

From: Strait, Kenneth A. <Kenneth.Strait@pseg.com>
Sent: Friday, April 10, 2020 8:02 PM
To: incidental.take@noaa.gov; EndangeredSpecies Resource
Cc: jeanette.bowers@dep.nj.gov
Subject: [External_Sender] SALEM GENERATING STATION-INCIDENTAL TAKE OF ATLANTIC STURGEON
Attachments: #1 Sturgeon Incidental Take Report for 04-10-20.pdf; #2 Sturgeon Incidental Take Report for 04-10-20.pdf; #3 Sturgeon Incidental Take Report for 04-10-20.pdf

Attached are the Incidental Take Reports and Data Collection Forms for the three moderately decomposed Atlantic sturgeon collected on 04/10/2020 at the Salem Generating Station cooling water intake. This incidental take is authorized under Biological Opinion NER-2010-6581.

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

Ken

Kenneth A. Strait

Manager-Biological Programs Phone: 856.339.3929
PSEG Nuclear Environmental Affairs Fax: 856.339.3905
P.O. Box 236, N33
Hancocks Bridge, NJ 08302 kenneth.strait@pseg.com
www.pseg.com/environment/estuary

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Subject: [External_Sender] SALEM GENERATING STATION-INCIDENTAL TAKE OF ATLANTIC STURGEON
Sent Date: 4/10/2020 8:01:50 PM
Received Date: 4/10/2020 8:11:41 PM
From: Strait, Kenneth A.

Created By: Kenneth.Strait@pseg.com

Recipients:

"jeanette.bowers@dep.nj.gov" <jeanette.bowers@dep.nj.gov>

Tracking Status: None

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

Tracking Status: None

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

Tracking Status: None

Post Office: pseg.com

Files	Size	Date & Time
MESSAGE	1377	4/10/2020 8:11:41 PM
#1 Sturgeon Incidental Take Report for 04-10-20.pdf	313634	
#2 Sturgeon Incidental Take Report for 04-10-20.pdf	314755	
#3 Sturgeon Incidental Take Report for 04-10-20.pdf	380996	

Options

Priority: Normal

Return Notification: Yes

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Alex Riehle (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Alex Riehle

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station, Circulating water Intake

Date animal observed: 04/10/2020 Time animal observed: 08:50 am

Date animal collected: 04/10/2020 Time animal collected: 09:00 am

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 10.0 °C; Sal. – 7.5 ppt; Wind – W; sky – overcast; waves – moderate; tide- flood 1 (91.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/10/2020; 01:00am

Water temperature (°C) at site and time of observation: 13.0 °C

Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 5 circulators

Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 100.0% /Unit 2: 89.5%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.9% /Unit 2: 90.4%

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION

Name: First Alex Last Riehle
Agency Affiliation PSEG subcontractor Email Alexander.Riehle@pseg.com
Address 100 South Cass Street, Middletown, DE 19709
Area code/Phone number (302) 378-9881 (Environmental Consulting Services, Inc.)

SEC 7 UNIQUE IDENTIFIER (PCTS)
No. Assigned by NMFS)

DATE REPORTED:

Month 04 Day 10 Year 2020

DATE EXAMINED:

Month 04 Day 10 Year 2020

SPECIES: (check one)

- ☐ shortnose sturgeon
☒ Atlantic sturgeon
☐ Unidentified *Acipenser* species
Check "Unidentified" if uncertain. See reverse side of this form for aid in identification.

