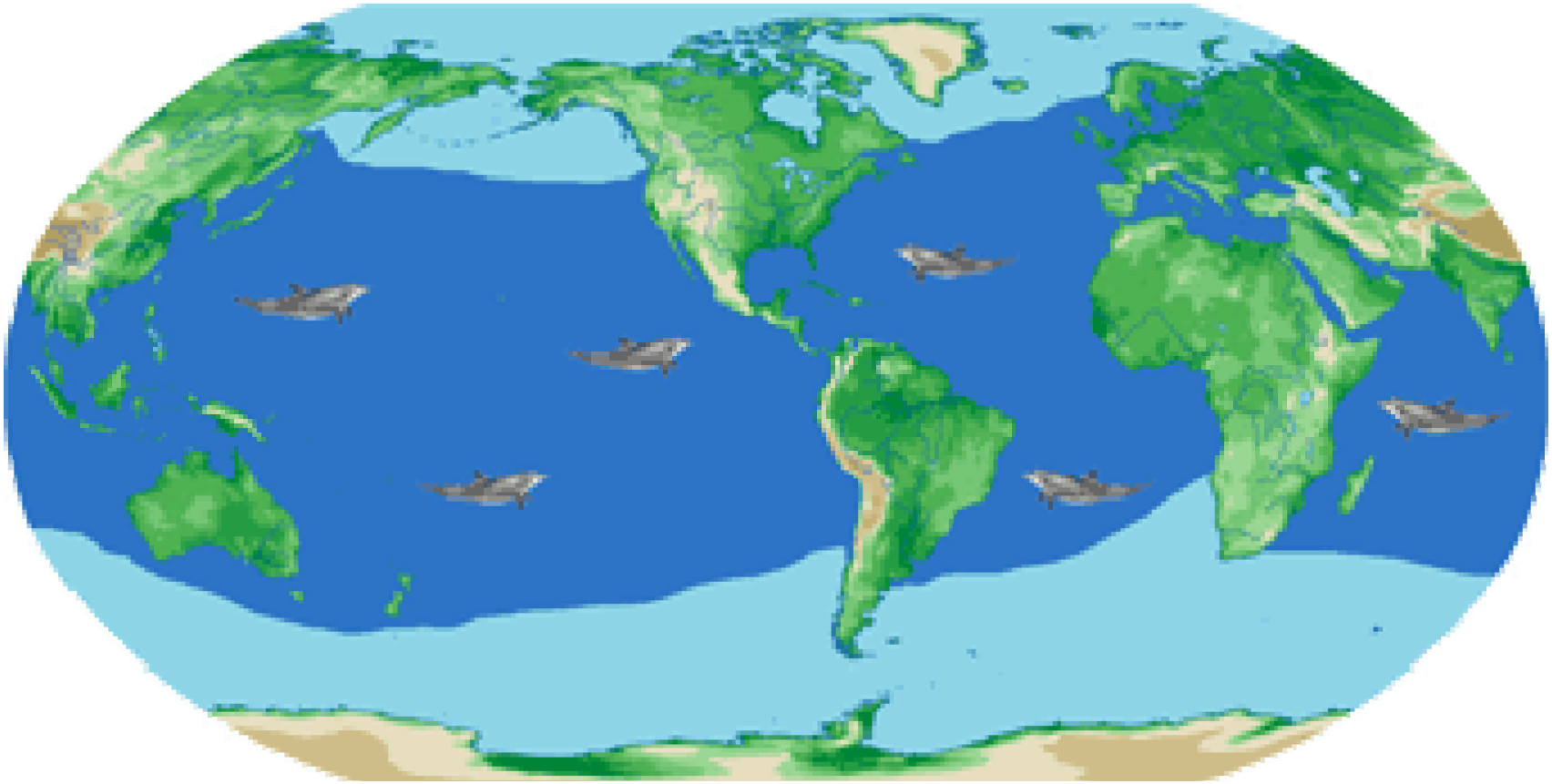
Worldwide Distribution of Bottlenose Dolphins



