



Butterfish Fishery Information Document

April 2021

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for butterfish, with an emphasis on 2020. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/msb>.

Key Facts

- 2020 landings, revenues, and average price for butterfish were down in 2020 compared to 2019. Landings have generally been variable and well below the quota in recent years.
- Butterfish's last management track assessment update (2019 data) concluded biomass has been trending down but the stock is not overfished nor experiencing overfishing. Recruitment is variable but has been trending lower since 1999. Spawning stock biomass (SSB) in 2019 was estimated to be 69% of the target. A research track assessment is ongoing – if approved via peer review, any new assessment methods would be incorporated into a management track assessment update in 2022 for 2023-2024 quotas.
- Considerable variability is expected in abundance, availability, and landings.

Basic Biology

Atlantic butterfish is a semi-pelagic/semi-demersal schooling fish species primarily distributed between Nova Scotia, Canada and Florida. They are most abundant from the Gulf of Maine to Cape Hatteras and are fast-growing, short-lived, and form loose schools. They winter near the edge of the continental shelf in the Middle Atlantic Bight and migrate inshore in the spring into Mid-Atlantic, southern New England, and Gulf of Maine waters. During the summer, butterfish occur over the entire mid-Atlantic shelf from sheltered bays and estuaries out to about 200 m. In late fall, butterfish move southward and offshore in response to falling water temperatures.

Butterfish are relatively short-lived and grow rapidly; few individuals live beyond 3 years and most are sexually mature at 1-2 years of age. The maximum age reported is 6 years. Juvenile butterfish range from 16 mm to about 120 mm. During their first year, they grow to 76-127 mm, or about half their adult size. Early-spawned individuals are 76-102 mm in the fall; late-spawned individuals are 51-76 mm in the fall and 76-127 mm the following spring. Adult butterfish range from about 120 mm to 305mm with an average length of 150-230 mm. See <https://www.nefsc.noaa.gov/nefsc/habitat/efh/> for more life history information.

Status of the Stock

Based on the last management track assessment, in 2019 the status of butterfish was not overfished with no overfishing occurring (available at https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php). However, declining recruitment has led to declines in biomass (Figure 1), and as of 2019 biomass is estimated to have been only 69% of the target. Projections run based on typical long-term recruitment predict a rapid increase in biomass, but that will only occur when the trend in recruitment reverses. Recent projections for catch limits used lower, more recent (last 10 years) recruitment, which reduces future projected biomass and catch recommendations.

