From: Cary, Richard H. <Richard.Cary@pseg.com>
Sent: Wednesday, April 14, 2021 9:08 AM
To: incidental.take@noaa.gov; EndangeredSpecies Resource
Cc: Neilan, Brian
Subject: [External_Sender] Salem Generating Station - Incidental Take Reports: Atlantic Sturgeon 04/13/2021
Attachments: Sturgeon Incidental Take Report for 04-13-2021 #1.pdf; Sturgeon Incidental Take Report for 04-13-2021 #2.pdf

Attached are the Incidental Take Reports and Data Collection Forms for one live and one deceased Atlantic sturgeon collected on 04/13/2021 from the Salem Generating Station during routine raking of the cooling water intake trash bars. The live sturgeon was returned to the Delaware River following examination and the deceased specimen is being held for study pending direction from NOAA/NMFS. This incidental take is authorized under Biological Opinion NER-2010-6581.

Thanks, and please let me know if you have any questions or need additional information.

Richard Cary
Environmental Compliance & Program Manager
PSEG Nuclear Environmental Affairs
O: 856-339-1487
C: 706-254-2584

The information contained in this e-mail, including any attachment(s), is intended solely for use by the named addressee(s). If you are not the intended recipient, or a person designated as responsible for delivering such messages to the intended recipient, you are not authorized to disclose, copy, distribute or retain this message, in whole or in part, without written authorization from PSEG. This e-mail may contain proprietary, confidential or privileged information. If you have received this message in error, please notify the sender immediately. This notice is included in all e-mail messages leaving PSEG. Thank you for your cooperation.

Hearing Identifier: NRR_DRMA
Email Number: 1124

Mail Envelope Properties (b8f452bed6a64c9883099f1cc75c7e1f)

Subject: [External_Sender] Salem Generating Station - Incidental Take Reports: Atlantic Sturgeon 04/13/2021
Sent Date: 4/14/2021 9:08:19 AM
Received Date: 4/14/2021 9:08:43 AM
From: Cary, Richard H.

Created By: Richard.Cary@pseg.com

Recipients:
"Neilan, Brian" <Brian.Neilan@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	1353	4/14/2021 9:08:43 AM
Sturgeon Incidental Take Report for 04-13-2021 #1.pdf	443929	
Sturgeon Incidental Take Report for 04-13-2021 #2.pdf	495392	

Options
Priority: Normal
Return Notification: No
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: Stephen Whitford (Environmental Consulting Services, Inc. [ECSI])
Reporter's full name: Stephen Whitford

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; SGS Unit 1, intake 13A

Date animal observed: 04/13/2021 Time animal observed: 09:35 AM
Date animal collected: 04/13/2021 Time animal collected: 09:30 AM

Environmental conditions at time of observation (i.e., tidal stage, weather):
Air temp. – 9.0 °C; Sal. – 3.0 ppt; Wind –E; sky – overcast; Wave – slight; tide- F1 (91.5 ft)

If removed from intakes (trash racks or traveling screens):
Date and time of last inspection of screen: 04/13/2021; at 01:00 AM
Water temperature (°C) at site and time of observation: 13.5 °C
Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 6 circulators
Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 99.3% /Unit 2: 99.8%
Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.4% /Unit 2: 100.1%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION
Name: First **Stephen** Last **Whitford**
Agency Affiliation **PSEG subcontractor** Email **Stephen.Whitford@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 13 Year 2021
DATE EXAMINED:
Month 01 Day 13 Year 2021

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) trash racks, intake bay 13A 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	**88.9 cm**
Total length	**101.6 cm**
Length ☐ actual ☒ estimate	
Mouth width (inside lips, see reverse side)	**5.1 cm**
Interorbital width (see reverse side)	**7.6 cm**
Weight ☒ actual ☐ estimate	**5.0 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 tag 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/vide taken? ☒ Yes ☐ No
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

