladder is full. One bait is found in the stomach. Goose-necked barnacles and plastic are found in the intestines

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.

HISTO: Brain (A); Skin (B); Skeletal muscle, Gland salt (C); Heart (D); Lung (E); Kidney (F).

Laboratory Results

HISTOPATHOLOGY

Skeletal muscle: There is a locally extensive area of mononuclear infiltrates.

Lung: Airways contain clumps of homogenous eosinophilic material occasionally mixed with clusters of ciliated columnar epithelium. In some sections, airways are collapsed.

All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

1. Mild, focal, non-suppurative, inflammation, skeletal muscle.
 2. Severe, diffuse, acute, edema, lung.
-

COMMENTS: Gross and microscopic findings pointed to forced submergence as cause of

death. The animal had a mild inflammation of skeletal muscle the cause of which could not be determined but which was not considered contributory to cause of death.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Func	Dis	Link
1. Forced submergence	()	()	(FY2220)(

Diagnostic findings may not be published without the knowledge and consent of the pathologist. Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21463

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	4/2/2010
Area:	South Pacific	DateSubmitted:	7/23/2010
State:	South Pacific	DateReceived:	7/23/2010
Country:	United States	DateExamined:	7/23/2010

SPECIMENS SUBMITTED: Carcass-Thawed

History: This turtle was hooked during a longline fishing expedition in the South Pacific. Trip No. AS0043, Set 03. MTRP ID date is 04-02-10.

Findings: Accession 1-green turtle immature female in fair body condition. Significant gross findings included a hook piercing the gular area and internally, collapsed lungs and presence of one sama bait in the stomach. On histology, lungs had collapsed airways filled with fluid.

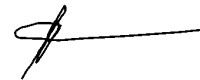
Final diagnosis: Accession 1-Forced submergence.

Comments: Gross and microscopic lesions pointed to forced submergence as cause of death.

Management: Please see NMFS recommendations for mitigation of sea turtle bycatch.

Report Date (mm/dd/yyyy): 10/12/2010 **Necropsy report:** Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21463
Accession: 1
Date Collected: 4/2/2010
Date Examined: 7/23/2010
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Fair) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (04-02-10)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Weight carcass (2.5 kg), Straight carapace length (26 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This turtle was hooked during a longline fishing expedition in the South Pacific. Trip No. AS0043, Set 03. MTRP ID date is 04-02-10.

External/Internal

EXTERNAL: There is a 4 cm notch on the left marginal scute. The 7th & 8th left marginal notch is cut and healed. The hook goes down through the left gular area.

INTERNAL: The lungs sink in formalin. There is one bait in the stomach. The gut fill is 10%.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.

HISTO: Brain, Gland salt, Skeletal muscle (A); Liver, Pancreas, Spleen (B); Lung (C); Kidney (D); Heart (E); Skin, Intestine small (F).

Laboratory Results

HISTOPATHOLOGY

Lung: Diffusely, airways are collapsed and contain clumps of homogenous eosinophilic material occasionally mixed with clusters of ciliated columnar epithelium or red cells.

All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

1. Severe, diffuse, edema and airway collapse, lung.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	(FY2220)	(

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21487

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	7/09/2010
Area:	South Pacific	DateSubmitted:	9/24/2010
State:	South Pacific	DateReceived:	9/24/2010
Country:	United States	DateExamined:	9/24/2010

SPECIMENS SUBMITTED: Carcass-Thawed

History: The turtle was hooked during a longline fishing expedition from Pago Pago, American Samoa. MTRP ID date: 07-09-10, AS0049, Set 25.

Findings: Accession 1-green turtle immature female in poor body condition. Significant gross findings included atrophy of pectoral muscles and presence of Turbinaria and jellyfish in the stomach. Histology revealed mild fluid and blood accumulation in the lungs.

Final diagnosis: Accession 1-Forced submergence.

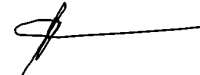
Comments: Gross and microscopic lesions pointed to forced submergence as cause of death. This animal was somewhat unusual for a longline turtle in that it was in poor body condition.

Management: Please see NMFS guidelines on mitigation of longline bycatch.