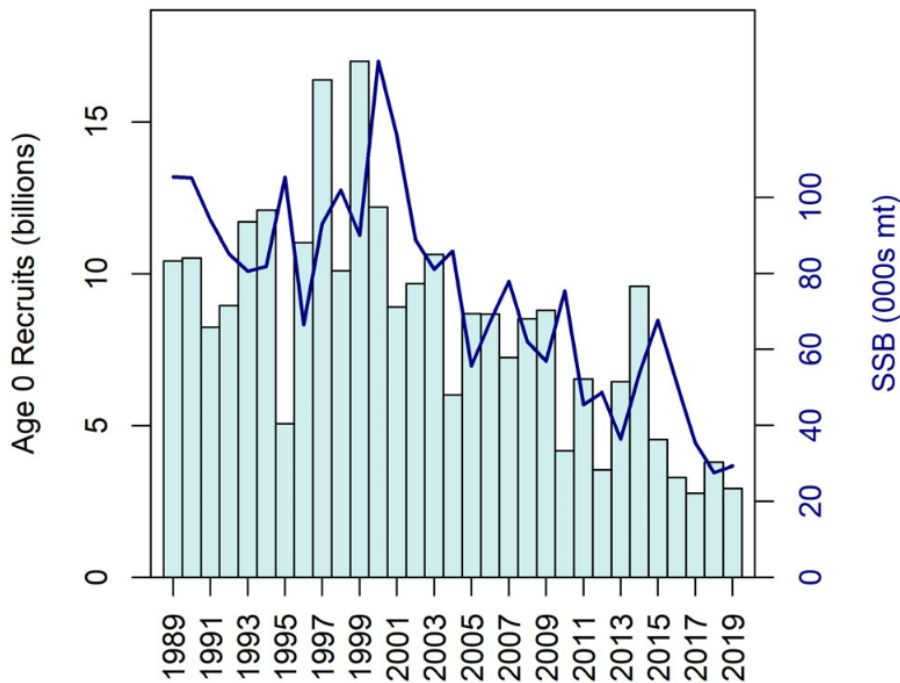


Figure 1. Butterfish recruitment (vertical bars), and the spawning stock biomass (blue line) 1989-2019.

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council (the Council or MAFMC) established management of butterfish in 1978 and the management unit includes all federal East Coast waters.

Limited access commercial vessels can fish year-round until quotas are achieved, subject to applicable gear requirements. Incidental permits are limited to 600 pounds per trip. The ABC for 2021 is 11,993 MT, with a commercial quota of 6,350 MT. At 5,350 MT a 5,000-pound trip limit

is implemented to slow the fishery and avoid having to go to the 600-pound trip limit that is implemented once the full quota is reached (in order to minimize regulatory discards). For 2022, the commercial quota is projected to increase to 11,495 MT. Additional summary regulatory information is available at <https://www.fisheries.noaa.gov/region/new-england-mid-atlantic>.

Recreational landings are negligible. There are no recreational regulations except for party/charter vessel permits and reporting.

Commercial Fishery

Figure 2 below, from the last assessment update describes U.S. butterfish catch 1965-2019. Figures 3-4 describe domestic landings, ex-vessel revenues and prices (inflation adjusted) since 1996. The Gross Domestic Product Implicit Price Deflator was used to report revenues/prices as “2020 dollars.”

Table 1 describes 2020 butterfish landings by state, and Table 2 describes 2020 butterfish landings by gear type. Table 3 describes 2020 butterfish landings by NMFS Statistical Area as reported in Vessel Trip Reports.