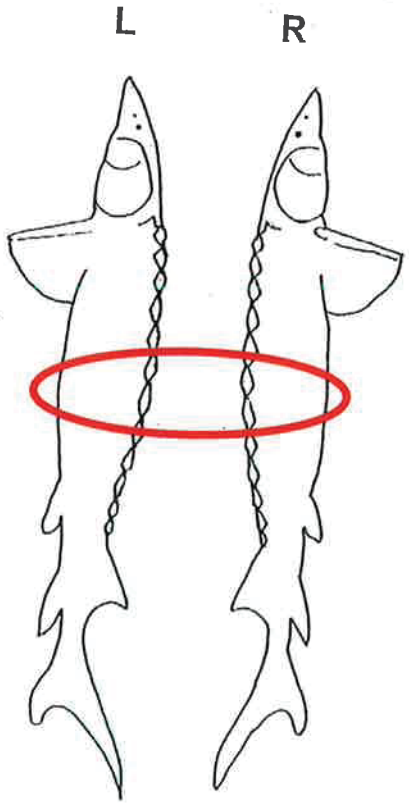
SAMPLES COLLECTED? ☒ Yes ☐ No

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 severely damaged Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/13/21, at 09:30AM. 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 also 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

Location of severe laceration that severed the specimen in half



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 and in very poor condition at the time of collection. Damage in the form of a severe laceration, which resulted in severing the specimen in half, was observed mid-torso and was exposing flesh and internal organs (refer to illustration).**

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

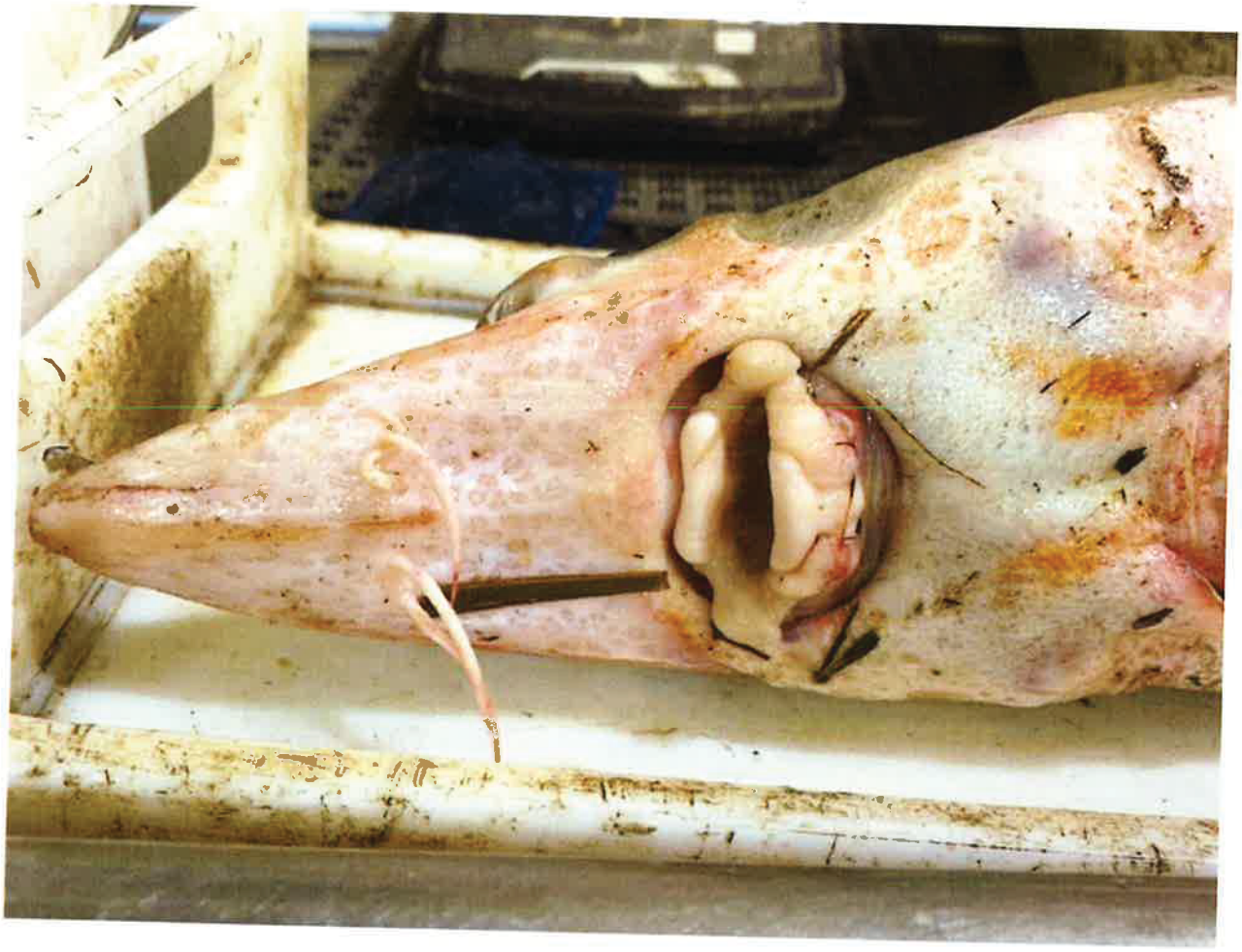
Data Access Policy: Upon written request, information submitted to National Marine Fisheries Service (NOAA Fisheries) on this form will be released to the requestor provided that the requestor credit the collector of the information and NOAA Fisheries. NOAA Fisheries will notify the collector that these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