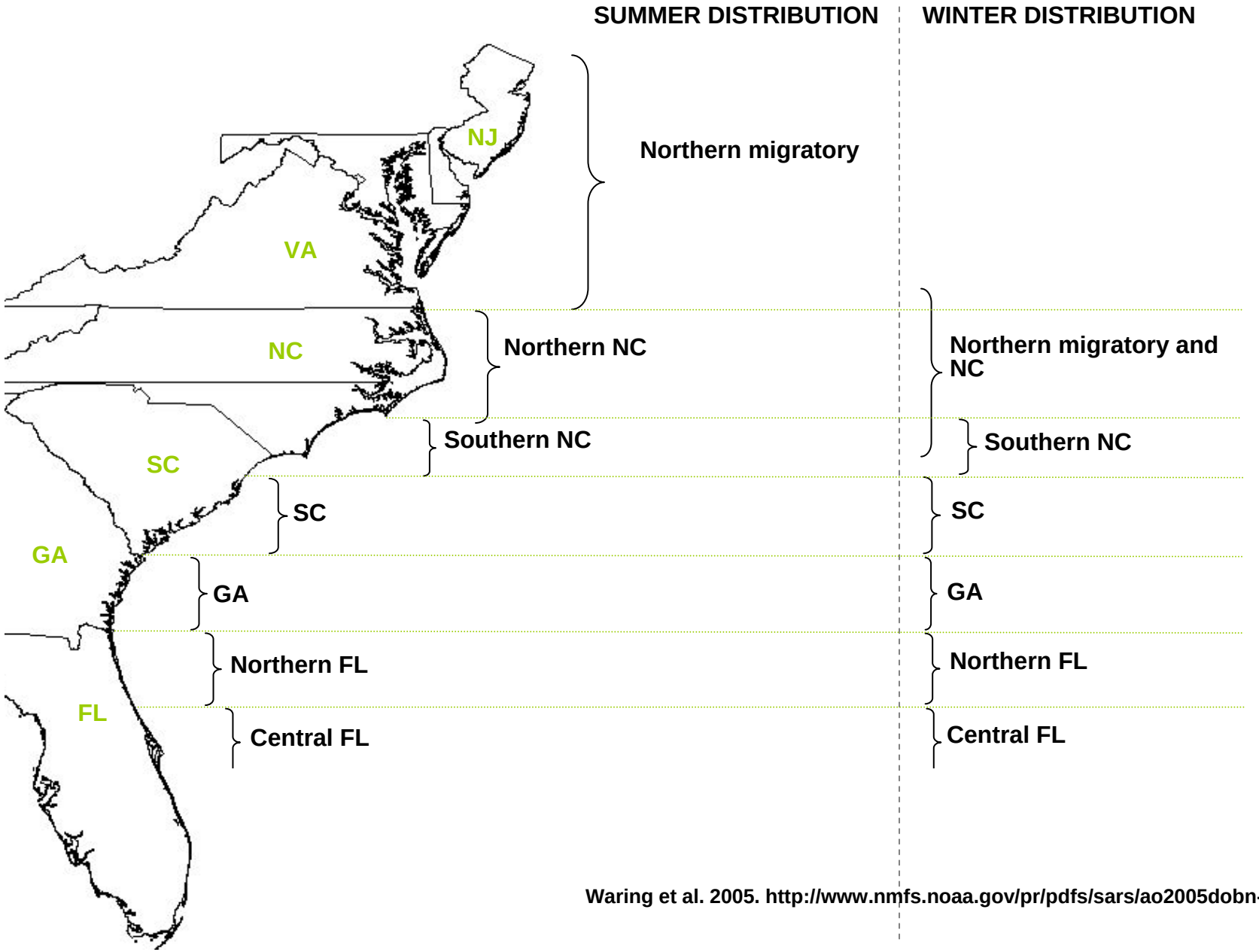
http://nationalzoo.si.edu/default.cfm

US Atlantic Coast

Bottlenose dolphins are

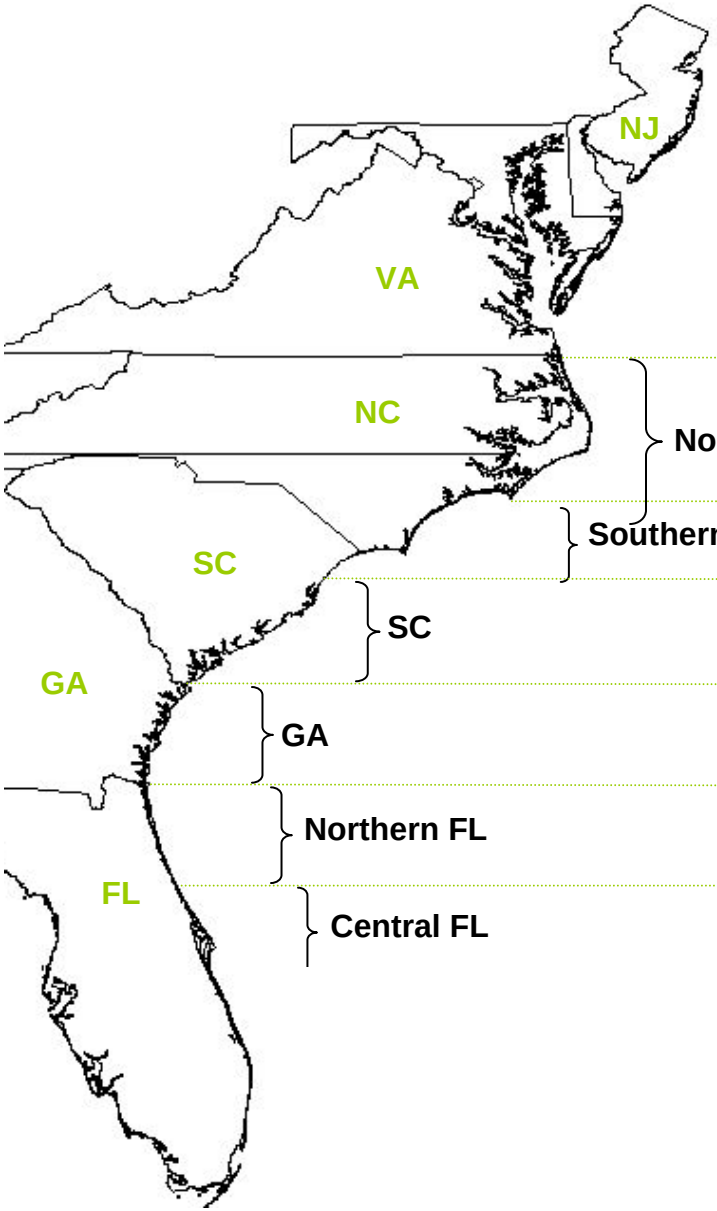
- **most abundant coastal cetacean from New Jersey to Florida**
- **throughout most of their range they are also common in estuarine systems**

Stocks of the Coastal Morphotype of Bottlenose Dolphin along the Atlantic coast



Waring et al. 2005. http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2005dobn-wnco.pdf

