



COMMONWEALTH of VIRGINIA

Marine Resources Commission
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Secretary of Natural and Historic
Resources

Jamie L. Green
Commissioner

MEMORANDUM

Date: April 8, 2024

To: Allie Iberle and the SAFMC Shrimp Advisory Panel

From: Patrick Geer, Chief of Fisheries Management Division,
Virginia Marine Resources Commission

Subject: Virginia's Shrimp Fishery

Thank you for the invitation to participate in the Council's Shrimp Advisory Panel. The Commonwealth of Virginia is excited for this opportunity and hope it will help enhance our emerging shrimp fishery. I'd like to take this opportunity to provide the Advisory Panel some background and results from Virginia's shrimp fishery.

History

Penaeid shrimp have been reported in Chesapeake Bay and seaside lagoons for years with periodic increases in abundance most likely due to recruitment from North Carolina spawners. In 2017, a number of fishermen off Virginia Beach (VB) began to notice quantities of shrimp entangled in their coastal gill nets. A single experiment fishing permit (EFP) was issued for a modified crab dredge to explore the efficacy of harvesting these shrimp. With some success that year, two EFPs were issued in 2018 using a lightweight 16 ft. beam trawl. Interest and initial success in the fishery resulted in 16 applications for permits (6 issued) in 2019, with expansion to the coastal waters off Eastern Shore (ES). Ten permits were issued in 2020 (VB-6, ES-2) resulting in over 400,000 lbs of harvest. With the success of the fishery in the coastal waters of Virginia Beach, the Virginia Marine Resources Commission (VMRC) began regulating and licensing the Virginia Beach Shrimp Trawl Harvest Area in 2021. The fishery remained limited entry with only 12 licenses issued from a pool of 70 applicants. Due to limited participation and information, the coastal waters of the Eastern Shore remained under an experimental fishing permit with 4 permits issued (19 applicants). Since that time, the Virginia Beach trawl area has remained a limited entry fishery with 12 licenses, while the number of Eastern Shore permits increased the past two years in hopes of gathering more information (2022-9, 2023-8). We are presently planning changes for the 2024 fishing season that will increase the number of licenses issued coastwide.

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The increase of shrimp in Virginia's state waters has been verified by fisheries independent surveys at the Virginia Institute of Marine Science (VIMS) (Figure 1). Our goal with this and all emerging fisheries is to limit participation with slow growth to ensure success while preventing possible negative economic or ecological circumstances.

Methods

Commercial

Gear: Beam or fixed frame opening no larger than 4.0 ft in height and 16 ft in width, with a minimum net mesh of 1.5-2.0 inches stretched mesh, with a National Marine Fisheries Service or North Carolina Division of Marine Fisheries approved bycatch reduction device. Tow duration may not exceed 30 minutes.

Season: October 1 to January 31 in the Virginia Beach trawl area and September 15 to December 31 in the Eastern Shore area. Both areas have season restrictions under § 28.2-315 of the Code of Virginia.

Observers: Staff participate on fishing trips to collect information on bycatch. In addition, participants must hail in after each trip to report estimated shrimp harvest and total bycatch – both in pounds.

Areas: Figure 2 shows the present permissible trawling areas for shrimp trawls. The areas are defined as:

Virginia Beach Shrimp Trawl Harvest Area: Cape Henry south to the NC/VA state line, eastward the 3-nautical mile line.

Eastern Shore Shrimp Trawl Harvest Area: Cape Charles eastward to the 3-nautical mile line, north along the line to the MD/VA state line, excluding all bays, lagoons, creeks, and inlets.

Other Commercial Considerations: All other lawful commercial gears (except the approved 16 ft beam trawl and cast nets) may fished in all state waters and are limited to 20 qts (heads-on) per person or vessel per day.

Recreational: Permitted only with approved recreational fishing gears and the appropriate licenses with a 20 quart per person or vessel per day.

Results

Catch and Effort Results

Virginia Beach Trawl Area: We've issued 13 EFPs/ licenses since 2017 in the Virginia Beach trawl area, with 11 of those individuals remaining active in the fishery. Annual harvest ranged from < 2000 lbs (6 trips) in 2017 to over 400,000 lbs and 401 trips in 2020.

