PSAT results – Hudson River Atlantic Sturgeon

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Objectives – Atlantic sturgeon

- Identify ocean habitat use:
  - Migratory routes
  - Aggregation areas
  - Potential threats
- Disseminate results to assist Atlantic sturgeon recovery

Erickson, D.L., A. Kahnle, M. J. Millard, E.A. Mora, G. Bryja, A. Higgs, J. Mohler, M. DuFour, G. Kenney, J. Sweka, and E.K. Pikitch. 2011. Use of pop-off satellite tags to identify oceanic migratory patterns for adult Atlantic sturgeon Ascipenser oxyrinchus oxyrinchus Mitchell 1815. J. Applied Ichthyology, p 1-10

- Captured with gill nets (May-July)
- Measurements (length, weight, sex) & genetic samples

Photo courtesy of Albany Times Union

Pop-Up Satellite Archival Tags

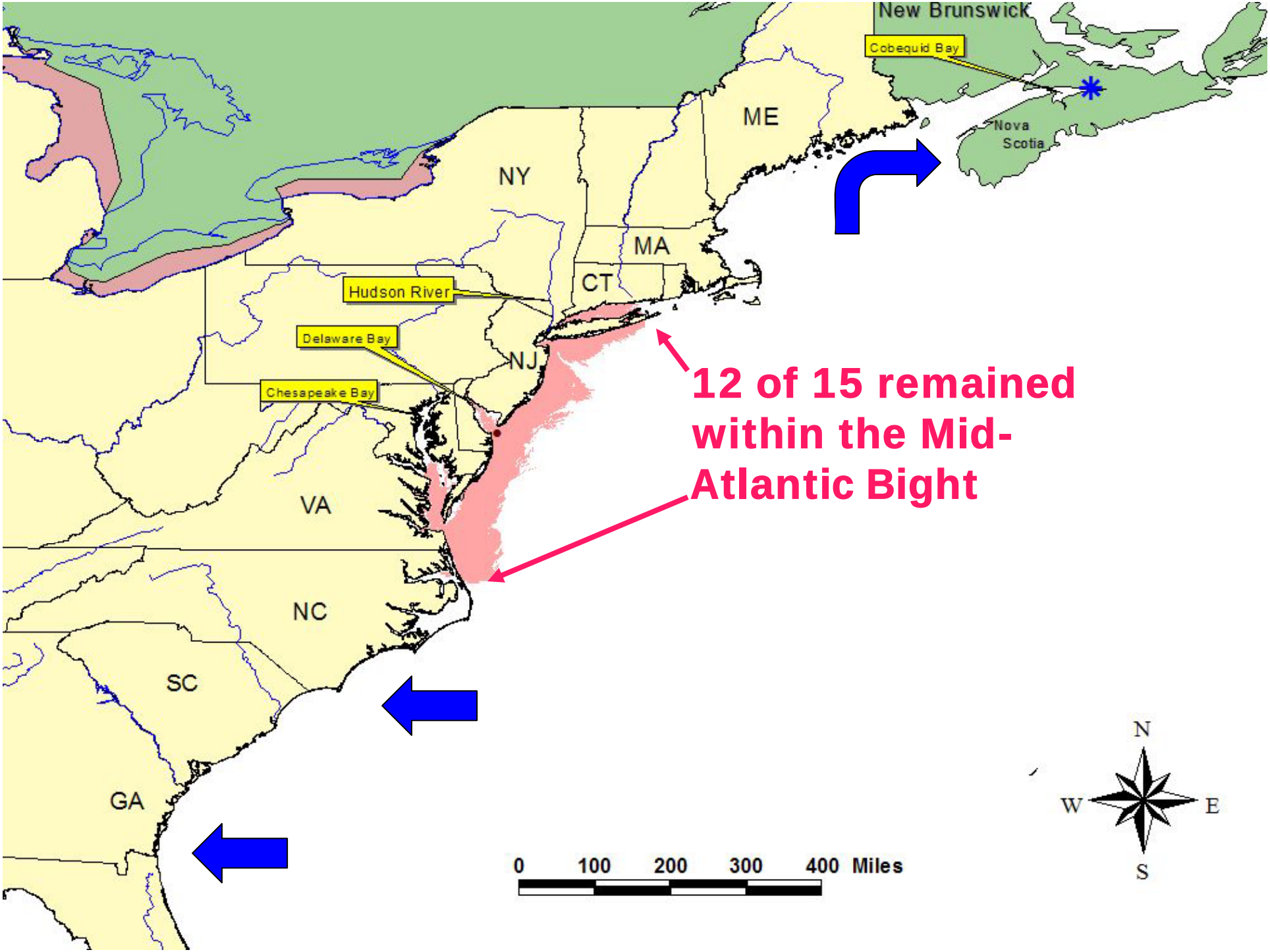
- No. of tags (HR)
  - 2006: 10
  - 2007: 13
  - 2008: 10