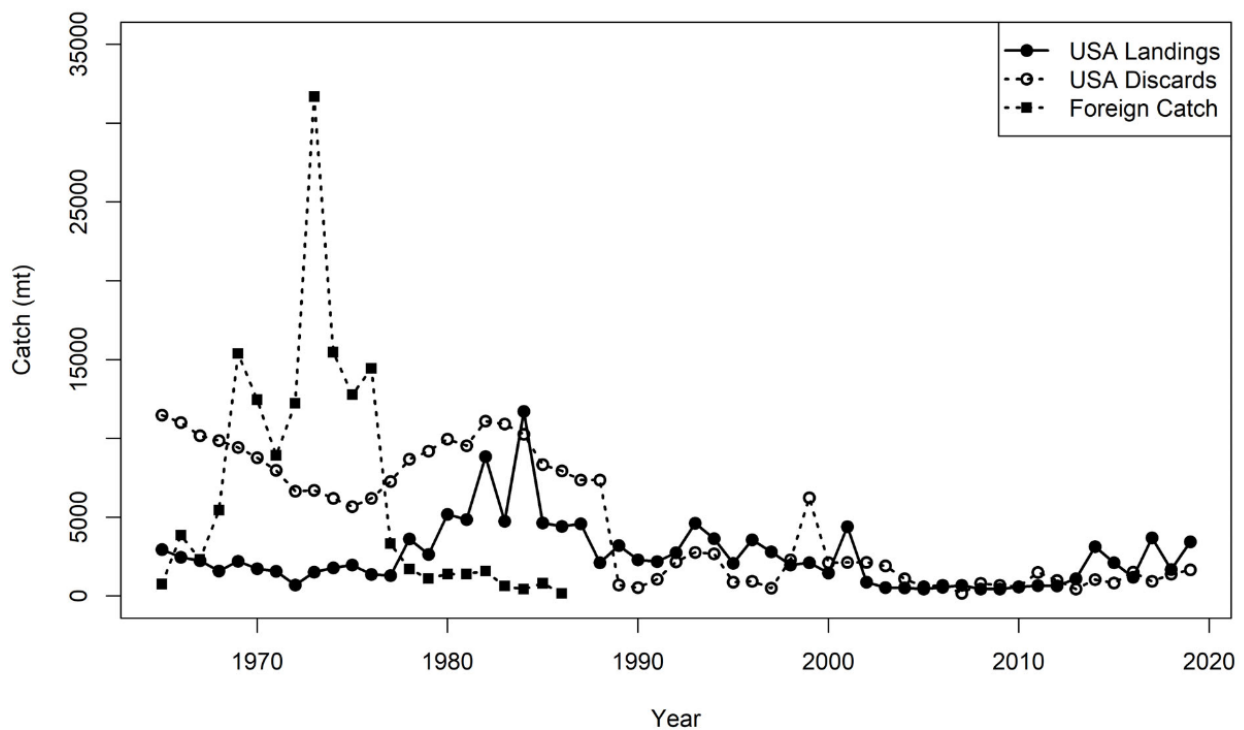


Figure 2. US landings, US discards, and foreign catch of butterfish, 1965–2019. Source: NEFSC Butterfish Management Track Assessment, available at https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php.