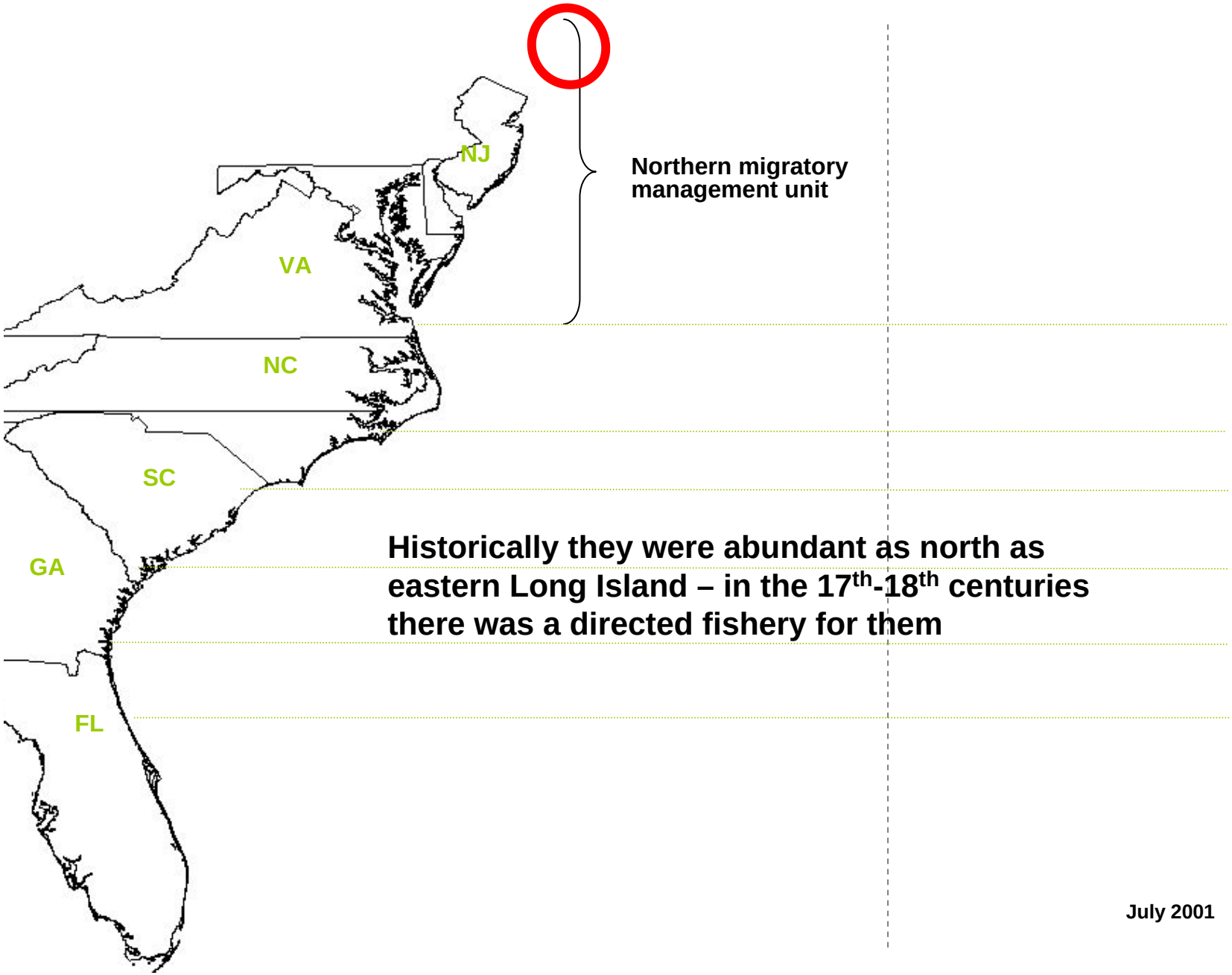
Summer Abundance Estimates



SUMMER DISTRIBUTION	
Northern migratory	17,466
Northern NC	7079
Southern NC	3786
SC	2325
GA	2195
Northern FL	448
Central FL	10652

Waring et al. 2005. http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2005dobn-wnco.pdf