Report Date (mm/dd/yyyy): 11/23/2010

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21487
Accession: 1
Date Collected: 7/09/2010
Date Examined: 9/24/2010
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Poor) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (07-09-10)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Weight carcass (6.4 kg), Straight carapace length (36.5 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: The turtle was hooked during a longline fishing expedition from Pago Pago, American Samoa. MTRP ID date: 07-09-10, AS0049, Set 25.

External/Internal

EXTERNAL: There is a size 15 circle hook through the left shoulder area of the flipper.

INTERNAL: The pectoral muscles are atrophied. There is no crop. The intestines contain turbinaria ornata and tentacles from bluebottle jellyfish.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.

HISTO: Gland salt, Brain (A); Lung (B); Liver, Kidney (C); Spleen, Heart (D); Intestine large, Intestine small, Skin (E).

Laboratory Results

HISTOPATHOLOGY

Lung: Occasional clumps of homogenous eosinophilic material and red cells are within small airways.

All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

1. Moderate, diffuse, acute, hemorrhage and edema, lung.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death. This animal was somewhat unusual for a longline turtle in that it was in poor body condition.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	(FY2220)	(

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21488

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	7/07/2010
Area:	South Pacific	DateSubmitted:	9/24/2010
State:	South Pacific	DateReceived:	9/24/2010
Country:	United States	DateExamined:	9/24/2010

SPECIMENS SUBMITTED: Carcass-Thawed

History: This turtle was hooked during longline fishing expedition from Pago Pago, American Samoa. MTRP ID date: 07-07-10, AS0049, Set 23.

Findings: Accession 1-green turtle immature female in excellent body condition. Grossly, the only significant finding was presence of a hook in the left maxilla. Histology was unremarkable save for mild accumulation of fluids in small airways of the lung. Stomach contents contained pelagic snails, Turbinaria, and salps.

Final diagnosis: Accession 1-Forced submergence.

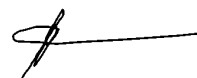
Comments: Gross necropsy findings indicated this animal died acutely. Microscopy revealed mild accumulations of fluids in the lungs compatible with forced submergence.

Management: Please see NMFS guidelines for mitigation of longline bycatch of sea turtles.

Report Date (mm/dd/yyyy): 11/23/2010

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
1845 Wasp Blvd Bldg 176
Honolulu, Hawaii 96818
United States

Case: 21488
Accession: 1
Date Collected: 7/07/2010
Date Examined: 9/24/2010
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION:(Excellent) POSTMORTEM:(Good) EUTHANASIA:(Not euthanized)
TAG TYPE:(Reference Number) TAG NO.:(07-07-10)
SPECIES:(Turtle: Green) AGE:(Immature) SEX:(Female)
MORPHOMETRICS: Weight carcass (7.9 kg), Straight carapace length (39.5 cm).
COLLECTION-SITE:(Open Ocean-South Pacific) AREA:(South Pacific) STATE:(South Pacific) COUNTRY:(United States)
HISTORY: This turtle was hooked during longline fishing expedition from Pago Pago, American Samoa. MTRP ID date: 07-07-10, AS0049, Set 23.

External/Internal

EXTERNAL: There is a size 15 offset circle hook in the left maxilla. There is dark pigmented blotching on the plastron edges and on the ventral neck and flipper skin. The carapace is dark colored.

INTERNAL: There are bait remains in the esophagus. There is no crop. The stomach contains salps, janthina snails, and turbinaria ornata.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.

HISTO: Gland salt, Brain (A); Lung (B); Liver, Mesentery, Spleen (C); Kidney (D); Intestine large, Intestine small, Pancreas (E); Skin (F).

Laboratory Results

HISTOPATHOLOGY

Lung: Small amounts of homogenous eosinophilic material is within small airways.

All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

1. Mild, diffuse, acute, edema, lung.

COMMENTS:Gross necropsy findings indicated this animal died acutely. Microscopy revealed mild accumulations of fluids in the lungs compatible with forced submergence.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	(FY2220)	(

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21568

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	12/15/2010
Area:	South Pacific	DateSubmitted:	3/29/2011
State:	South Pacific	DateReceived:	3/29/2011
Country:	United States	DateExamined:	3/29/2011

SPECIMENS SUBMITTED: Carcass-Frozen

History: This turtle was hooked during a longline fishing expedition in the South Pacific. Trip identification is AS0074, Set 09. MTRP ID date is 12-15-10.