Photographs

A dorsolateral view showing the size and condition of a deceased Atlantic sturgeon (Acipenser oxyrinchus), retrieved at approximately 09:30AM on 04/13/2021 from the Salem Circulating Water Intake trash collection basket by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/13/2021).

A close-up view of a severe laceration located mid-torso on the specimen, which severed the specimen in half (04/13/2021).

Photographs



A ventral view of the head, showing the characteristic elongated rostrum and small mouth (04/13/2021).

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: Ashley Barnett (Environmental Consulting Services, Inc. [ECSI])
Reporter's full name: Ashley Barnett

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; SGS Unit 2, intake 21B

Date animal observed: 04/13/2021 Time animal observed: 13:10
Date animal collected: 04/13/2021 Time animal collected: 13:00

Environmental conditions at time of observation (i.e., tidal stage, weather):
Air temp. – 13.0 °C; Sal. – 5.0 ppt; Wind –NE; sky – partly cloudy; Wave – calm; tide- FS (94.1 ft)

If removed from intakes (trash racks or traveling screens):
Date and time of last inspection of screen: 04/13/2021; at 01:00 AM
Water temperature (°C) at site and time of observation: 13.5 °C
Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 6 circulators
Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 99.3% /Unit 2: 99.8%
Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.4% /Unit 2: 100.1%

PIT ID

Microchip ID Systems ™
933000320184018

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION
Name: First **Ashley** Last **Barnett**
Agency Affiliation **PSEG subcontractor** Email **Ashley.Barnett@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 13 Year 2021
DATE EXAMINED:
Month 04 Day 13 Year 2021

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) trash racks, intake bay 21B 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	**76.2 cm**
Total length	**86.4 cm**
Length ☒ actual ☐ estimate	
Mouth width (inside lips, see reverse side)	**5.1 cm**
Interorbital width (see reverse side)	**7.6 cm**
Weight ☒ actual ☐ estimate	**4.0 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 tag 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). Specimen was alive, but revealed some damage. After processing and a period of holding to reduce stress, it was released back to the Delaware River.