LOCATION FOUND: ☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)

River/Body of Water Delaware River City Lower Alloways Creek State NJ
Descriptive location (be specific) Removed from Circulating Water Intake Structure (CWIS) during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.
Latitude 39.460603° (Dec. Degrees) Longitude -75.536133° (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)

- ☐ 1 = Fresh dead
☒ 2 = Moderately decomposed
☐ 3 = Severely decomposed
☐ 4 = Dried carcass
☐ 5 = Skeletal, scutes & cartilage

SEX:

- ☒ Undetermined
☐ Female ☐ Male
How was sex determined?
☐ Necropsy
☐ Eggs/milt present when pressed
☐ Borescope

MEASUREMENTS:

Circle unit

Fork length 83.3 cm
Total length 96.2 cm
Length ☒ actual ☐ estimate
Mouth width (inside lips, see reverse side) 5.3 cm
Interorbital width (see reverse side) 6.6 cm
Weight ☒ actual ☐ estimate 3.4 kg

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #

Tag Type

Location of tag on carcass

No Tags found

CARCASS DISPOSITION: (check one or more)

- ☐ 1 = Left where found
☐ 2 = Buried
☐ 3 = Collected for necropsy/salvage
☒ 4 = Frozen for later examination
☐ 5 = Other (describe).

Carcass Necropsied?

☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? ☒ Yes ☐ No

Disposition of Photos/Video PSEG Nuclear Environmental Affairs

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample

How preserved

Disposition (person, affiliation, use)

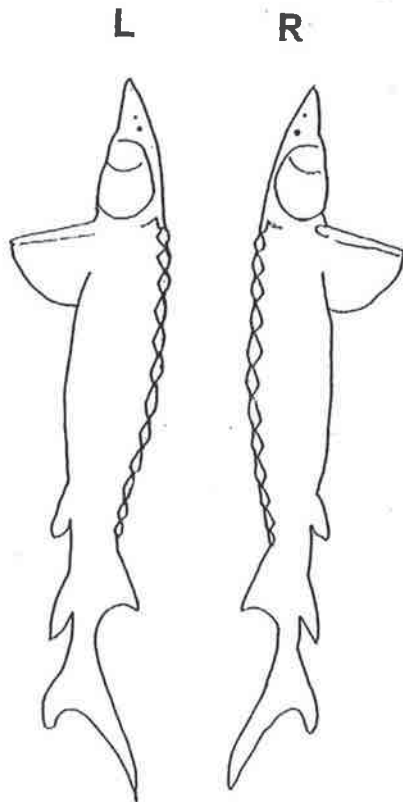
Pelvic fin clip

stored in non-denatured ethanol and refrigerated.

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A deceased and slightly decomposed Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure on 04/10/20, at 09:00am during routine trash rack cleaning. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, and no existing PIT tags were indicated. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the specimen was placed on ice and prepared for transport back to the ECSI main office, where it will be stored under refrigeration, awaiting direction on further disposition. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was deceased at the time of collection and was observed to be slightly decomposed. No evidence of major damage was exhibited.**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

Data Access Policy: Upon written request, information submitted to National Marine Fisheries Service (NOAA Fisheries) on this form will be released to the requestor provided that the requestor credit the collector of the information and NOAA Fisheries. NOAA Fisheries will notify the collector that these data have been requested and the intent of their use.

Photographs



A dorsal view showing the size and condition of the deceased, Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at 09:00am on 04/10/2020 from the circulating water intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/10/2020).



A left, ventral view of the specimen showing some evidence of minor decomposition, but no indications of major external damage (04/10/2020).

Photographs



A right, ventral view of the specimen, again showing some evidence of minor decomposition, but no indications of major external damage (04/10/2020).

Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Alex Riehle (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Alex Riehle

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station, Circulating water Intake

Date animal observed: 04/10/2020 Time animal observed: 08:50 am

Date animal collected: 04/10/2020 Time animal collected: 09:00 am

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. - 10.0 °C; Sal. - 7.5 ppt; Wind - W; sky - overcast; waves - moderate; tide- flood 1 (91.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/10/2020; 01:00am

Water temperature (°C) at site and time of observation: 13.0 °C

Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 5 circulators

Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 100.0% / Unit 2: 89.5%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.9% / Unit 2: 90.4%

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION

Name: First Alex Last Riehle
Agency Affiliation PSEG subcontractor Email Alexander.Riehle@pseg.com
Address 100 South Cass Street, Middletown, DE 19709
Area code/Phone number (302) 378-9881 (Environmental Consulting Services, Inc.)