Eastern Shore Trawl Area: This area has been more problematic. A total of 15 individuals have been issued EFPs since 2019 with only 4 of those individuals actually reporting fishing activity. During that five-year period (2019-2023), a total of 2,355 lbs of shrimp was reported from 26 trips. Staff have put more effort into promoting this area since the Virginia Beach trawl area became regulated in 2021 in hopes of increasing participation. In 2023, we allowed permittees to start fishing as early as September 15th with only one individual reporting any activity (two trips). We are confident these areas hold shrimp given available suitable inshore habitat, fishery independent survey observations, and reports from other states on the Delmarva peninsula.

Overall, there was peak in shrimp harvest and effort in 2020 with catch per trip (CPUE) nearing 1000 lbs per trip. CPUE has averaged 399 lbs per trip over the past three years (Figure 3).

Staff collect bycatch information from observer trips and fishers are required to call in total bycatch daily. Bycatch to Shrimp ratio has been relatively low – averaging less than 0.25 lbs of bycatch per pound of shrimp during the seven years of the fishery. Bycatch is dominated by sciaenids (Figure 4).

Relevant Code Sections and Regulations

Code

[§ 28.2-314](#). Trawl nets and drag nets prohibited; sale of fish; penalty (1992).

[§ 28.2-315](#). Fishing with trawl net within three-mile limit; license fee (2009).

[§ 28.2-316](#). Trawling boat not granted license for other fishing device; penalty (1992).

[§ 28.2-317](#). Prima facie evidence of violation; penalty (1992).

[§ 28.2-318](#). Exemption for certain trawling activity (1992).

Regulation

[Chapter 4VAC20-1390-10](#). Pertaining to Shrimp (2021).

