



Atlantic Bonito: Biology & Catch

DEPARTMENT OF ENVIRONMENTAL QUALITY
Marine Fisheries

Marine Fisheries Commission | Jacqui Degan | August 2025



Origination

- MFC motion for DMF to develop issue paper for Atlantic bonito management
- DMF Marine Fisheries Biologist vacancy filled
- Present background and available data



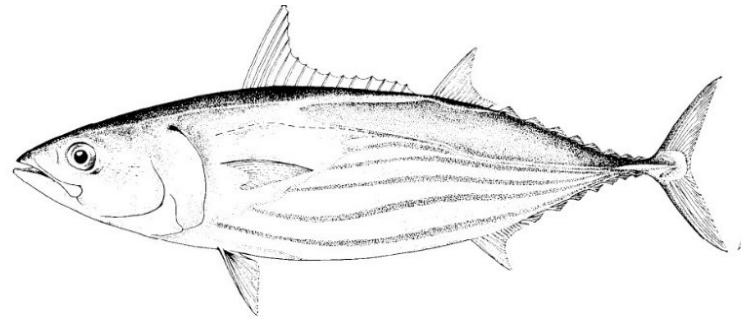
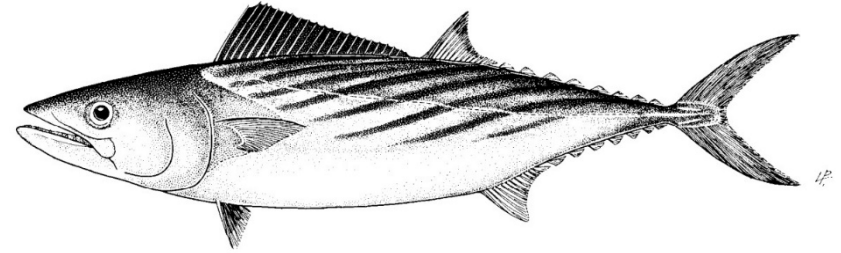
Presentation Outline

- Biology
 - Classification & Description
 - Distribution & Habitat
 - Life History
- Management
 - International
 - National
- Catch Characteristics
 - Recreational
 - Commercial
- Timeline

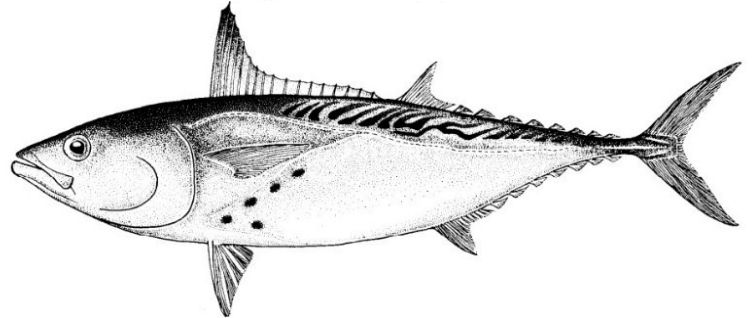


Classification & Description

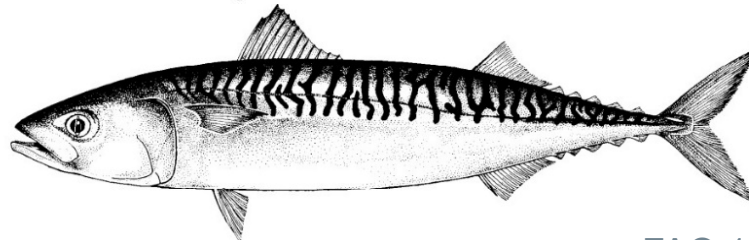
- Family: Scombridae
 - Scientific Name: *Sarda sarda*
 - Common Names:
 - Atlantic Bonito
 - Skipjack
 - Bonita
 - False albacore
 - Little tunny
 - Boston mackerel



Katsuwonus pelamis



Euthynnus alletteratus

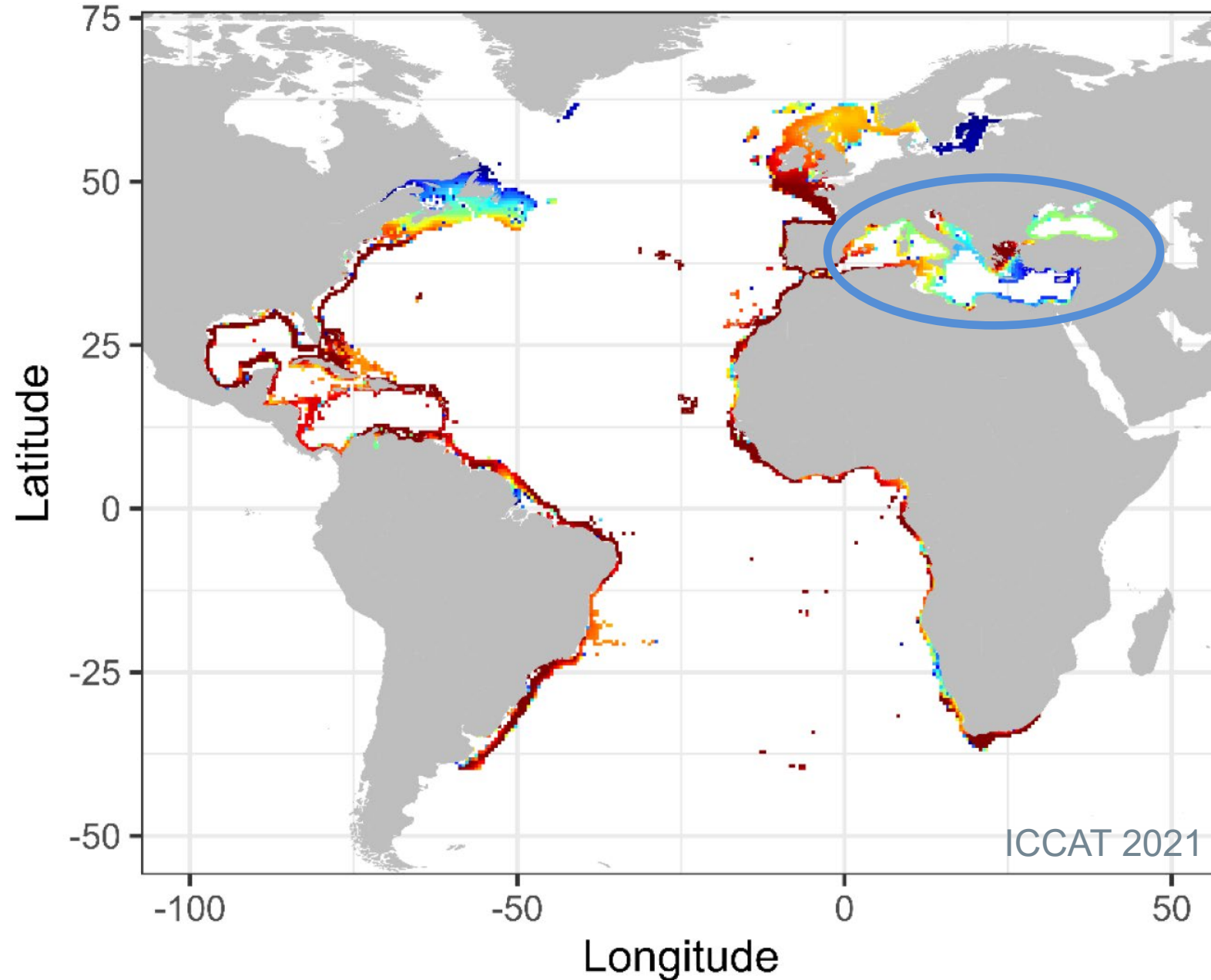


Scomber scombrus

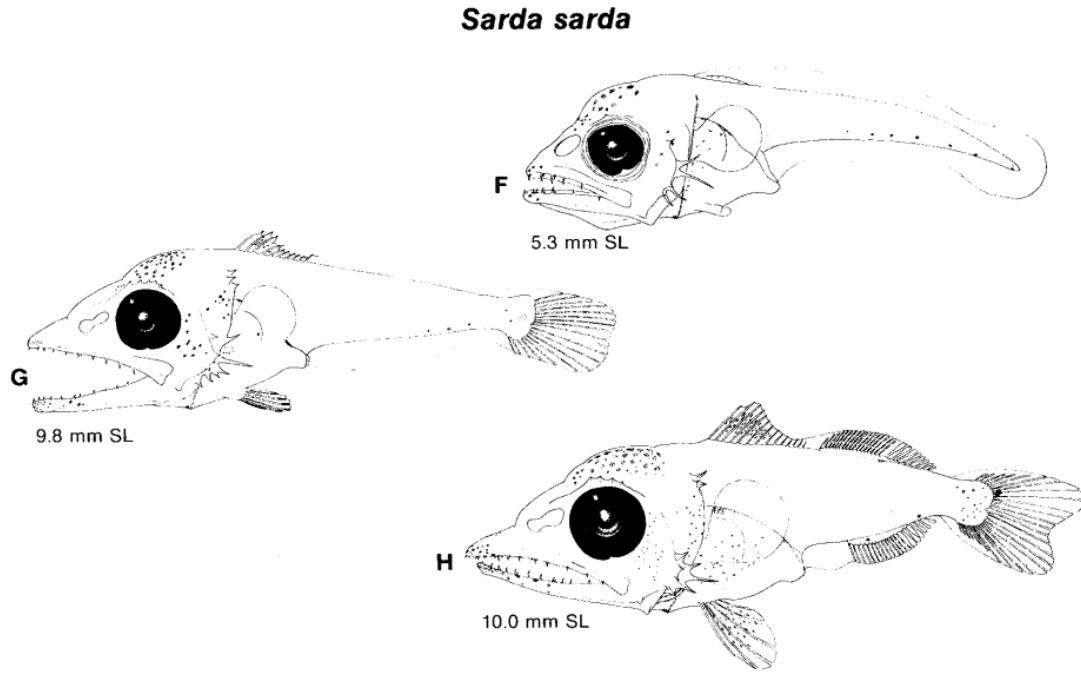
FAO 1983

Distribution & Habitat

- Coastal
- Surface waters
- 54 to 81 °F
- 14 to 39 ‰ Salinity
- Migration
 - Tagging studies