Historical Range

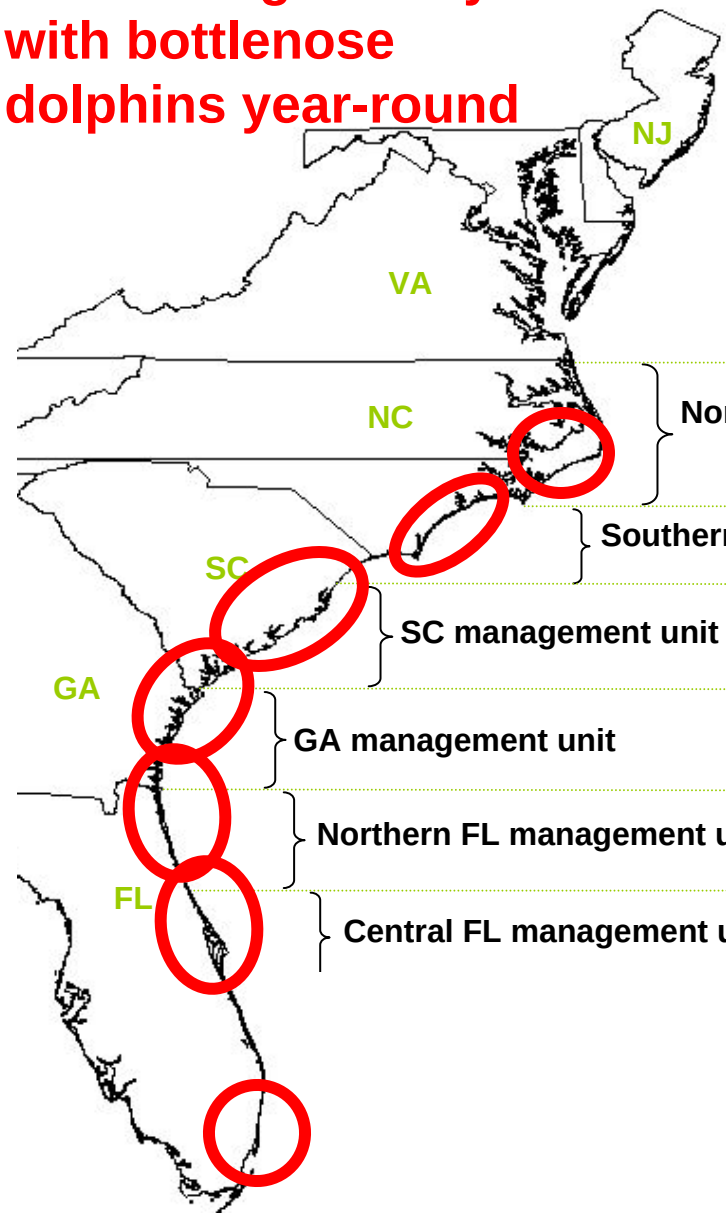


Historically they were abundant as north as eastern Long Island – in the 17th-18th centuries there was a directed fishery for them

July 2001

Management Units of the Coastal Morphotype of Bottlenose Dolphin along the Atlantic coast