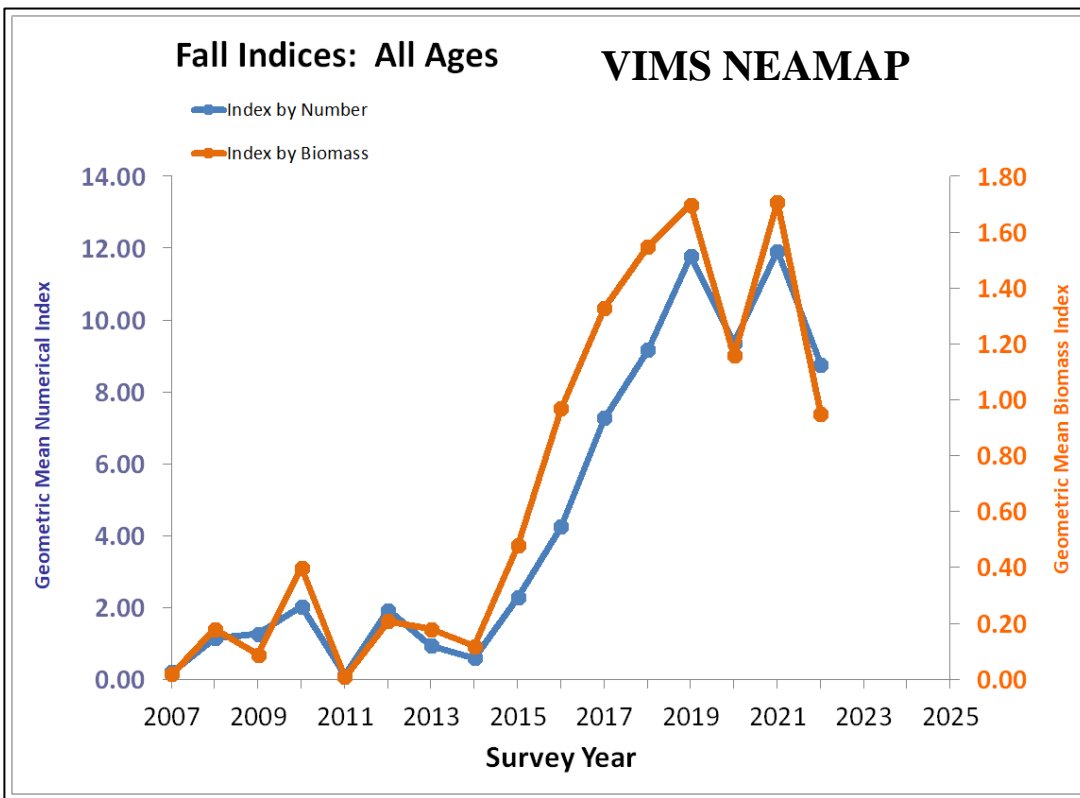
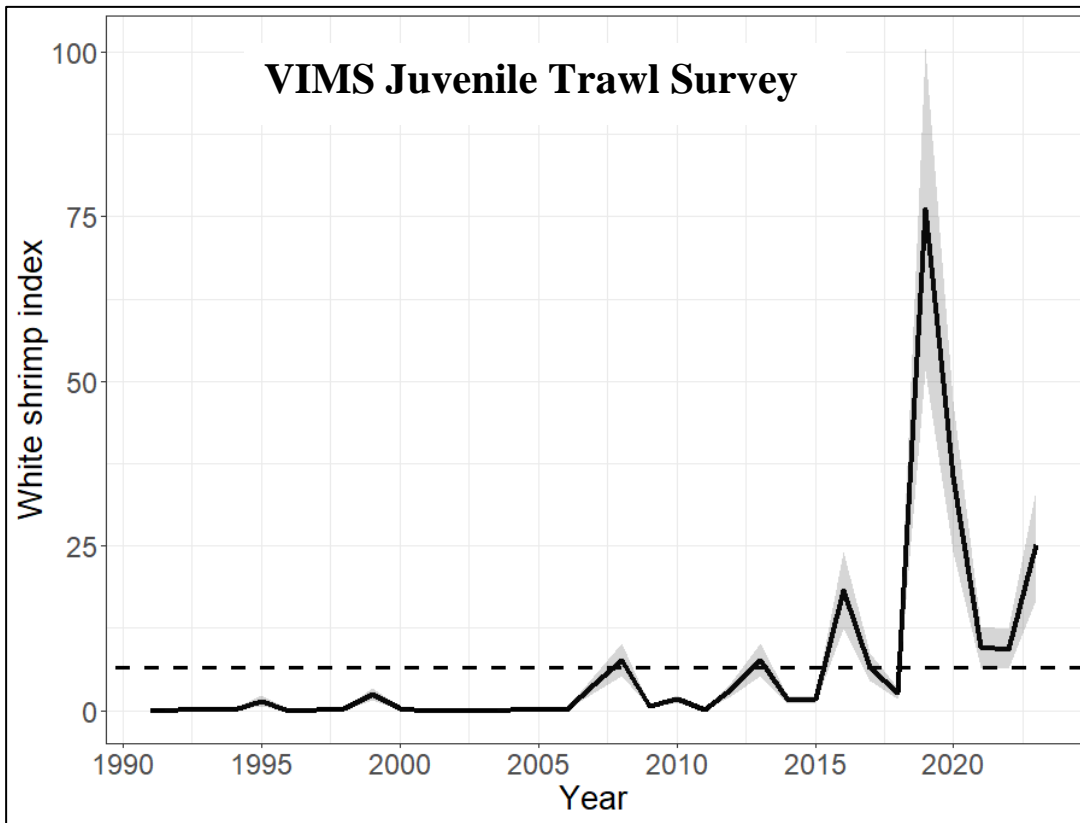


Figure 1. White shrimp indices from VIMS Trawl Surveys: Top: Juvenile Trawl Survey. Bottom: Northeast Area Monitoring and Assessment Program (NEAMAP).