Life History



JNWAFS 1983

- Reproduction

- Spawn in June and July
- Batch spawners
- 300,000 to 1 million eggs
- 61 to 82 °F

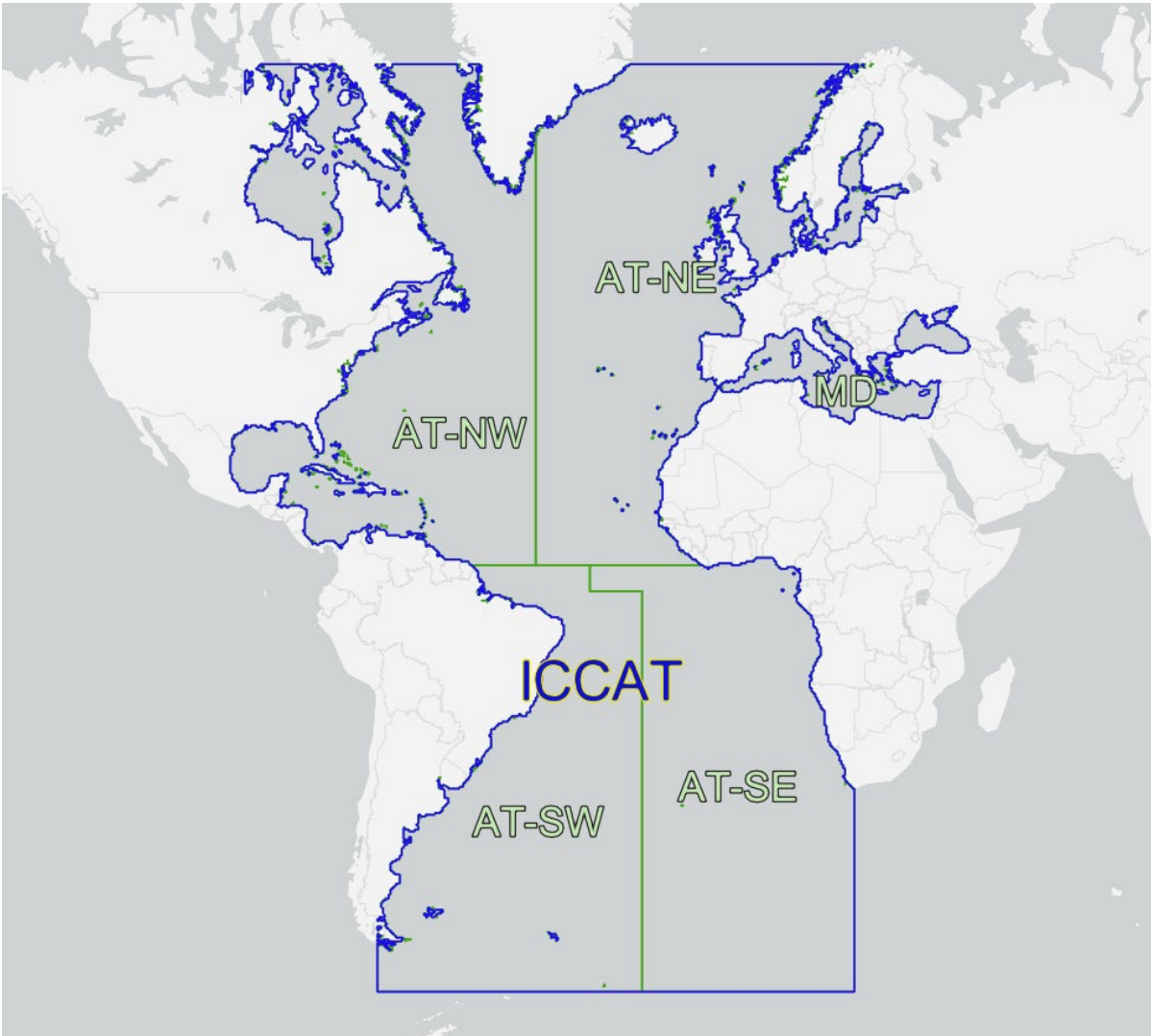
- Growth

- Maximum length: 34 inches
- Length of maturity: 15 inches
- Maximum age: 5-7 years

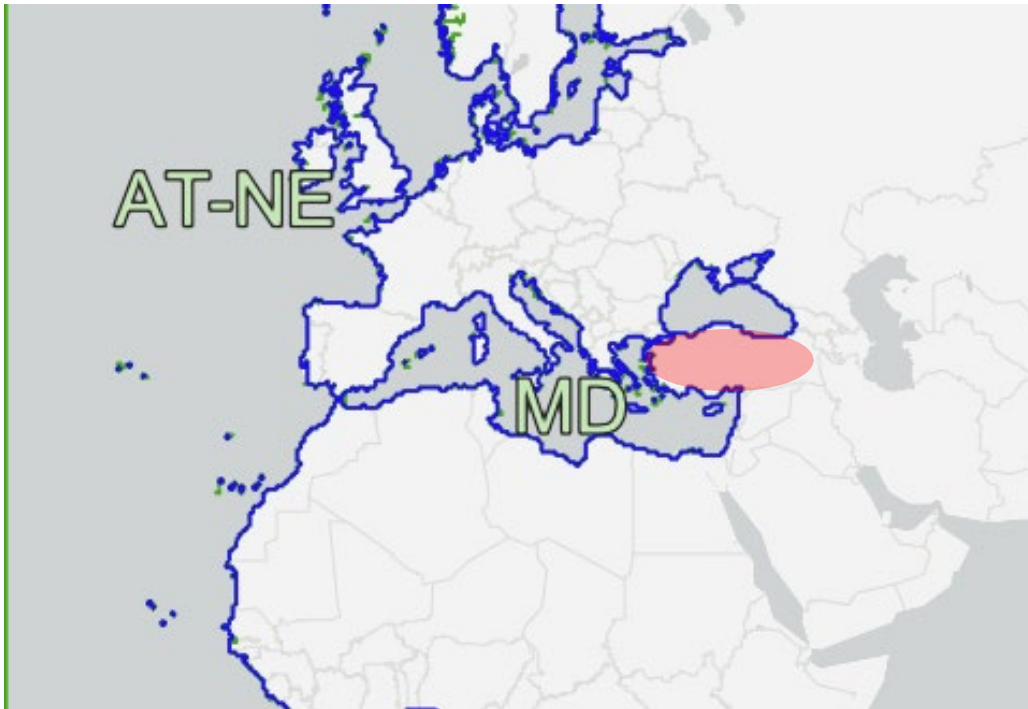


Management: International

- International Commission for the Conservation of Atlantic Tunas (ICCAT)
 - Small Tunas Species Group
 - Bonito **30%**
 - Little tunny
 - Frigate tuna
 - King mackerel
 - Spanish mackerel
 - Bullet tuna
 - Wahoo



Management: International



- Turkey
 - Seasonal ban (April 1 to August 14)
 - Minimum size 10 inches
 - 11 lbs per angler per day

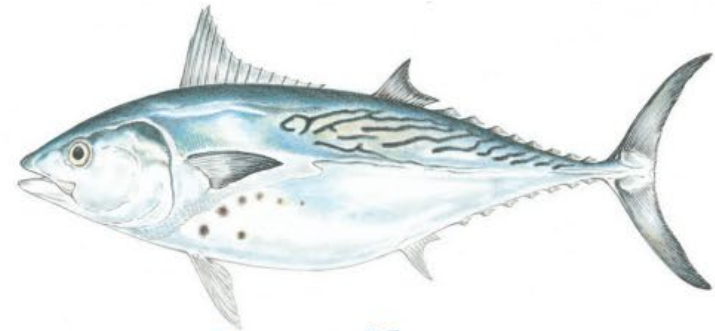


Management: National

- National
 - Massachusetts



Atlantic Bonito



False Albacore

Year round / 16" curved fork length (both species) / 5 fish (Atlantic bonito and false albacore combined)