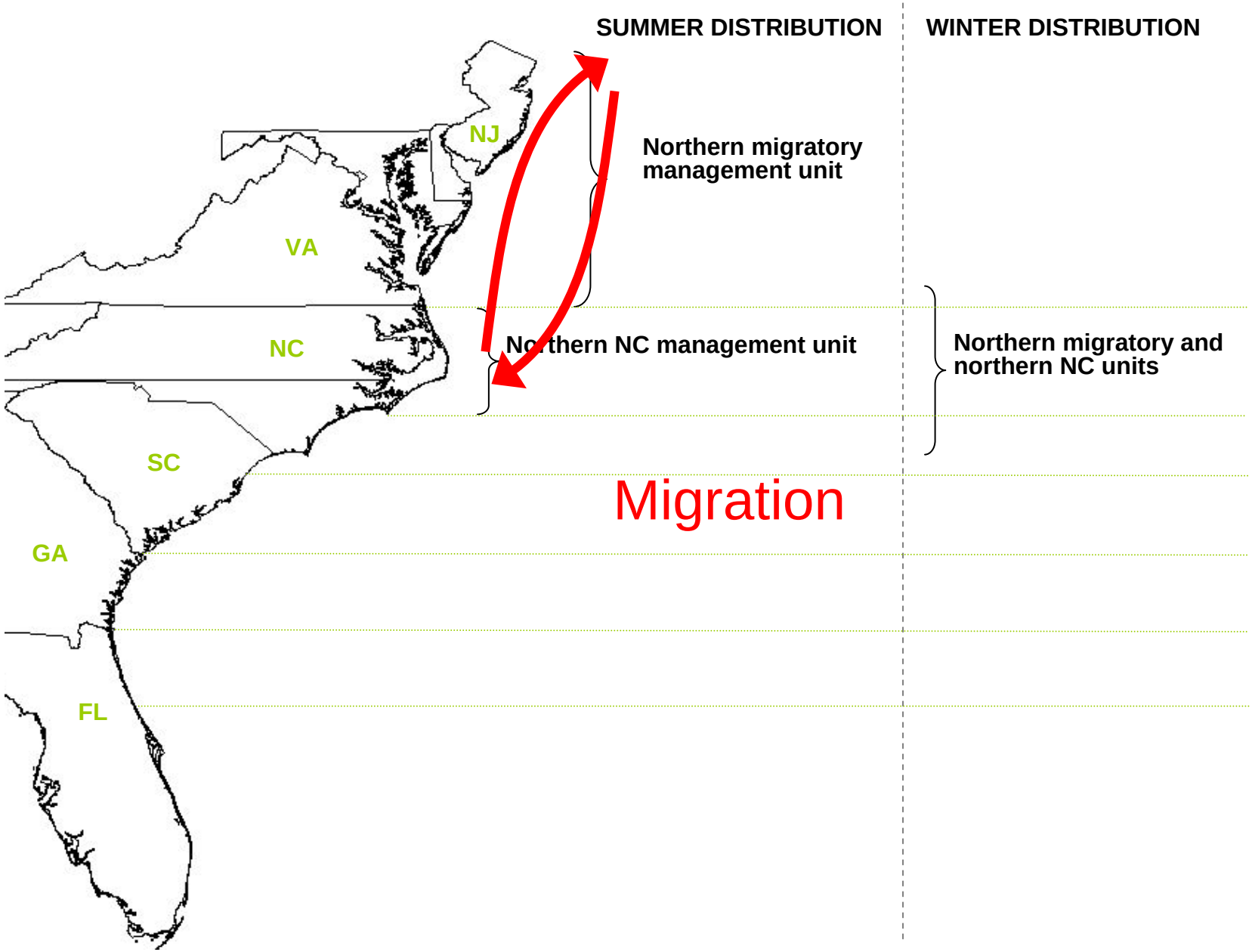
Estuaries generally with bottlenose dolphins year-round



SUMMER DISTRIBUTION	WINTER DISTRIBUTION
Northern migratory management unit	Northern migratory and northern NC units
Northern NC management unit	
Southern NC management unit	Southern NC unit
SC management unit	SC unit
GA management unit	GA unit
Northern FL management unit	Northern FL unit
Central FL management unit	Central FL unit

July 2001

Migration of Northern Migratory Stock of Bottlenose Dolphins along the Atlantic Coast



Migration of Northern Migratory Stock of Bottlenose Dolphins along the Atlantic Coast

Why do they migrate?

1. **Prey migrate**

2. **Thermoregulatory response**

Prey Species of Bottlenose Dolphins from North Carolina*

Sciaenidae

- **Weakfish *(Cynoscion regalis)***
- **Croaker *(Micropogonids undulatus)***
- **Spot *(hiortomus xanthurus)***
- **Silver perch *(Bairdiella chrysoura)***