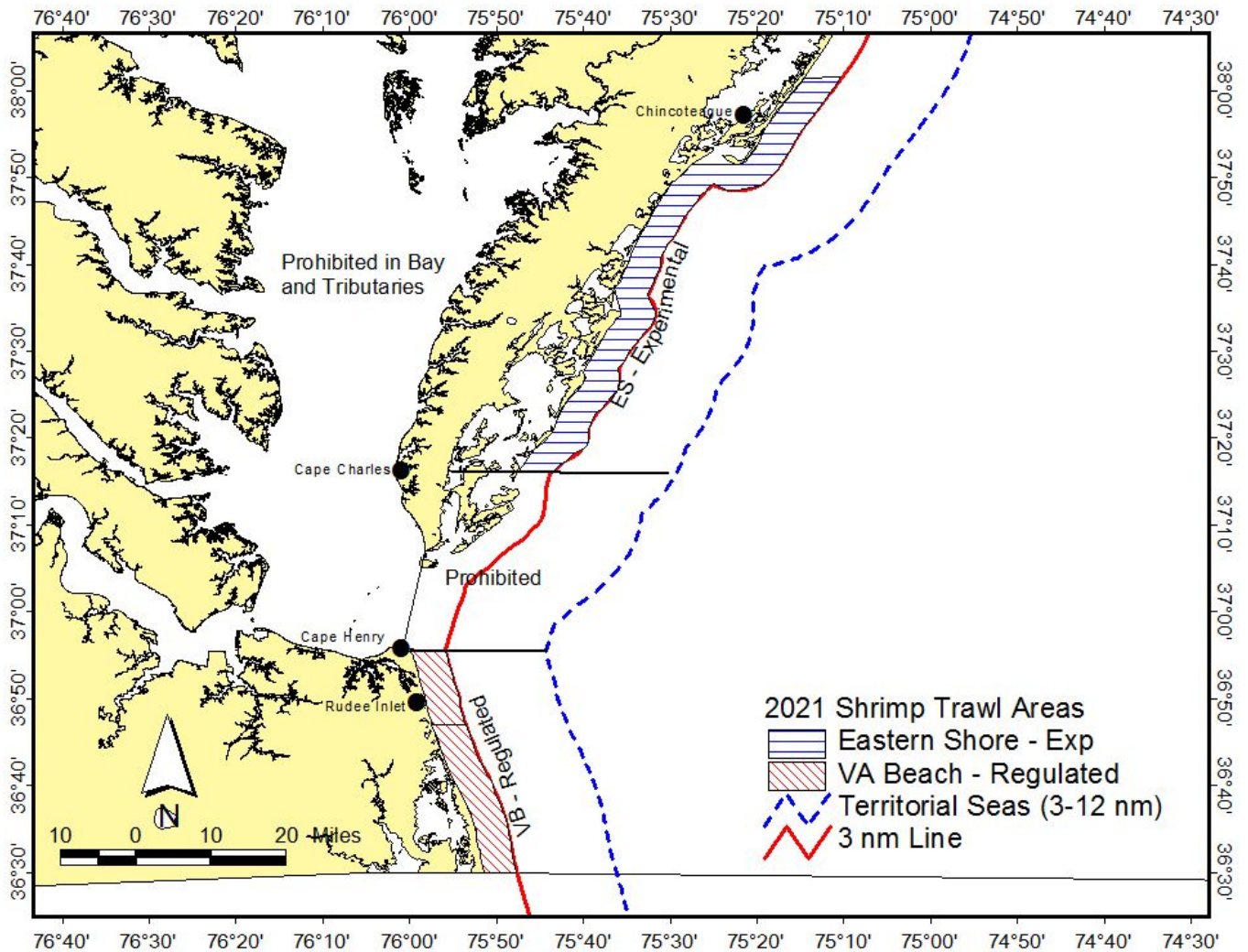


Figure 2. Virginia shrimp trawl harvest areas. Virginia Beach has been regulated under Chapter 4VAC20-1320-10 since 2021. The Eastern Shore area is still managed through experimental fishing permits (EFP). Trawling locations and seasons are regulated under §§ 28.2-315-318 of the Code of Virginia.