Commonwealth of Massachusetts
Division of Marine Fisheries
mass.gov/MarineFisheries



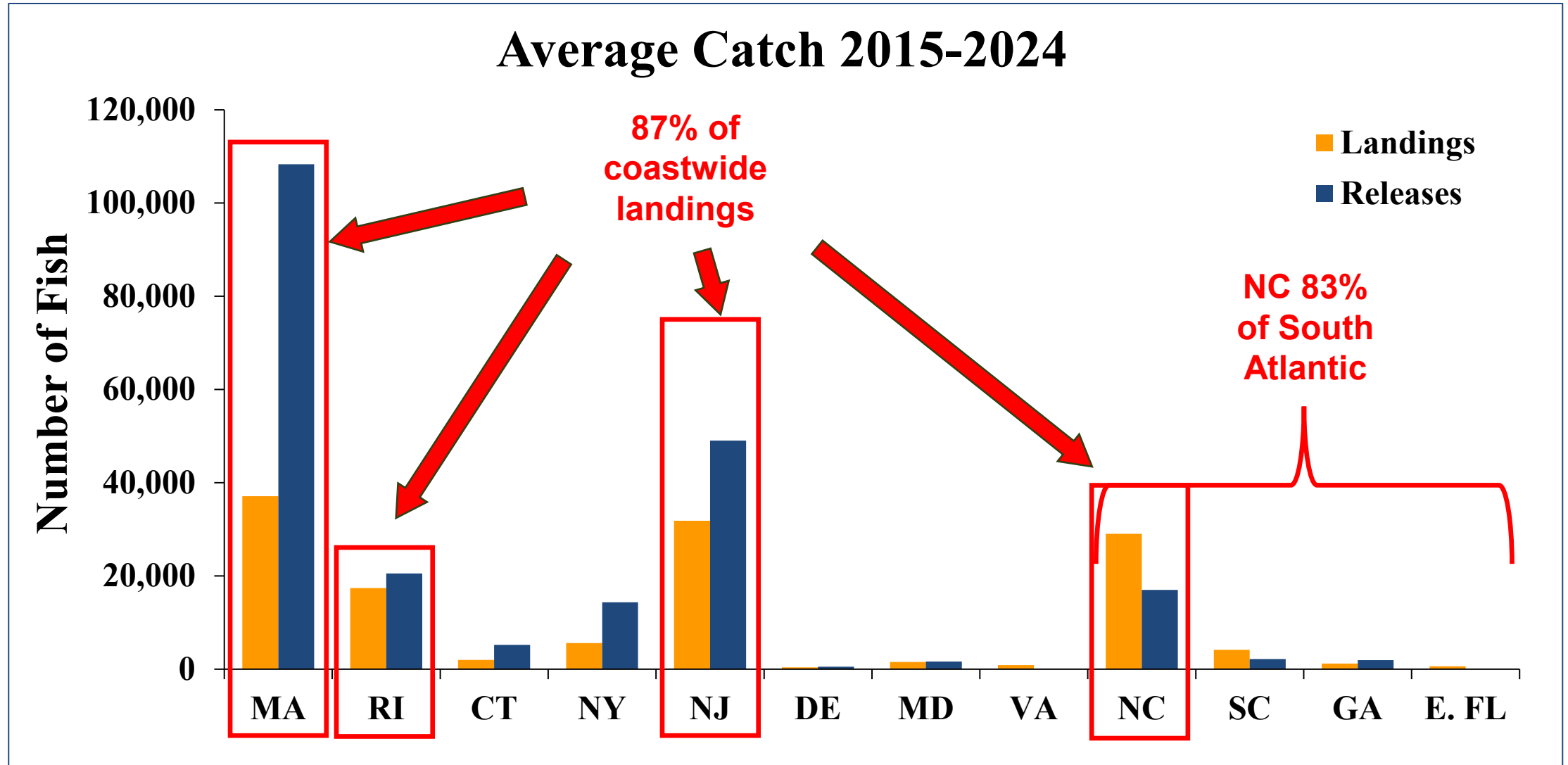
CATCH CHARACTERISTICS



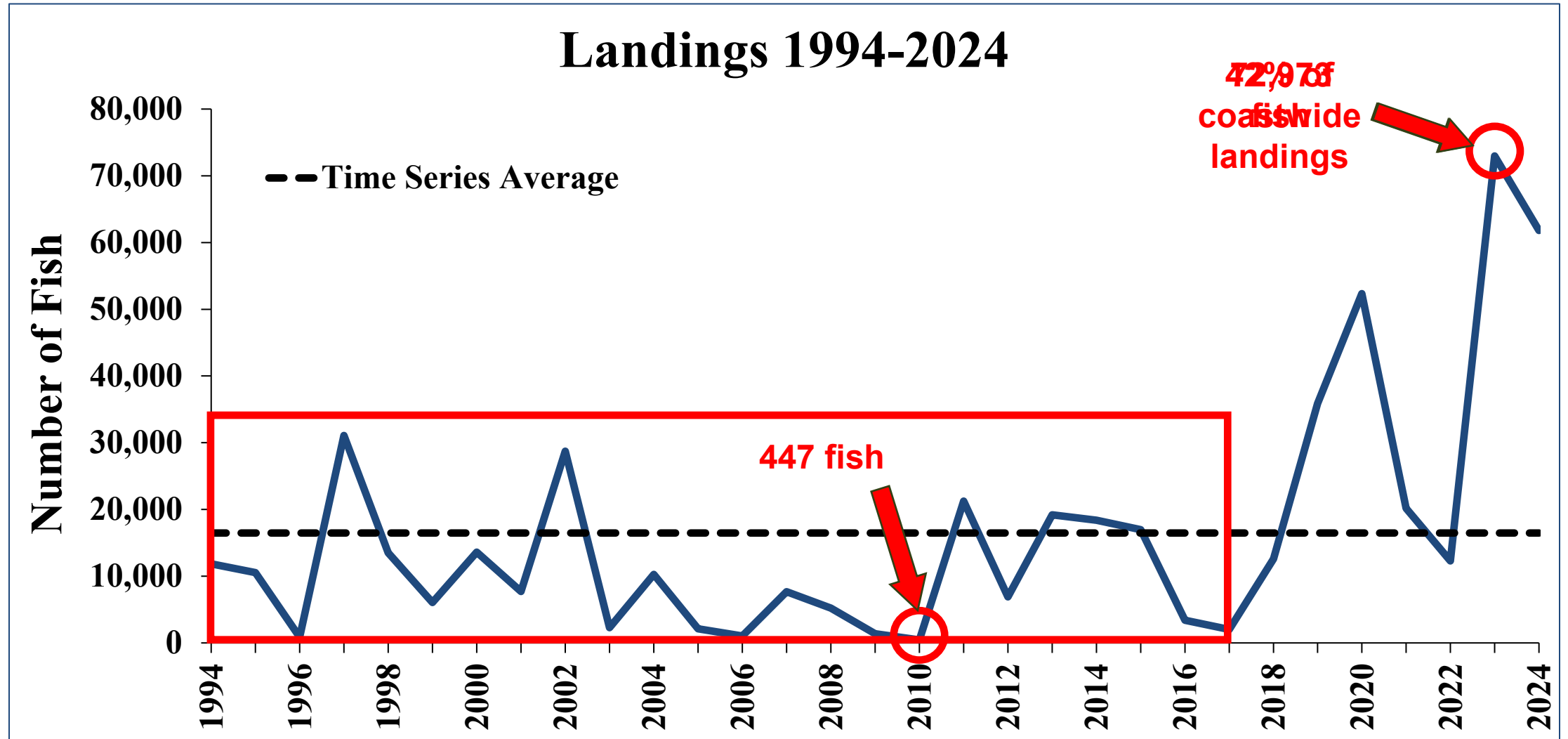
- Atlantic Coastal Cooperative Statistics Program (ACCSPP)
- North Carolina Trip Ticket Program
- Marine Recreational Information Program (MRIP)
- Cautionary Notes:
 - Low sample sizes
 - High percent standard error (PSE's)
 - Incorrect identifications



