



## EAGLES ISLAND COALITION

May 7, 2014

Lock and Dam No. 1, Riegelwood, North Carolina

*Attendance list at end.*

### Welcome and Introductions

The meeting was called to order at 2:18 pm by Chair Niel Brooks. Attendees introduced themselves and the organizations they represent.

### Announcements

- No announcements were made at the beginning of the meeting.

### PRESENTATION: Acoustic Tagging and Monitoring of Anadromous Fishes in the Cape Fear River

Joe Facendola – NC Division of Marine Fisheries, Research Technician

- The following are talking points from the presentation, however the full presentation in pdf format can be found on <http://www.eaglesisland.org/>. Any specific questions related to the data can be directed to Joe Facendola of NCDMF ([joe.facendola@ncdenr.gov](mailto:joe.facendola@ncdenr.gov)).
- Joe indicated both species of sturgeon found within the Cape Fear River basin are capable of spawning multiple times within their lifetime. Sturgeon has a complex life cycle, of which the riverine system is an important part of the cycle.
- Other anadromous fish species within the Cape Fear River basin include American shad, hickory shad, river herring (Alewife and blue-black herring), striped bass (white perch is a cousin and is slightly anadromous) and two sturgeon species (Atlantic and short-nosed).
- Short-nosed sturgeon is considered short-lived whereas Atlantic sturgeon can live up to 65 years.
- Dams severely reduce or eliminate spawning habitat areas, as seen in the Cape Fear River basin.
- Phil Prete asked if there is evidence of active spawning habitat below Lock and Dam No. 1.
  - Joe indicated primary and historical spawning habitat is located at the Fall line where there is presence of riffle-pool complex habitat. All anadromous species require fresh water to spawn; juvenile fish die at the saltwater interface.
- The Cape Fear River is way below population potential even if all habitat was available.
- NCDMF tagging goals include: 1) track fish migration and note patterns, and 2) fish passage on the Cape Fear River.
- In the Northeast Cape Fear River and Black River, historic populations are also declined and may hold individual stocks or potentially mixed stocks. Although these main tributaries are unimpeded, there is still a dramatic population decline beginning around the same time as the construction of the Lock and Dams.
  - It is unknown whether these tributaries do not have suitable habitat therefore leading to a population sink.
  - It is unknown why these populations are not successful, potential threats include overfishing, and habitat degradation due to the presence of CAFO's.
- Methods utilized by NCDMF include conventional tagging (external and internal) as well as acoustic telemetry.
  - Recapture rates can be used to estimate populations within the river basin. The Cape Fear River currently has 30 listening stations, including downstream and upstream of Lock and Dam No. 1.
  - Listening distances can vary and is dependent on fish species and type of tag. For example, a striped bass was detected 80 miles from Point Peter.
  - Currently, approximately 60 shad have tags, 78 Atlantic sturgeon, 2 shortnose sturgeon and 200 striped bass.
  - Each tag costs approximately \$350. Several organizations have partnered with NCDMF to share the costs of the tags including The Nature Conservancy and Cape Fear River Watch.
  - Limestone outcrops have been identified downstream of Lock and Dam No. 1 where male adult Atlantic sturgeon have been observed.

- Two shortnose sturgeon tagged in the Cape Fear River have migrated to river basins within South Carolina (Santee and Altamaha).
- Striped bass core habitat during July through March is Eagles Island.
  - Eagles Island represents the freshwater/saltwater interface where a productive estuary happens.
  - Striped bass spawn from April to June although none have been detected beyond Lock and Dam No. 2.
  - There is evidence of spawning within the Black and NE Cape Fear Rivers, as well as evidence of specific individuals crossing over drainages during a single spawning season.
- American shad tags are smaller in size and inserted directly into the stomach; fish will pass tags when feeding post-spawn.
  - There is strong evidence of fish passage beyond Lock and Dam No. 3; however when shad are tagged they generally "fall back".
  - Charles Robbins recommended a book called "The Founding Fish" that describes the history of American shad.
- Current threats include: runoff from agriculture and development; dredging of the main stem which allows the salt wedge to creep upstream and thereby eliminate possible spawning habitat; non-native fish such as catfish.
  - Charles Robbins indicated a need for additional moratorium signage as he has witnessed people fishing for striped bass and taking them home for consumption.
  - Can the moratorium be enforced, specifically locations such as Sutton Lake. There is limited presence of Marine Patrol on the water.
  - It was suggested additional signage at Castle St. boat ramp should be constructed.
  - Marilyn asked if sturgeons are caught and Joe replied they are caught accidentally in the shad gill net fishery. There are observers for this fishery however drift nets and anchor nets do not require observers.
  - Small mesh nets set in ocean (winter) do tend to catch sturgeon. This is a threat as it takes 8 to 10 years for a sturgeon to mature.
  - Sturgeon has been observed to favor the Brunswick River although there is low flow. These fish tend to stay in deep holes and are mostly observed in early spring.

Chair Niel Brooks thanked Joe Facendola and John Perry, for attending our meeting and sharing information with the Eagles Island Coalition and invited them to be regular participants.

### Minutes

No minutes were approved at this meeting.

### COMMITTEE UPDATES – Conservation Planning – Committee Chair Kristina Fischer

- A 10-year management plan is in the process of being developed by the Conservation Planning Committee (Kristina, Marilyn and Phil). This plan will guide the Coalition in conservation and management efforts on the island.
- A list of targets has been developed and the committee has assembled relevant experts.
  - A matrix to analyze the various categories will be developed as a product including a table and mapping component.
  - Orientation for the experts was held May 19 and 20. The orientation will include review of the threats and goals data sheet.
  - Timeline includes: feedback from experts by end of July (the Committee will compile feedback), adopt management plan in December.
  - The management plan will allow for grant development of funding needs and will help guide the Coalition's efforts.

### COMMITTEE UPDATES – Recreation & Cultural Resources – Niel Brooks



- Niel Brooks reviewed a request by the Battleship North Carolina for a letter of support for a grant to construct the Expedition Trail along the Battleship site.
  - A motion was made by Marilyn Meares and seconded by Phil Prete for approval for Niel to develop a letter of support for the construction of the Expedition Trail. The motion passed unanimously.
  - Phil requested a separate email including site plan and letter to the voting members. Niel will send a template letter of support in the event other organizations will also write a letter of support.
  - The Expedition Trail grant and site plan are attached to these minutes.
- Niel discussed a recent paddle on the red trail on high tide.

#### **COMMITTEE UPDATES – Education & Outreach**

- Phil Prete mentioned that Gordon Johnson is doing a great job of keeping the website current and we appreciate his support! Please visit - <http://www.eaglesisland.org/> to see information that is posted

#### **OTHER BUSINESS**

- Charles Robbins discussed a Master's student conducting visual observations via cameras on swallow tail kite nests in the Cape Fear River basin.
- John and Joe from NCDMF led the group through a tagging exercise of an adult female dead carp.
- Tom Charles invited attendees to take a tour of Lock and Dam No. 1 after the meeting was adjourned.

#### **Adjourn**

Being no further business, the meeting adjourned at 4:05.

#### **Attendees**

Niel Brooks  
Kristina Fischer  
Dru Harrison  
Phil Prete  
Dawn York  
Chris Vargo  
Charles Robbins  
John Perry  
Joe Facendola  
Mike Spencer  
Tom Charles  
Marilyn Meares  
Devon Rhodes