Engraulidae

- **Striped anchovy *(Anchoa hepsetus)***

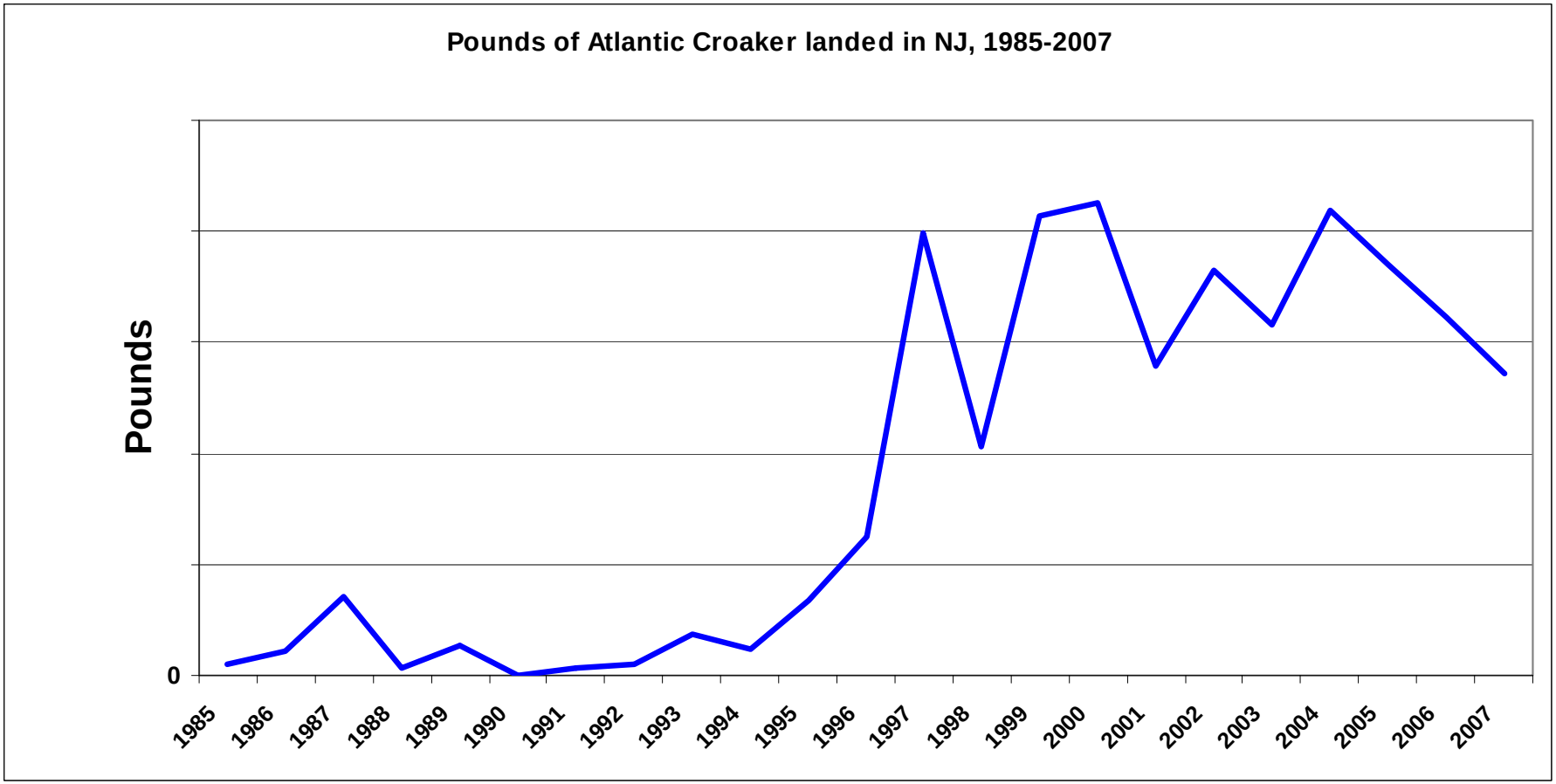
Clupeidae

- **Menhaden *(Brevoortia tyrannus)***

***SC through FL mullet is a prey item**

From Danon and Waples 1994z

Pounds of Atlantic Croaker landed in NJ, 1985-2007



Unpublished data: NMFS Southeast Fisheries Science Center

Prey Species of Bottlenose Dolphins in Navesink/Shrewsbury River System

Photo credit: NOAA, Southeast Fisheries Science Center

Striped bass

Menhaden Partially Eaten by Bottlenose Dolphin

Photo credit: NOAA, Southeast Fisheries Science Center