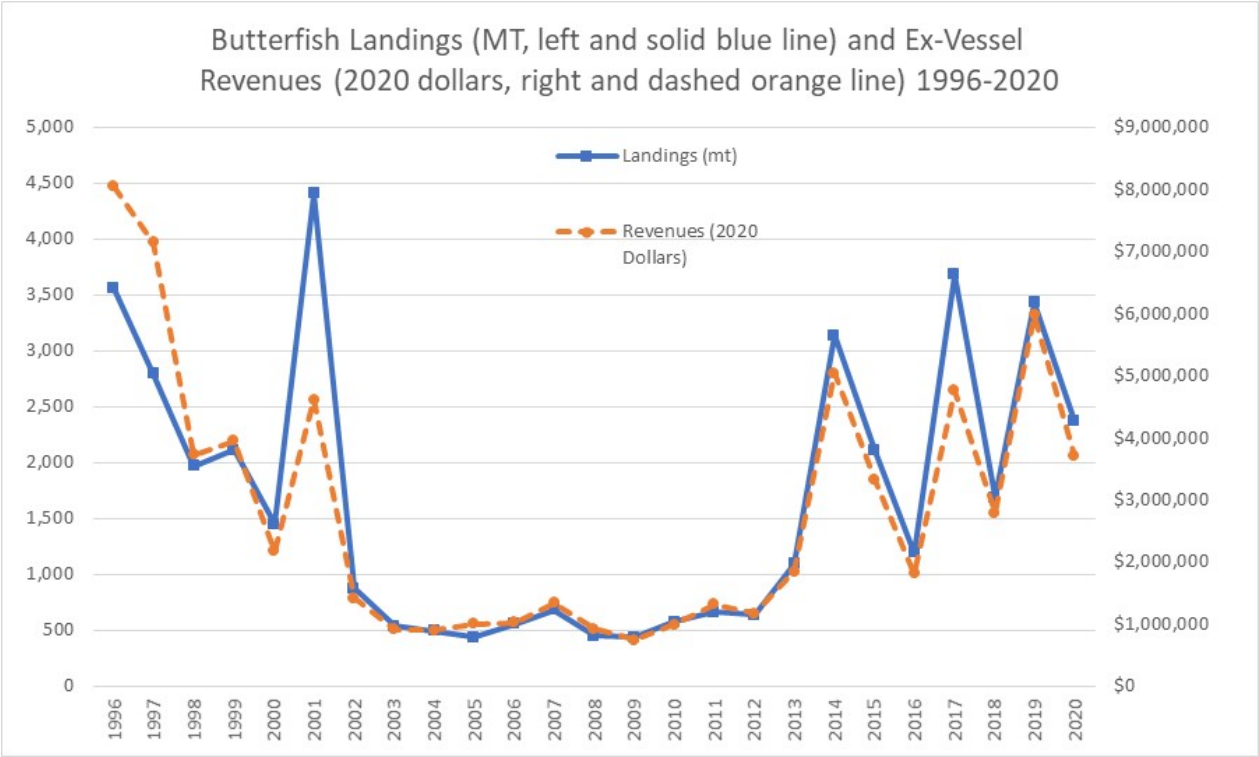


Figure 3. U.S. Butterfish Landings and Butterfish Ex-Vessel Values 1996-2020. Source: NMFS unpublished dealer data.

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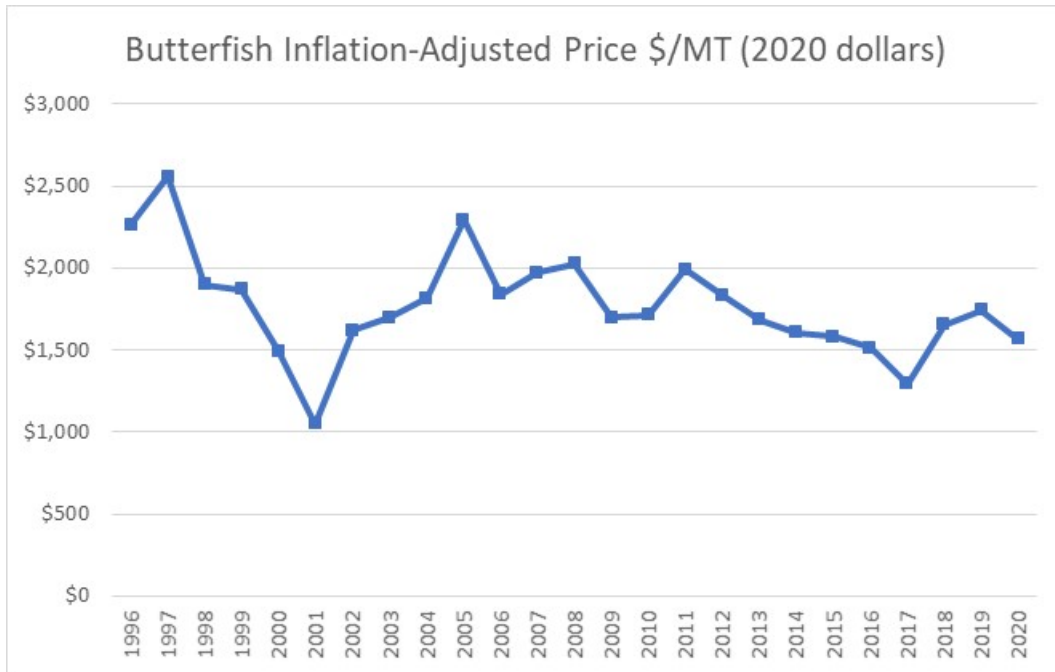


Figure 4. Ex-Vessel Butterfish Prices 1996-2020 Adjusted to 2020 Dollars Source: NMFS unpublished dealer data.

Table 1. Commercial Butterfish landings (live weight) by state in 2020. Source: NMFS unpublished dealer data.

State	Metric_Tons
RI	2,073
NY	177
CT	54
MA	35
NJ	24
Other	5
Total	2,367

Table 2. Commercial Butterfish landings (live weight) by gear in 2019. Source: NMFS unpublished dealer data.

GEAR	Metric_Tons
TRAWL, OTTER, BOTTOM, FISH	2,241
UNKNOWN	94
Other	32
Total	2,367

Table 3. Commercial butterfish landings by statistical area in 2019. Source: NMFS unpublished VTR data.

Stat Area	Metric_Tons
526	1,157
537	715
539	152
616	88
611	82
615	77
613	41
636	32
525	30
622	15
Other	51
Total	2,441

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