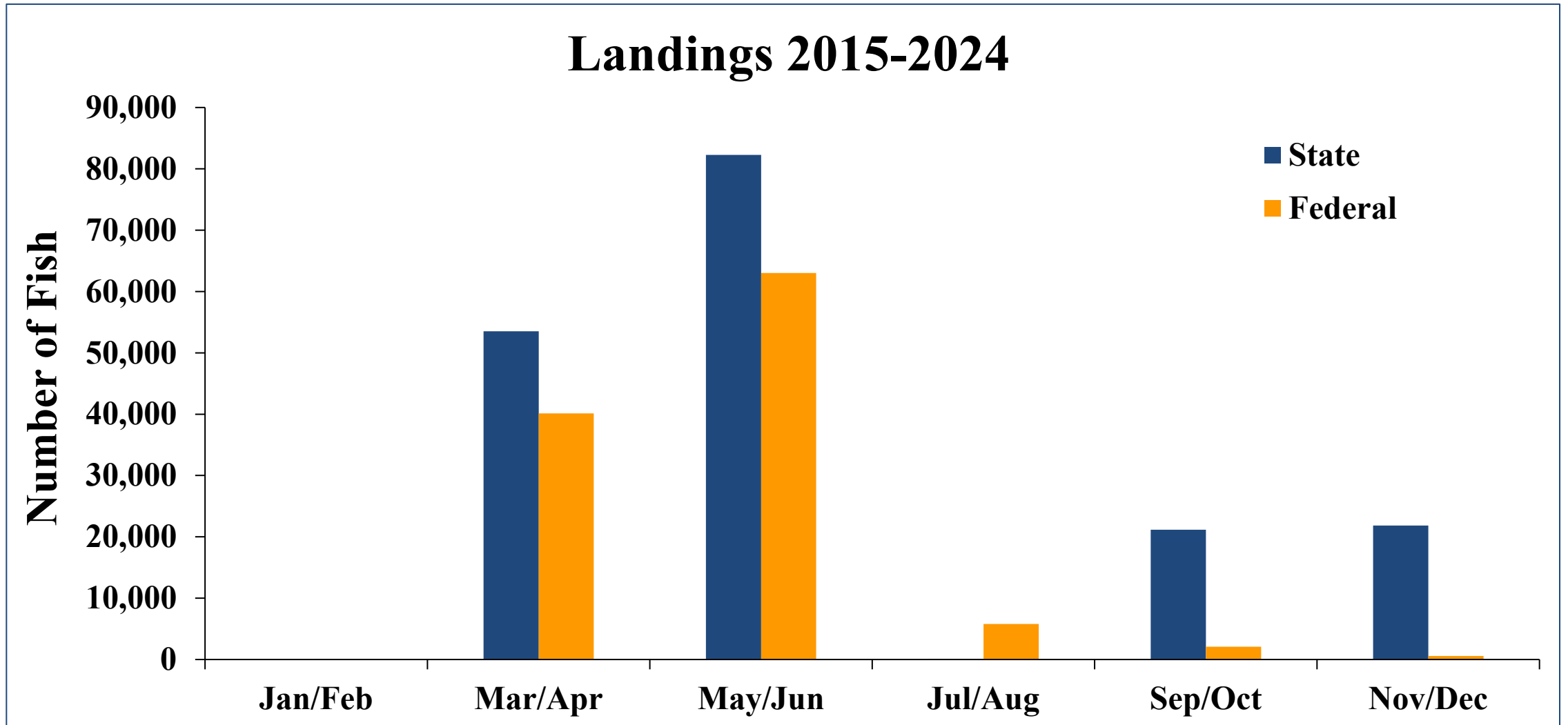
Catch Characteristics: Recreational



NC Catch Characteristics: Recreational

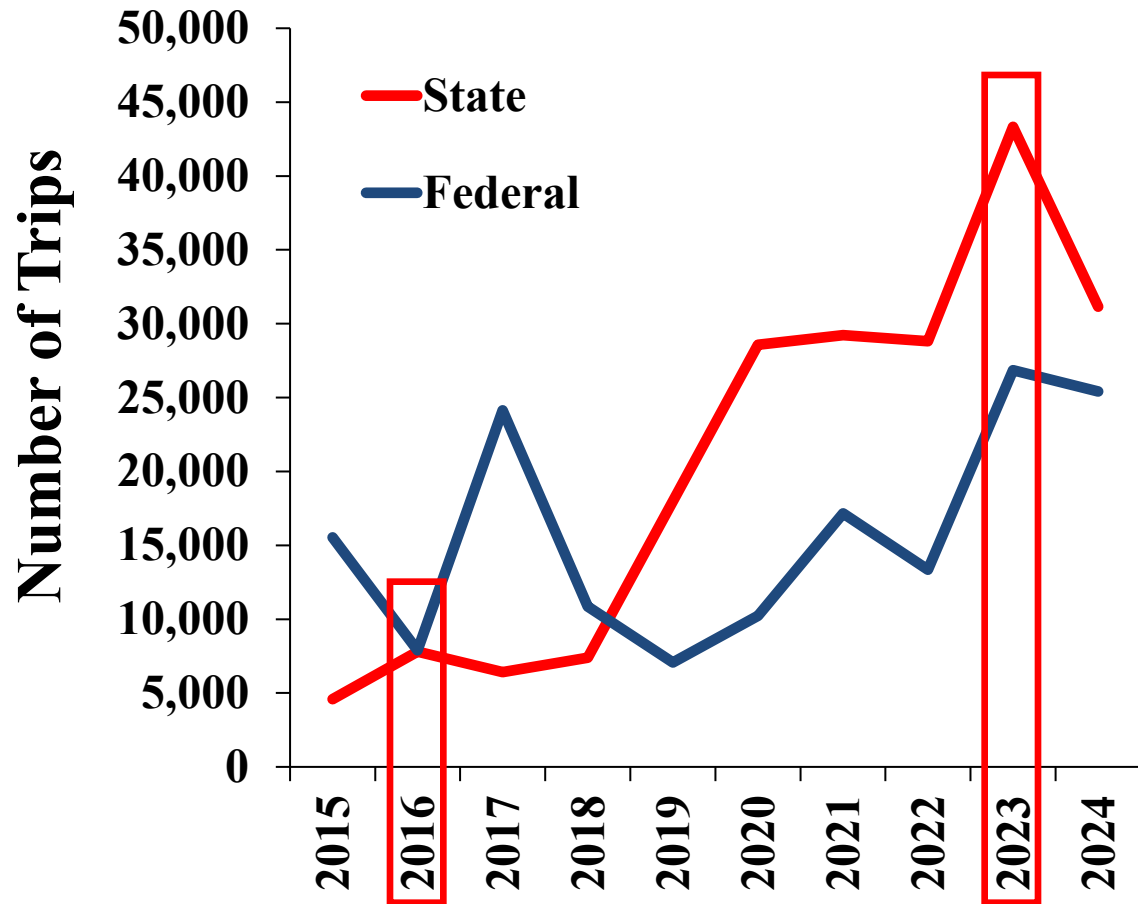


NC Catch Characteristics: Recreational

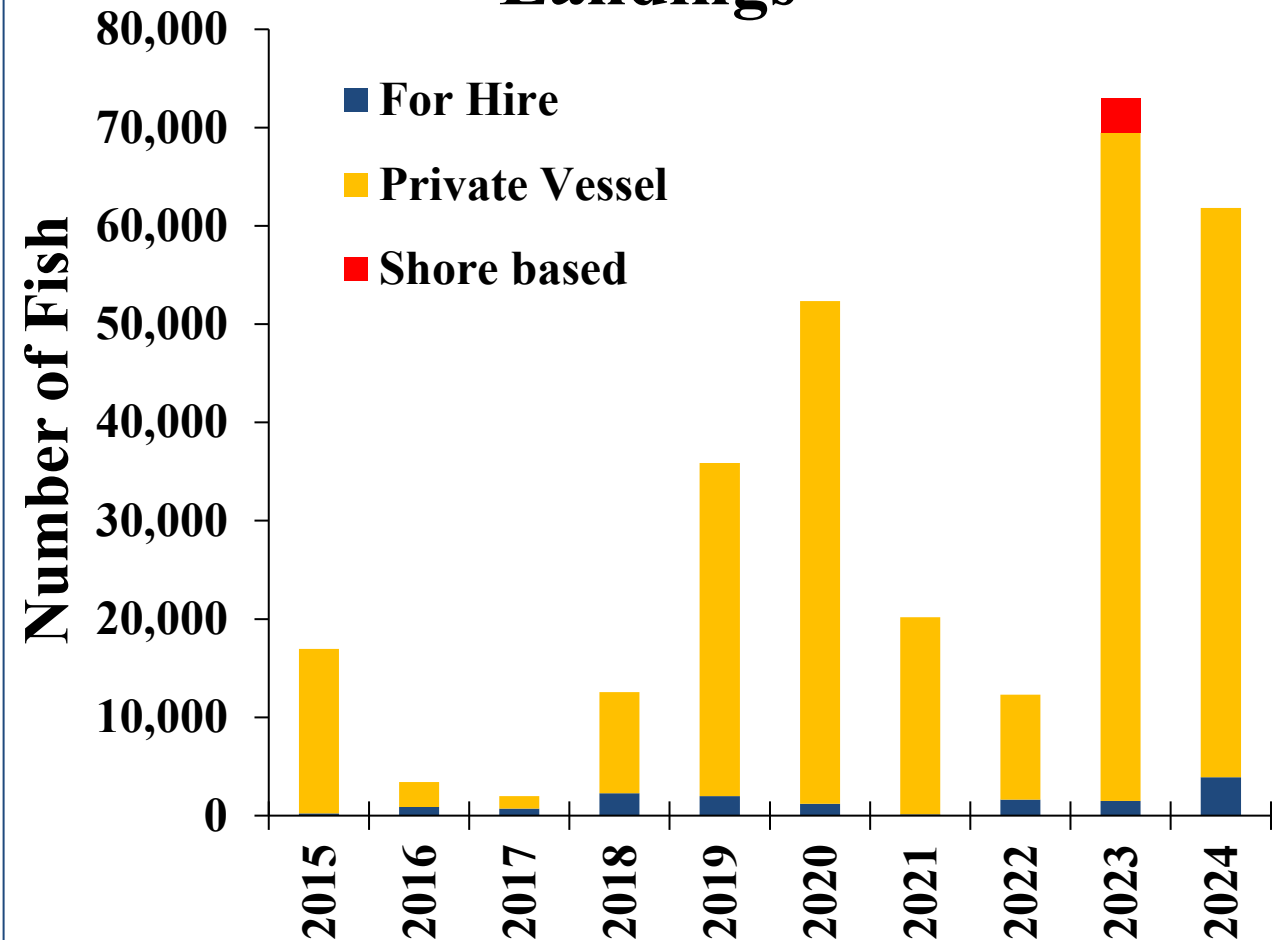


NC Catch Characteristics: Recreational