Findings: Accession 1-green turtle immature female in excellent body condition. Significant gross findings included a hook that penetrated subcutaneous tissues of left neck and presence of two bait fish in the stomach. Microscopy revealed collapse of small airways in lungs with presence of fluid and sloughed mucosal cells.

Final diagnosis: Accession 1-Forced submergence.

Comments: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Management: Please see NMFS recommendations for mitigation of longline interactions with sea turtles.

Report Date (mm/dd/yyyy): 6/14/2011

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

**NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT**

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Case: 21568
Accession: 1
Date Collected: 12/15/2010
Date Examined: 3/29/2011
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Excellent) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)

TAG TYPE: (Reference Number) TAG NO.: (12-15-10)

SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)

MORPHOMETRICS: Straight carapace length (40.8 cm).

COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)

HISTORY: This turtle was hooked during a longline fishing expedition in the South Pacific. Trip identification is AS0074, Set 09. MTRP ID date is 12-15-10.

External/Internal

EXTERNAL: There is a hook in the left neck that penetrates only subcutaneous tissue. Biopsies were taken from the inguinal region.

INTERNAL: Two baitfish are found in the esophagus. The stomach contains multiple velella, spirula, and plastic. The GI tract is 40% full.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Frozen.

HISTO: Gland salt, Brain (A); Kidney, Liver, Spleen (B); Lung, Intestine small (C); Heart, Intestine small, Pancreas (D); Skin (E).

Laboratory Results

HISTOPATHOLOGY

Lung: Diffusely, small airways are partially collapsed and filled with homogenous eosinophilic material with occasional clumps of sloughed columnar cells.

All other Organs: No remarkable lesions are seen.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	()	(FY2220)	()	()

Diagnostic findings may not be published without the knowledge and consent of the

21568-1
pathologist.

Page 2 of 2
Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21569

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	12/27/2010
Area:	South Pacific	DateSubmitted:	3/29/2011
State:	South Pacific	DateReceived:	3/29/2011
Country:	United States	DateExamined:	3/29/2011

SPECIMENS SUBMITTED: Carcass-Frozen

History: This turtle was hooked in the right front flipper on a long-line fishing expedition in the South Pacific. It was trip number AS0063 / set 49. The MTRP ID date is 12-27-10.

Findings: Accession 1-green turtle immature male in excellent body condition. No significant gross lesions were seen externally. Internally, lungs were collapsed and microscopy revealed airway collapse, fluid, and mucosal cell accumulation.

Final diagnosis: Accession 1-Forced submergence.


Comments: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Management: Please see NMFS recommendations for mitigation of longline interactions with sea turtles.

Report Date (mm/dd/yyyy): 6/14/2011

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Case: 21569
Accession: 1
Date Collected: 12/27/2010
Date Examined: 3/29/2011
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Excellent) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (12-27-10)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Male)
MORPHOMETRICS: Weight carcass (11.6 kg), Straight carapace length (44.1 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This turtle was hooked in the right front flipper on a long-line fishing expedition in the South Pacific. It was trip number AS0063 / set 49. The MTRP ID date is 12-27-10.

External/Internal

EXTERNAL: Although this turtle was hooked in the front flipper, there were no significant external findings.

INTERNAL: Both lungs appear to be collapsed. The stomach contains 2 bait, gooseneck barnacles, gill net, salps, and a large amount of plastic. The gut fill is estimated to be around 50%.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Frozen.

HISTO: Gland salt, Brain (A); Spleen, Liver, Kidney (B); Lung, Heart (C); Intestine small, Intestine large (D); Skin, Pancreas, Intestine small (E).

Laboratory Results

HISTOPATHOLOGY

Lung: Diffusely, small airways are partially collapsed and filled with homogenous eosinophilic material with occasional clumps of sloughed columnar cells. Rare round trematode eggs some of which are surrounded by macrophage are within edicular walls.