Record & archive Date, time, light, water temperature, depth

Programmed to detach (up to 1 year)

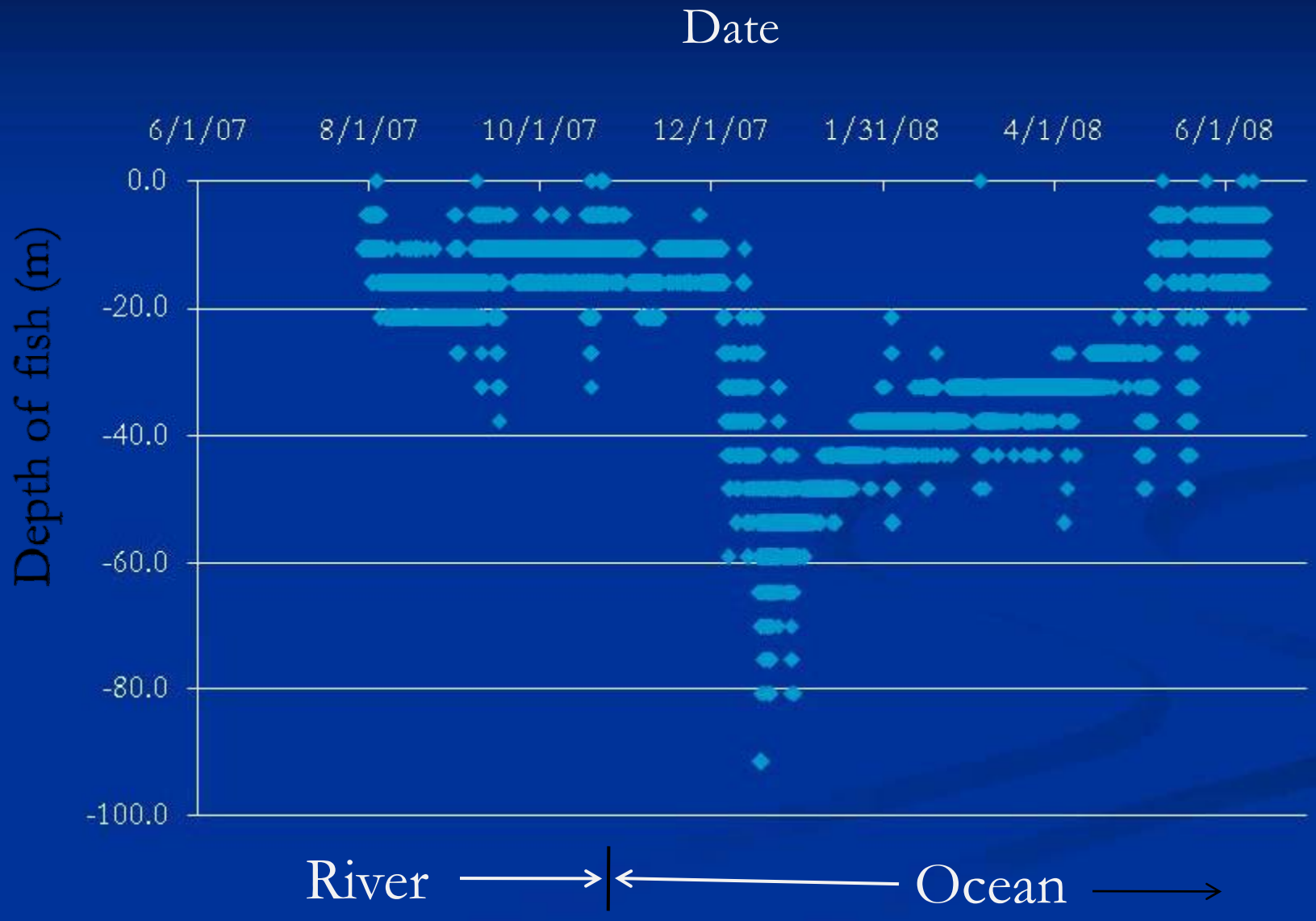
Data relayed to researcher via satellite

Photo courtesy of Albany Times Union


New Brunswick
Cobequid Bay
Nova Scotia
ME
NY
MA
CT
NJ
Hudson River
Delaware Bay
Chesapeake Bay
VA
NC
SC
GA
12 of 15 remained within the Mid-Atlantic Bight
0 100 200 300 400 Miles
N
W
E
S

Depths recorded by PAT (hourly)

from Hudson River to Cobequid Bay, Nova Scotia



Summary of results

- "Hudson River Fish" mix with <u>all</u> other stocks while in the ocean (GA to NS)

- Vulnerable to threats inside and outside the MAB

- Narrow migratory corridor (5-40 m depth)
- Definitive aggregation areas:

SW Long Island, New Jersey coast, off Delaware Bay and off Chesapeake Bay

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