Directed Trips

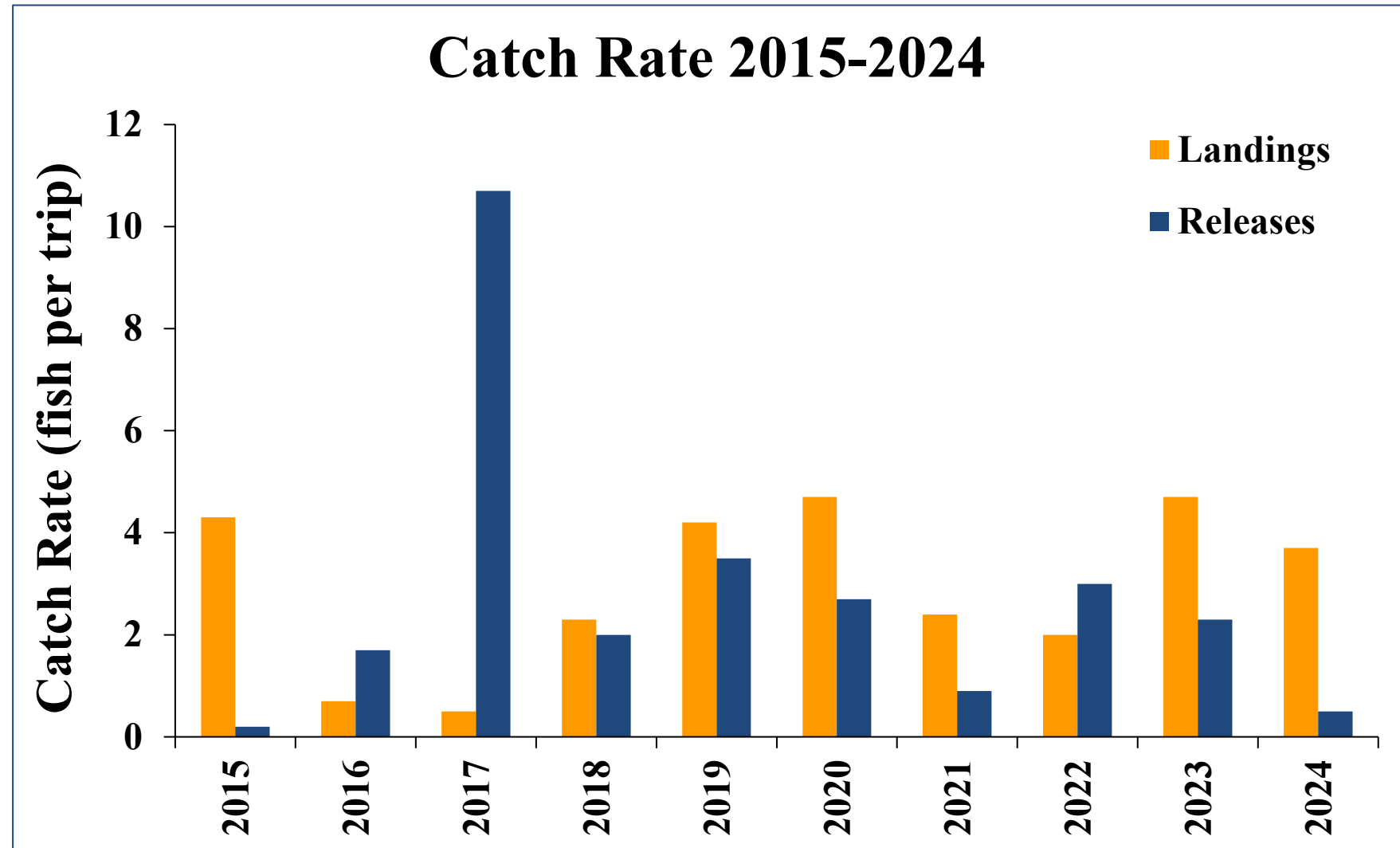


Landings



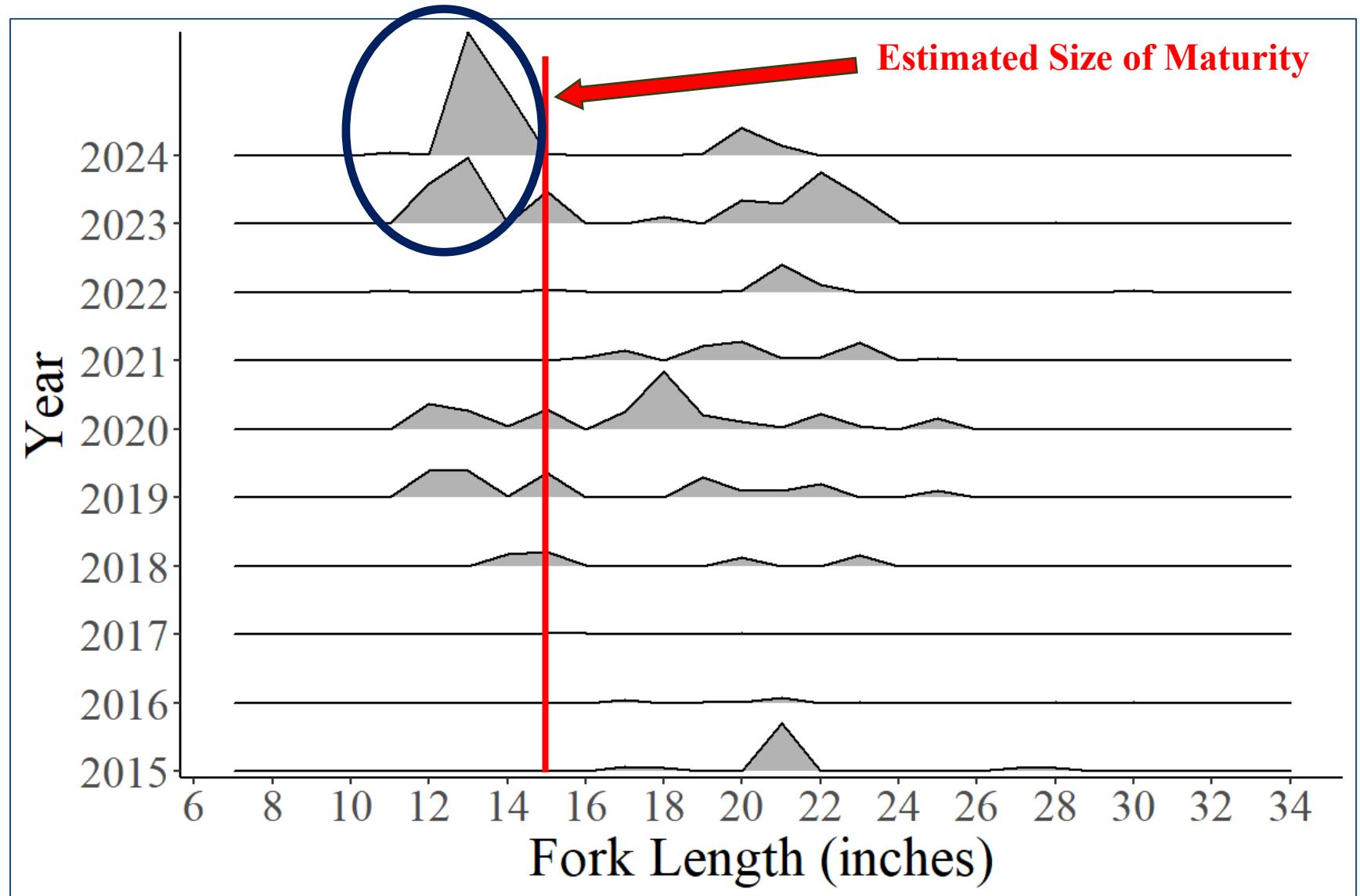
NC Catch Characteristics: Recreational

- Catch per trip
 - 2 to 11 fish
- Landings per trip
 - 1 to 5 fish
- Releases per trip
 - 0 to 11 fish