Carcass Necropsied?
☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

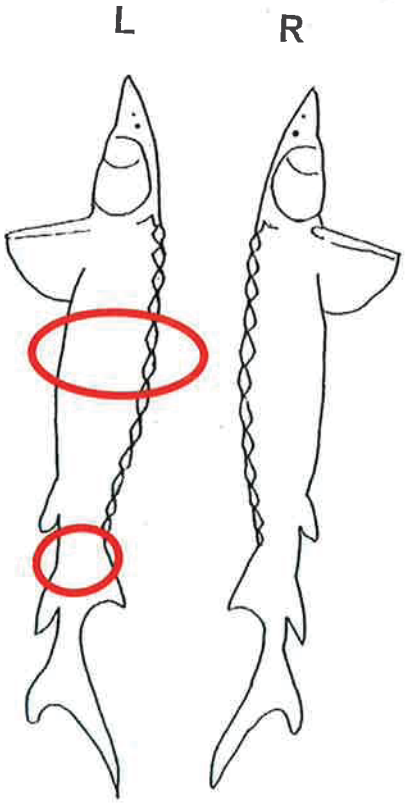
PHOTODOCUMENTATION:
Photos/vide taken? ☒ Yes ☐ No
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 second Atlantic sturgeon, alive but showing moderate damage, was retrieved from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/13/21, at 13:00. 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. Therefore, PIT tagging procedures for placement of a tag were implemented. Specimen has been identified with tag #933000320184018. A pelvic fin clip was also collected for future DNA analysis. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory. Upon completion of processing, the specimen was released back to the Delaware River at 13:30.

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 collected alive, but revealed two to three lacerations to the dorsal surface of the torso, on the left side (refer to illustration). Showing no indication of existing tags, the specimen has been identified with PIT #933000320184018. After processing, specimen was released back to the Delaware River.**

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

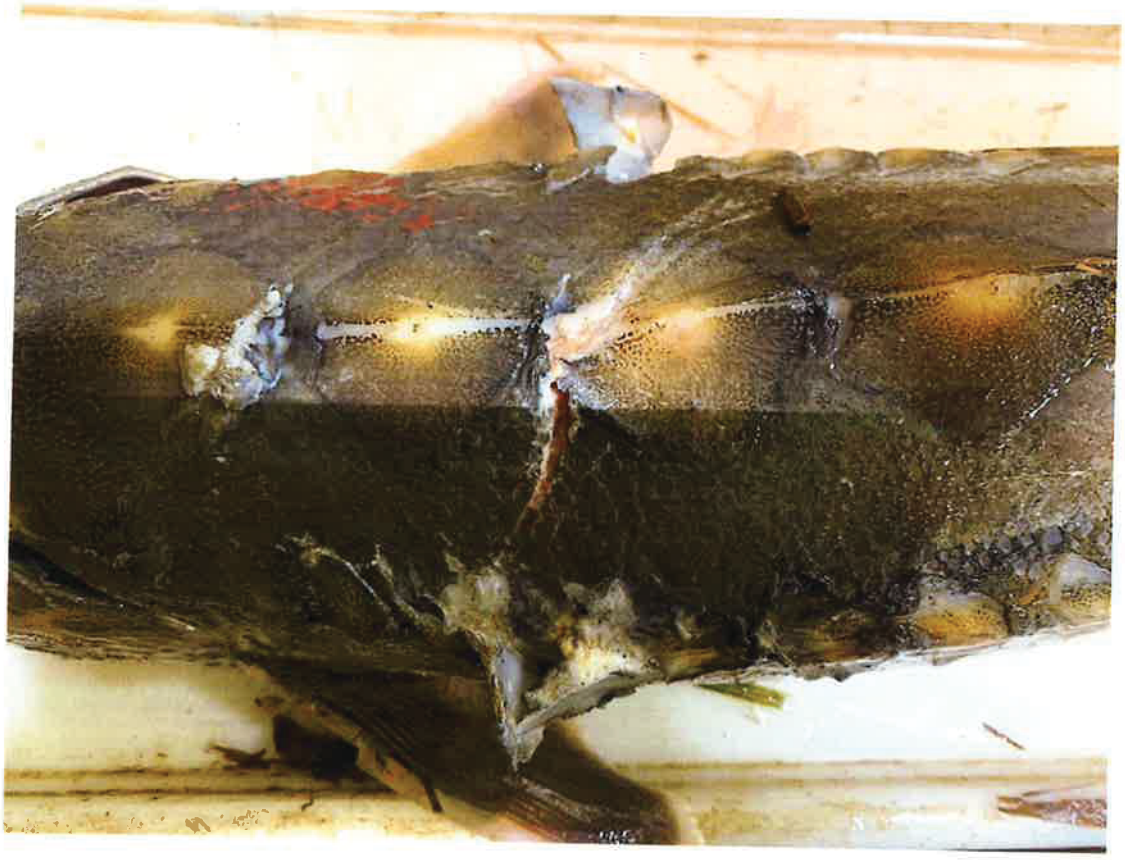
Data Access Policy: Upon written request, information submitted to National Marine Fisheries Service (NOAA Fisheries) on this form will be released to the requestor provided that the requestor credit the collector of the information and NOAA Fisheries. NOAA Fisheries will notify the collector that these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