Gland salt: Rare trematode eggs with no inflammatory response are present.

All other Organs: No remarkable lesions are seen.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	()	(FY2220)	()	()

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21570

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	2/2/2011
Area:	South Pacific	DateSubmitted:	3/29/2011
State:	South Pacific	DateReceived:	3/29/2011
Country:	United States	DateExamined:	3/29/2011

SPECIMENS SUBMITTED: Carcass-Frozen

History: This animal was hooked during a long-line fishing expedition in the South Pacific. Trip number AS0076 / set number 3. The MTRP ID date is 2-2-2011.

Findings: Accession 1-green turtle immature female in fair body condition. No external lesions were seen. Internally, a single bait was in the stomach, and histology revealed airway collapse with fluid and mucosal cell accumulations.

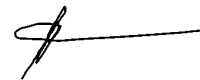
Final diagnosis: Accession 1-Forced submergence.

Comments: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Management: Please see NMFS recommendations for mitigation of longline interactions with sea turtles.

Report Date (mm/dd/yyyy): 6/14/2011 **Necropsy report:** Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

**NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT**

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Case: 21570
Accession: 1
Date Collected: 2/2/2011
Date Examined: 3/29/2011
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Fair) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (2/2/2011)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Weight carcass (17.6 kg), Straight carapace length (47.5 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This animal was hooked during a long-line fishing expedition in the South Pacific. Trip number AS0076 / set number 3. The MTRP ID date is 2-2-2011.

External/Internal

EXTERNAL:

INTERNAL: Found one bait in the esophagus. The GI track is about 50% full and contains gooseneck barnacles, sticks, plastics, and squid.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Frozen.

HISTO: Kidney, Brain (A); Liver, Kidney, Spleen, Pancreas (B); Lung, Heart (C); Intestine small, Intestine large (D); Skin (E).

Laboratory Results

HISTOPATHOLOGY

Lung: Diffusely, small airways are partially collapsed and filled with homogenous eosinophilic material with occasional clumps of sloughed columnar cells.

All other Organs: No remarkable lesions are seen.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	()	(FY2220)	()	()

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
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HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21571

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	10/30/2010
Area:	South Pacific	DateSubmitted:	3/29/2011
State:	South Pacific	DateReceived:	3/29/2011
Country:	United States	DateExamined:	3/29/2011

SPECIMENS SUBMITTED: Carcass-Frozen

History: This animal was hooked during a long-line fishing expedition in the South Pacific. The trip number is AS0059 / set number 24. The MTRP ID date is 10-30-10.

Findings: Accession 1-green turtle immature female in excellent body condition. A hook penetrates the tongue and no significant internal lesions are seen. Microscopy reveals moderate amounts of fluid and sloughed mucosal cells in the airways.

Final diagnosis: Accession 1-Forced submergence.

Comments: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Management: Please see NMFS recommendations for mitigation of longline interactions with sea turtles.

Report Date (mm/dd/yyyy): 6/14/2011

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

**NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT**

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Case: 21571
Accession: 1
Date Collected: 10/30/2010
Date Examined: 3/29/2011
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Excellent) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (10/30/2011)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Weight carcass (12.0 kg), Straight carapace length (44.0 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This animal was hooked during a long-line fishing expedition in the South Pacific. The trip number is AS0059 / set number 24. The MTRP ID date is 10-30-10.

External/Internal

EXTERNAL: The turtle was hooked in the left jaw hinge through the tongue.

INTERNAL: There are two bait in the esophagus. The gut is approximately 30% full and contains pelagic snails, plastic, feathers, plastic from a ramen package, and pieces of hard plastic.

PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Frozen.

HISTO: Gland salt, Brain (A); Liver, Kidney, Spleen, Pancreas (B); Lung, Heart (C); Intestine small, Intestine large (D); Skin (E).

Laboratory Results

HISTOPATHOLOGY

Lung: Diffusely, moderate amounts of sloughed edicular epithelium is within lumen of small airways as are small amounts of homogenous eosinophilic material.

All other Organs: No remarkable lesions are seen.