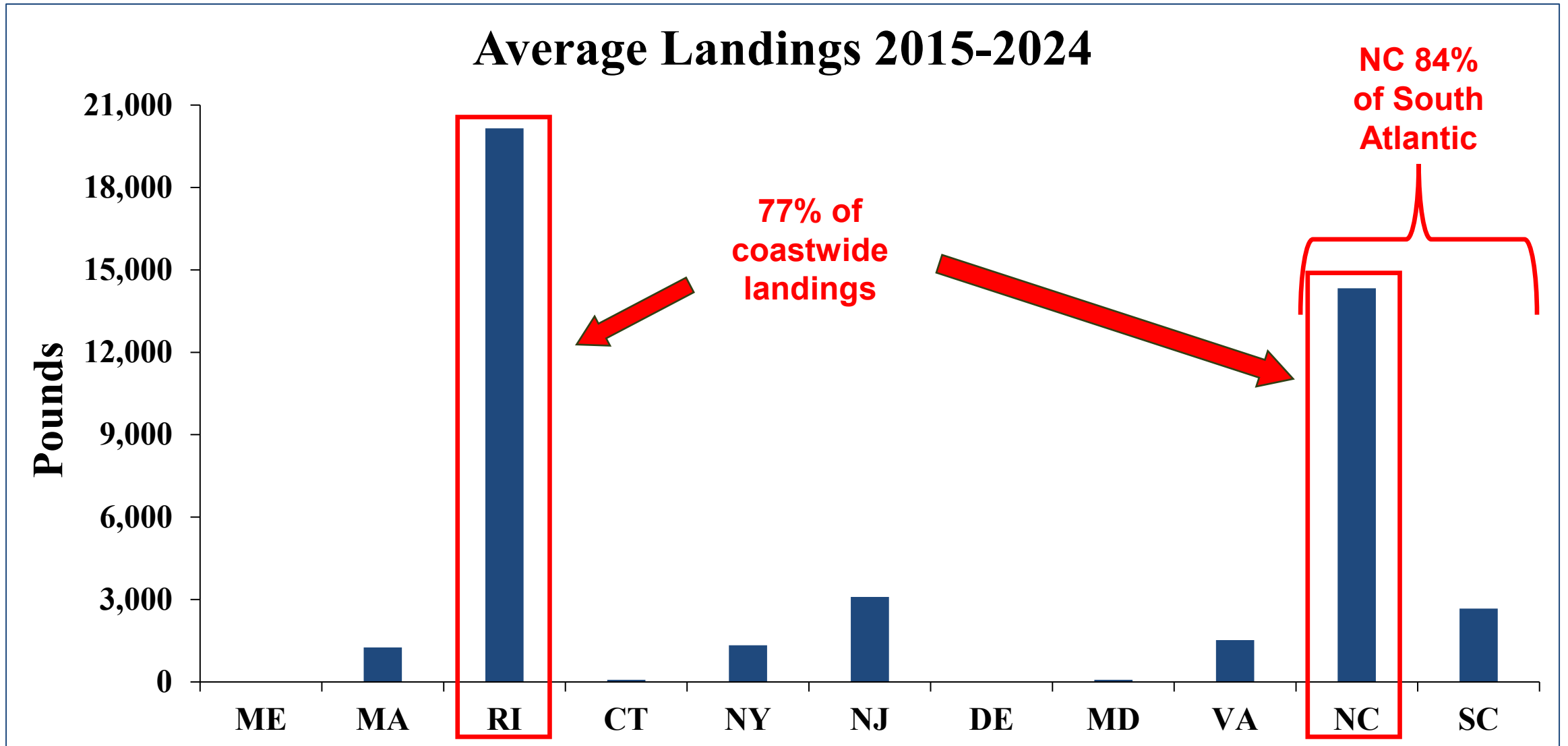


NC Catch Characteristics: Recreational

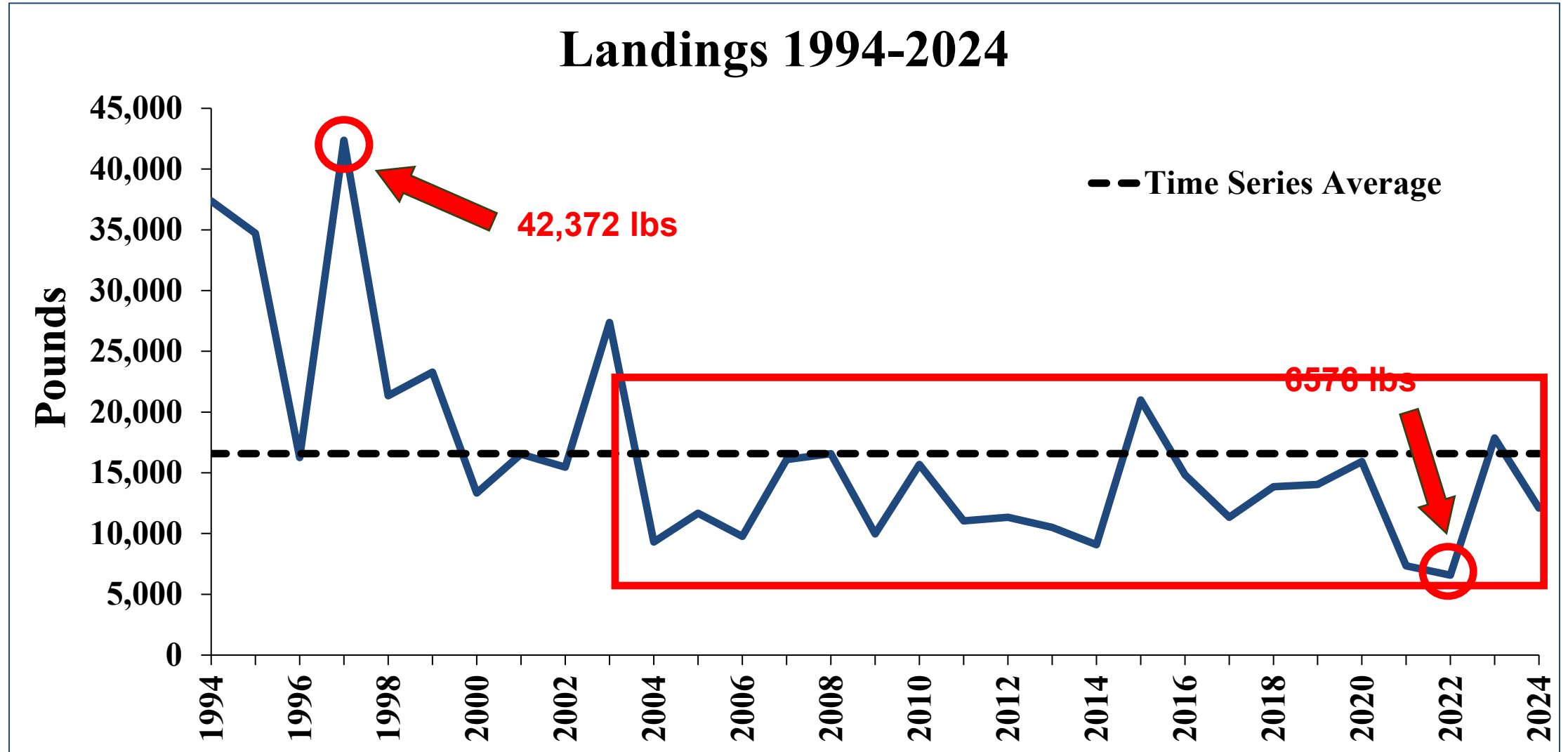
- 2015-2024
 - 14 to 21 inches
 - 18.4 inches
- 2024
 - 11 to 27 inches
 - 14.5 inches