Schools of Menhaden in the Navesink/Shrewsbury River System

Photo credit: NOAA, Southeast Fisheries Science Center

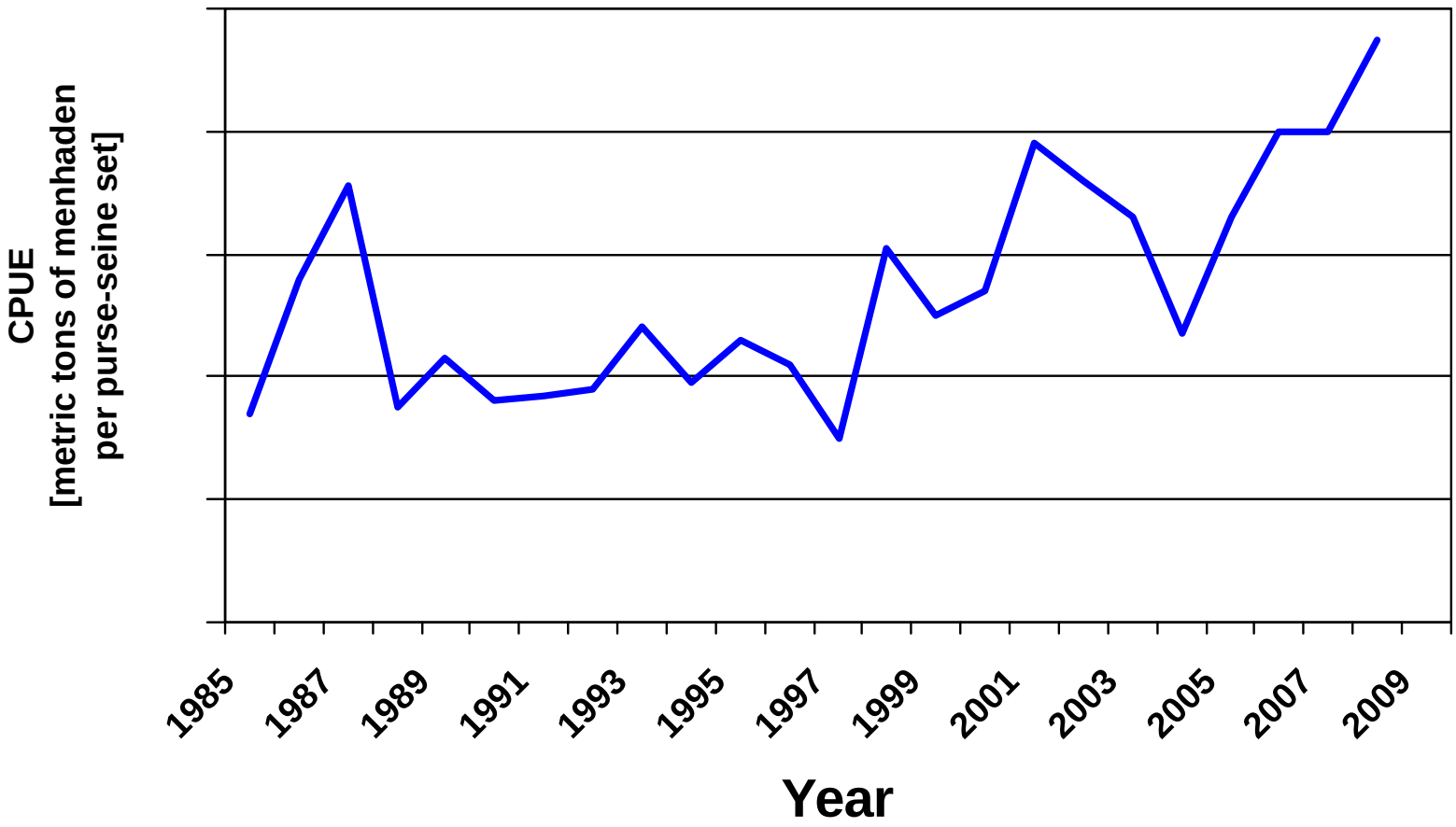
Schools of Menhaden in the Navesink/Shrewsbury River System

Photo credit: NOAA, Southeast Fisheries Science Center

Schools of Menhaden in the Navesink/Shrewsbury River System

Photo credit: NOAA, Southeast Fisheries Science Center

CPUE of Menhaden Fleet off NJ, 1985-2008



Unpublished data: NMFS Southeast Fisheries Science Center

What are they eating now?

Photo credit: NOAA, Southeast Fisheries Science Center

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