COMMENTS: Gross and microscopic lesions pointed to forced submergence as cause of death. Samples of liver, fat, scute, and blood were taken for NIST specimen banking.

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	()	(FY2220)	()	()

Diagnostic findings may not be published without the knowledge and consent of the

21571-1
pathologist.

Page 2 of 2
Milt Code: (Drowned)

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 21677

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Species submitted (n):

Turtle: Green (1)

Location:	Open Ocean-South Pacific	DateCollected:	06/16/2011
Area:	South Pacific	DateSubmitted:	11/28/2011
State:	South Pacific	DateReceived:	11/28/2011
Country:	United States	DateExamined:	11/28/2011

SPECIMENS SUBMITTED: Carcass-Thawed

History: This animal was hooked during a longline fishing expedition in the South Pacific (-13.10111, -170.28444). Trip identification number is AS0090, Set #39. Samples were taken for NIST specimen banking. The MTRP ID date is 6-16-11.

Findings: Accession 1-green turtle immature female in good body condition. Significant external findings included a 2 cm scar on the cranial plastron. Internally, white nodules were on the intestinal serosa that on microscopy were suspect parasite larvae. Two bait fish were in the stomach.

Final diagnosis: Accession 1-Forced submergence.

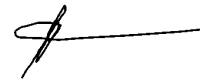
Comments: Gross and microscopic lesions along with history pointed to forced submergence as cause of death

Management: Please refer to NOAA guidelines on mitigation of longline bycatch in sea turtles.

Report Date (mm/dd/yyyy): 1/11/2012

Necropsy report: Enclosed

Copies of this report sent to:



If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case

**NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT**

Submitter Name:

Mr. George Balazs
National Oceanic and Atmospheric
Administration
2570 Dole St
Honolulu, Hawaii 96822
United States

Case: 21677
Accession: 1
Date Collected: 06/16/2011
Date Examined: 11/28/2011
Prosector: T. M. Work
Pathologist: T. M. Work

Signalment-Morphometrics-History

CONDITION: (Good) POSTMORTEM: (Good) EUTHANASIA: (Not euthanized)
TAG TYPE: (Reference Number) TAG NO.: (6-16-11)
SPECIES: (Turtle: Green) AGE: (Immature) SEX: (Female)
MORPHOMETRICS: Weight carcass (9.5 kg), Straight carapace length (40.6 cm).
COLLECTION-SITE: (Open Ocean-South Pacific) AREA: (South Pacific) STATE: (South Pacific) COUNTRY: (United States)
HISTORY: This animal was hooked during a longline fishing expedition in the South Pacific (-13.10111, -170.28444). Trip identification number is AS0090, Set #39. Samples were taken for NIST specimen banking. The MTRP ID date is 6-16-11.

External/Internal

EXTERNAL: There is a 2 cm scar on the cranial plastron.
INTERNAL: There are white nodules on the intestinal serosa. Two bait fish are found in the esophagus/stomach.
PRELIMINARY DIAGNOSIS: Drowning.

Samples

SECIMENS RECEIVED: Carcass-Thawed.
HISTO: Brain, Pancreas, Spleen (A); Lung (B); Kidney (C); Heart, Bladder urinary (D); Skin (E); Liver, Intestine small (F).

Laboratory Results

HISTOPATHOLOGY

Intestine small: Within smooth muscle is a nidus of foamy macrophages surrounding a lumen lined by a hyaline membrane.
Skin: A localized area of epidermis is eroded and replaced by clumps of eosinophilic cellular debris.
Kidney: Perivascular connective tissue spaces are distended with homogenous pink material.
Lung: Within small airways are accumulations of homogenous pink material mixed with red cell fragments.
All other Organs: No remarkable lesions are seen.

Morphologic Diagnosis:

1. Moderate, diffuse, acute, edema, lung.

COMMENTS:Gross and microscopic lesions along with history pointed to forced submergence as cause of death

Final Diagnosis (in order of importance)

Diagnosis	Topog	Morpho	Etiol	Funct	Dis	Link
1. Forced submergence	()	()	()	(FY2220)	()	()

Diagnostic findings may not be published without the knowledge and consent of the pathologist.

Milt Code: (Drowned)