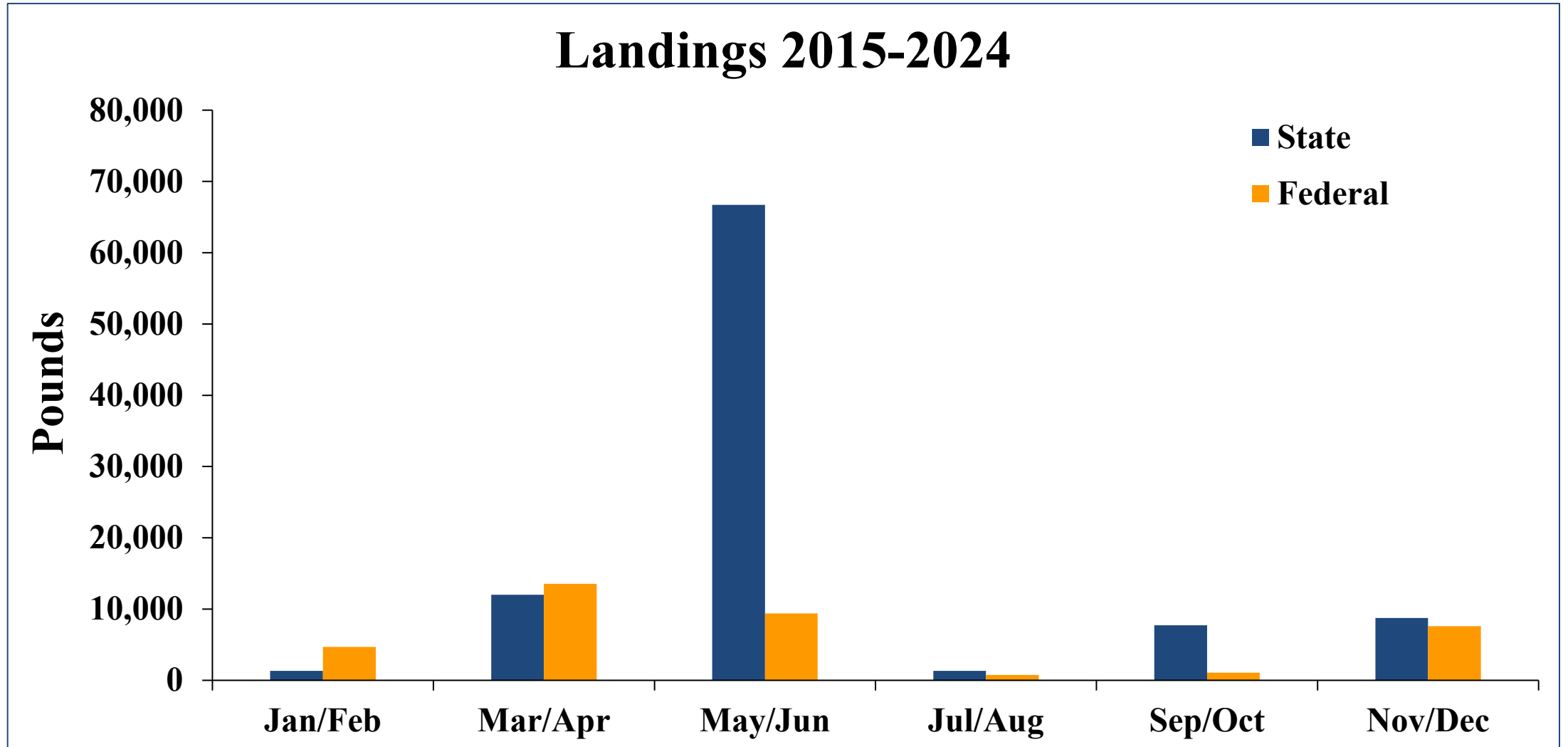
Catch Characteristics: Commercial



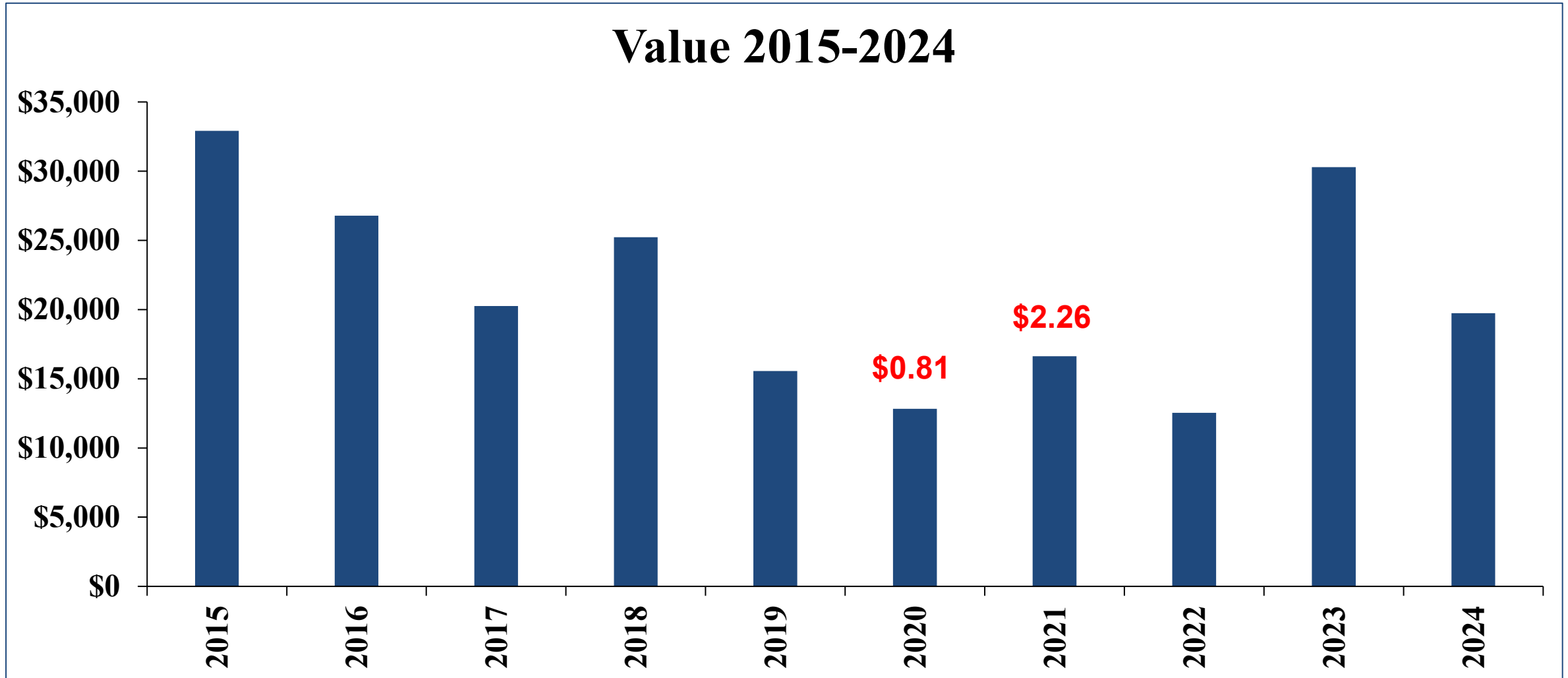
NC Catch Characteristics: Commercial



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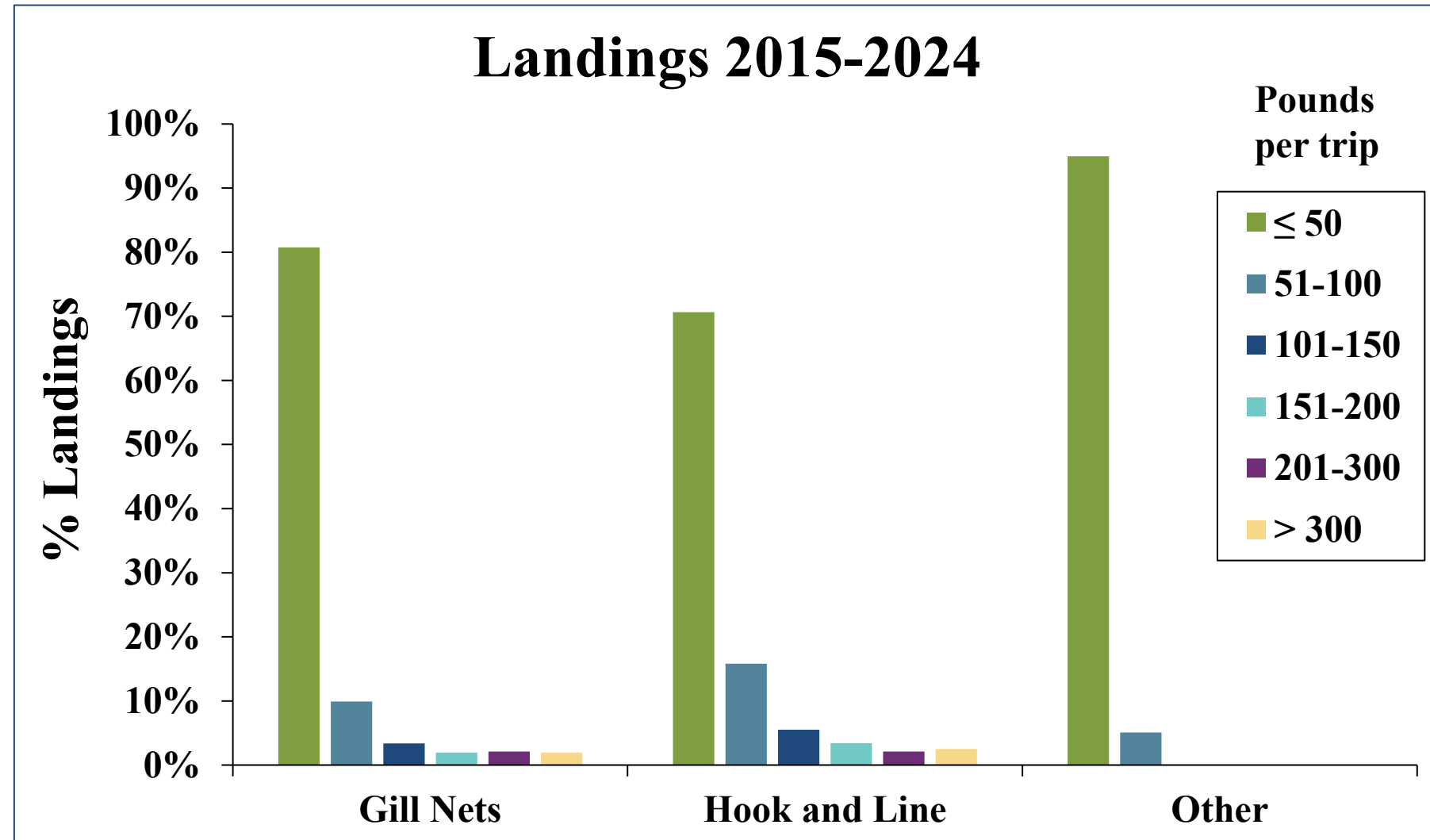