Photographs

A dorsolateral view showing the size and condition of a second, Atlantic sturgeon (Acipenser oxyrinchus), retrieved alive at approximately 13:00 on 04/13/2021 from the Salem Circulating Water Intake trash collection basket by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/13/2021).

A ventral view of the specimen, showing the existence of some very minor surface bruising to the ventral aspects of the pectoral fins and near the mouth (04/13/2021).

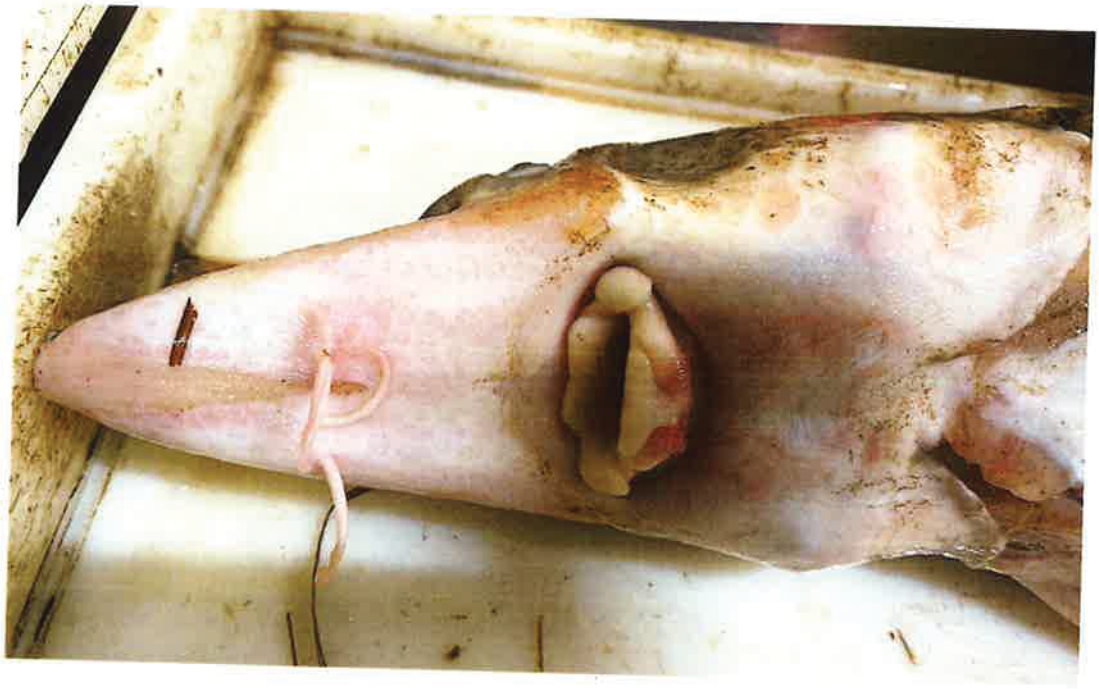
Photographs



A dorsal view of the specimen, showing the existence of two to three lacerations along the dorsal line of scutes. The largest of the three lacerations extends down to a point just below the lateral line of scutes, and posterior to the operculum (04/13/2021).

A dorsolateral view of the left side of the specimen, showing the point of termination of the larger laceration just below the lateral line of scutes (04/13/2021).

Photographs



A ventral view of the head, showing the characteristic elongated rostrum and small mouth (04/13/2021).