SEC 7 UNIQUE IDENTIFIER (PCTS
No. Assigned by NMFS)

DATE REPORTED:

Month 04 Day 10 Year 2020

DATE EXAMINED:

Month 04 Day 10 Year 2020

SPECIES: (check one)

- ☐ shortnose sturgeon
☒ Atlantic sturgeon
☐ Unidentified *Acipenser* species
Check "Unidentified" if uncertain. See reverse side of this form for aid in identification.

LOCATION FOUND: ☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)

River/Body of Water Delaware River City Lower Alloways Creek State NJ
Descriptive location (be specific) Removed from Circulating Water Intake Structure (CWIS) during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.
Latitude 39.460603° (Dec. Degrees) Longitude -75.536133° (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)

- ☐ 1 = Fresh dead
☒ 2 = Moderately decomposed
☐ 3 = Severely decomposed
☐ 4 = Dried carcass
☐ 5 = Skeletal, scutes & cartilage

SEX:

- ☒ Undetermined
☐ Female ☐ Male
How was sex determined?
☐ Necropsy
☐ Eggs/milt present when pressed
☐ Borescope

MEASUREMENTS:

Circle unit

Fork length 58.9 cm
Total length 68.0 cm
Length ☒ actual ☐ estimate
Mouth width (inside lips, see reverse side) 3.3 cm
Interorbital width (see reverse side) 4.8 cm
Weight ☒ actual ☐ estimate 1.9 kg

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #

Tag Type

Location of tag on carcass

No Tags found

CARCASS DISPOSITION: (check one or more)

- ☐ 1 = Left where found
☐ 2 = Buried
☐ 3 = Collected for necropsy/salvage
☒ 4 = Frozen for later examination
☐ 5 = Other (describe).

Carcass Necropsied?

☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? ☒ Yes ☐ No

Disposition of Photos/Video PSEG Nuclear Environmental Affairs

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample

How preserved

Pelvic fin clip

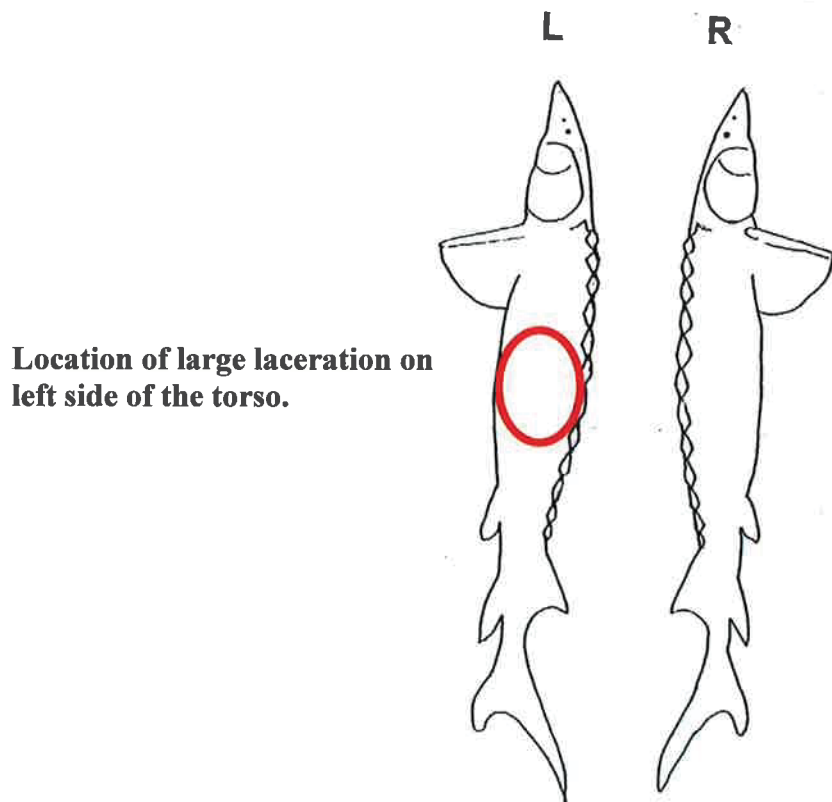
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A second, deceased and damaged Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure on 04/10/20, at 09:00am during routine trash rack cleaning. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, and no existing PIT tags were indicated. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the specimen was placed on ice and prepared for transport back to the ECSI main office, where it will be stored under refrigeration, awaiting direction on further disposition. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was deceased at the time of collection and was observed to have a large, laceration on the left side of the torso (refer to diagram above). Specimen exhibited some evidence of decomposition.**