NC Catch Characteristics: Commercial



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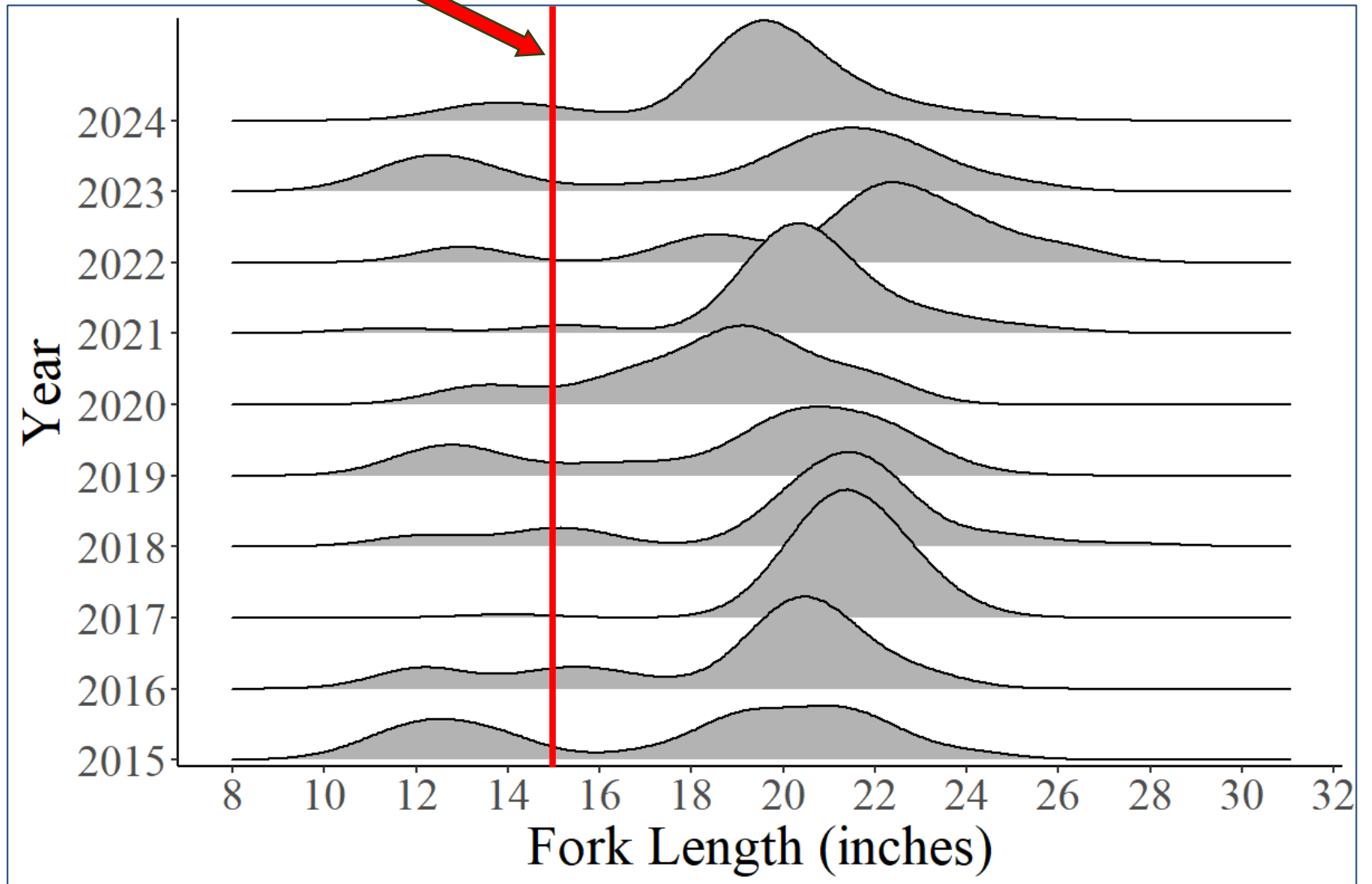
- Gill Nets:
 - 9,366 lbs
- Hook and Line:
 - 4,013 lbs



NC Catch Characteristics: Commercial

- 2015-2024
 - 11 to 28 inches
 - 19.4 inches
- 2024
 - 13 to 25 inches
 - 19.2 inches

Estimated Size of Maturity



NC Catch Characteristics: Summary

- **Recreational**

- Accounts for 22% of coastwide landings and 83% in South Atlantic
- Landings more than releases
- Directed trips on private vessels have increased in state waters
- Catch of 2 to 11 fish per trip; Landing 1 to 5 fish per trip
- Smaller fish caught last year, but average at 15 inches

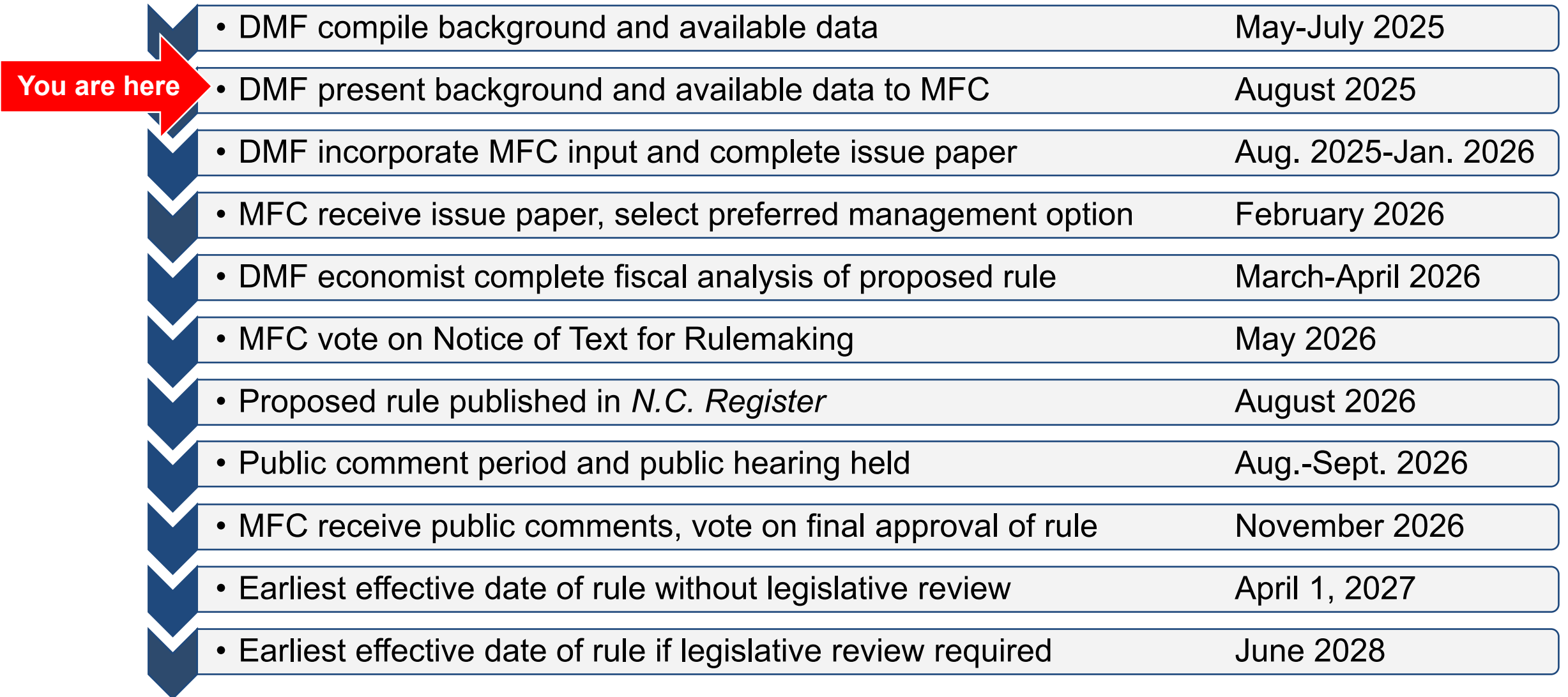
- **Commercial**

- Accounts for 32% of coastwide landings and 84% in South Atlantic
- Total catch has remained below average with low value
- Harvest shifted to state waters; mostly from gill nets
- Most trips harvest ≤ 50 lbs regardless of gear
- No change in size frequency

Atlantic Bonito Next Steps

- DMF address questions and obtain additional input from MFC based on presentation today of background and available data
- DMF incorporate MFC input and complete issue paper
- MFC receive issue paper and select preferred management option
- DMF economist complete fiscal analysis of proposed rule
- MFC vote on Notice of Text for Rulemaking to begin the process

Atlantic Bonito Timeline



Questions?

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