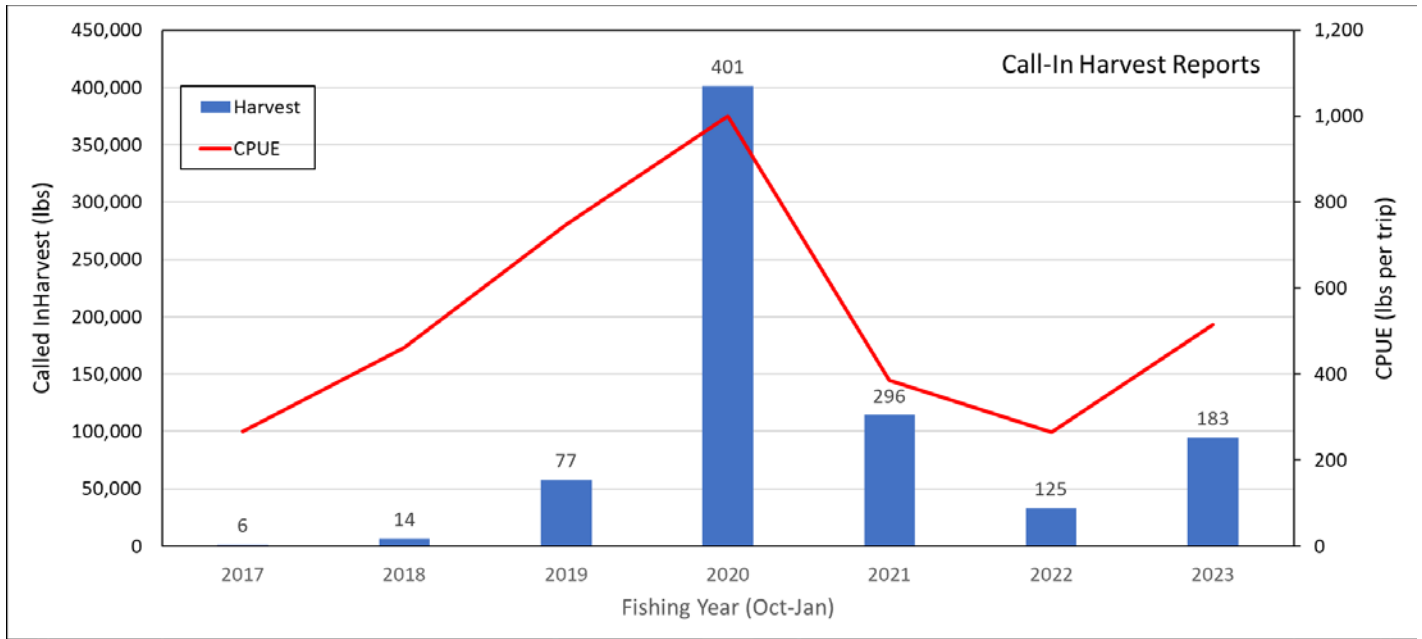


Figure 3: Shrimp harvest and Catch Per Unit Effort (CPUE) in lbs/trip for Virginia's shrimp trawl fishery. The numbers above each bar are the annual number of trips.

Shrimp Trawl Species Composition by Weight
VMRC Observer Program
2018-2023

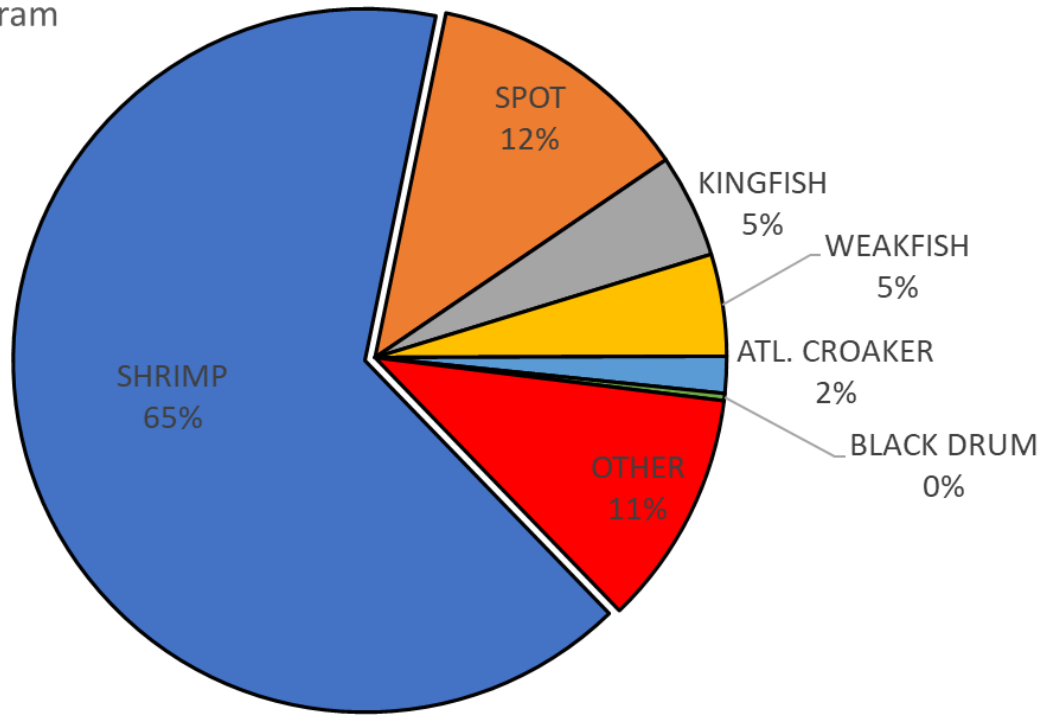


Figure 4: Shrimp trawl species composition by weight 2018-2023.
Source: VMRC Observer Program