Submit completed forms (within 24 hours of observation of fish): by e-mail to [Incidental Take@noaa.gov](mailto:IncidentalTake@noaa.gov) or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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Photographs



A dorsal view showing the size and condition of a second, deceased and damaged Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at 09:00am on 04/10/2020 from the circulating water intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/10/2020).



A right, ventral view of the specimen showing some evidence of minor decomposition and minor bruising, but no indications of any severe damage (04/10/2020).

Photographs



A left, ventral view of the specimen, showing the existence of a large laceration located mid-torso (04/10/2020).

Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Alex Riehle (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Alex Riehle

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station, Circulating water Intake

Date animal observed: 04/10/2020 Time animal observed: 08:50 am

Date animal collected: 04/10/2020 Time animal collected: 09:00 am

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 10.0 °C; Sal. – 7.5 ppt; Wind – W; sky – overcast; waves – moderate; tide- flood 1 (91.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/10/2020; 01:00am

Water temperature (°C) at site and time of observation: 13.0 °C

Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 5 circulators

Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 100.0% /Unit 2: 89.5%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.9% /Unit 2: 90.4%

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION

Name: First Alex Last Riehle
Agency Affiliation PSEG subcontractor Email Alexander.Riehle@pseg.com
Address 100 South Cass Street, Middletown, DE 19709
Area code/Phone number (302) 378-9881 (Environmental Consulting Services, Inc.)

SEC 7 UNIQUE IDENTIFIER (PCTS)
No. Assigned by NMFS)

DATE REPORTED:

Month 04 Day 10 Year 2020

DATE EXAMINED:

Month 04 Day 10 Year 2020

SPECIES: (check one)

- ☐ shortnose sturgeon
☒ Atlantic sturgeon
☐ Unidentified *Acipenser* species
Check "Unidentified" if uncertain. See reverse side of this form for aid in identification.

LOCATION FOUND:

☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)
River/Body of Water Delaware River City Lower Alloways Creek State NJ
Descriptive location (be specific) Removed from Circulating Water Intake Structure (CWIS) during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.
Latitude 39.460603° (Dec. Degrees) Longitude -75.536133° (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)

- ☐ 1 = Fresh dead
☒ 2 = Moderately decomposed
☐ 3 = Severely decomposed
☐ 4 = Dried carcass
☐ 5 = Skeletal, scutes & cartilage

SEX:

- ☒ Undetermined
☐ Female ☐ Male
How was sex determined?
☐ Necropsy
☐ Eggs/milt present when pressed
☐ Borescope

MEASUREMENTS:

Circle unit
Fork length 70.6 cm
Total length 83.0 cm
Length ☒ actual ☐ estimate
Mouth width (inside lips, see reverse side) 4.5 cm
Interorbital width (see reverse side) 6.1 cm
Weight ☒ actual ☐ estimate 2.5 kg

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #

Tag Type

Location of tag on carcass

No Tags found

CARCASS DISPOSITION: (check one or more)

- ☐ 1 = Left where found
☐ 2 = Buried
☐ 3 = Collected for necropsy/salvage
☒ 4 = Frozen for later examination
☐ 5 = Other (describe).

Carcass Necropsied?

☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? ☒ Yes ☐ No

Disposition of Photos/Video PSEG Nuclear Environmental Affairs

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample

How preserved

Disposition (person, affiliation, use)

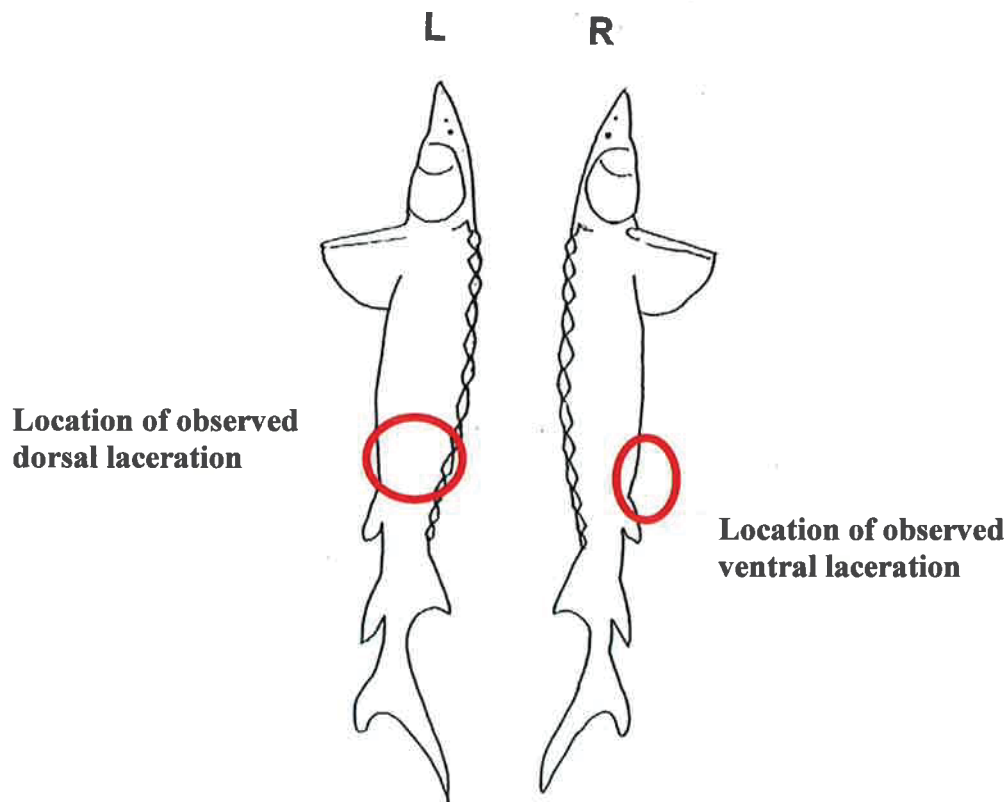
Pelvic fin clip

stored in non-denatured ethanol and refrigerated.

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A third, deceased and damaged Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure on 04/10/20, at 09:00am during routine trash rack cleaning. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, and no existing PIT tags were indicated. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the specimen was placed on ice and prepared for transport back to the ECSI main office, where it will be stored under refrigeration, awaiting direction on further disposition. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was deceased at the time of collection and was observed to have a large, dorsal laceration, as well as a smaller, ventral laceration, anterior to the pelvic fins (refer to diagram above). Specimen exhibited some evidence of decomposition.**

Submit completed forms (within 24 hours of observation of fish): by e-mail to [Incidental Take@noaa.gov](mailto:IncidentalTake@noaa.gov) or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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Photographs



A dorsal view showing the size and condition of a third, deceased and damaged Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at 09:00am on 04/10/2020 from the circulating water intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/10/2020).



A right, ventral view of the specimen showing some evidence of minor decomposition, as well as surface bruising and a small laceration anterior to the pelvic fins (04/10/2020).

Photographs



A close-up of the laceration observed on the ventral aspect of the torso, anterior to the pelvic fins (04/10/2020).



A left, ventral view of the specimen, showing the existence of a large laceration located mid-torso (04/10/2020).