

## Atlantic Mackerel MRIP Recreational Catches

Recall that pre-2018 catch estimates incorporate a calibration applied to results originally generated with the landline telephone survey for effort. From 2018 on, the mail-based *Fishing Effort Survey* data are used to estimate angler trip effort, which is combined with the dockside APAIS survey data to estimate catches. MRIP uses VTR effort data for the part of the for-hire fleet that submits VTRs.

Catch estimates for years before 2017 also have additional calibration factors included to account for dockside APAIS survey changes in preceding years.

For-hire operators are not interviewed about trip catches but their anglers/customers could be, if they are at a site that is included on the MRIP site register. Anglers are to be asked about all fish caught and their disposition (available to be measured, harvested but not available, and/or released).

2021 Data are preliminary and does not yet include November/December

Overall PSEs suggest data are relatively precise from a big-picture perspective and that total recreational catch numbers were statistically very similar from 2018-2021 (almost all recreational catch in this time period was from MA, NH, and ME).

Query: MRIP CATCH TIME SERIES  
 Year: 2018 - 2021  
 Wave: ANNUAL  
 Species: ATLANTIC MACKEREL  
 Geographic Area: NORTH ATLANTIC  
 Fishing Mode: ALL MODES COMBINED  
 Fishing Area: ALL AREAS COMBINED  
 Type of Catch: TOTAL CATCH (TYPE A + B1 + B2)  
 Information: NUMBERS OF FISH

Estimate Status	Year	Common Name	Total Catch (A+B1+B2)	PSE	** Contribution of Imputed Data to Total Catch Rate
FINAL	2018	ATLANTIC MACKEREL	11,230,947	9.3	0%
FINAL	2019	ATLANTIC MACKEREL	10,571,496	8.9	0%
FINAL	2020	ATLANTIC MACKEREL	10,485,396	12.4	2%
PRELIMINARY	2021	ATLANTIC MACKEREL	9,704,565	9.8	0%

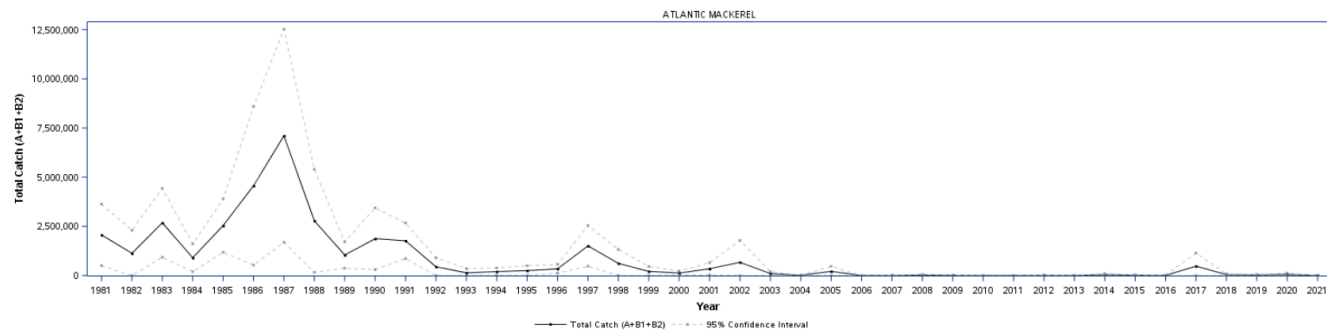
Your Query Parameters:

Query: MRIP CATCH TIME SERIES  
Year: 1981 - 2021  
Wave: ANNUAL  
Species: ATLANTIC MACKEREL  
Geographic Area: MID-ATLANTIC  
Fishing Mode: ALL MODES COMBINED  
Fishing Area: ALL AREAS COMBINED  
Type of Catch: TOTAL CATCH (TYPE A + B1 + B2)  
Information: NUMBERS OF FISH

\*\*Some estimates may be considered preliminary. Please rerun your query with table output to view estimate status.  
\*\*NOTE: Y-axis scale may not be the same for multiple graphs.

[Return to Query Page](#)

Common Name=ATLANTIC MACKEREL



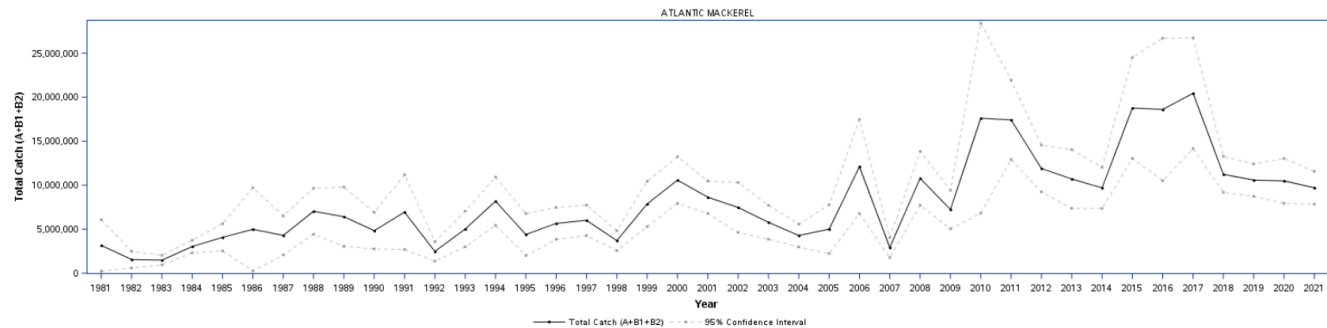
Your Query Parameters:

Query: MRIP CATCH TIME SERIES  
Year: 1981 - 2021  
Wave: ANNUAL  
Species: ATLANTIC MACKEREL  
Geographic Area: NORTH ATLANTIC  
Fishing Mode: ALL MODES COMBINED  
Fishing Area: ALL AREAS COMBINED  
Type of Catch: TOTAL CATCH (TYPE A + B1 + B2)  
Information: NUMBERS OF FISH

\*\*Some estimates may be considered preliminary. Please rerun your query with table output to view estimate status.  
\*\*NOTE: Y-axis scale may not be the same for multiple graphs.

[Return to Query Page](#)

Common Name=ATLANTIC MACKEREL



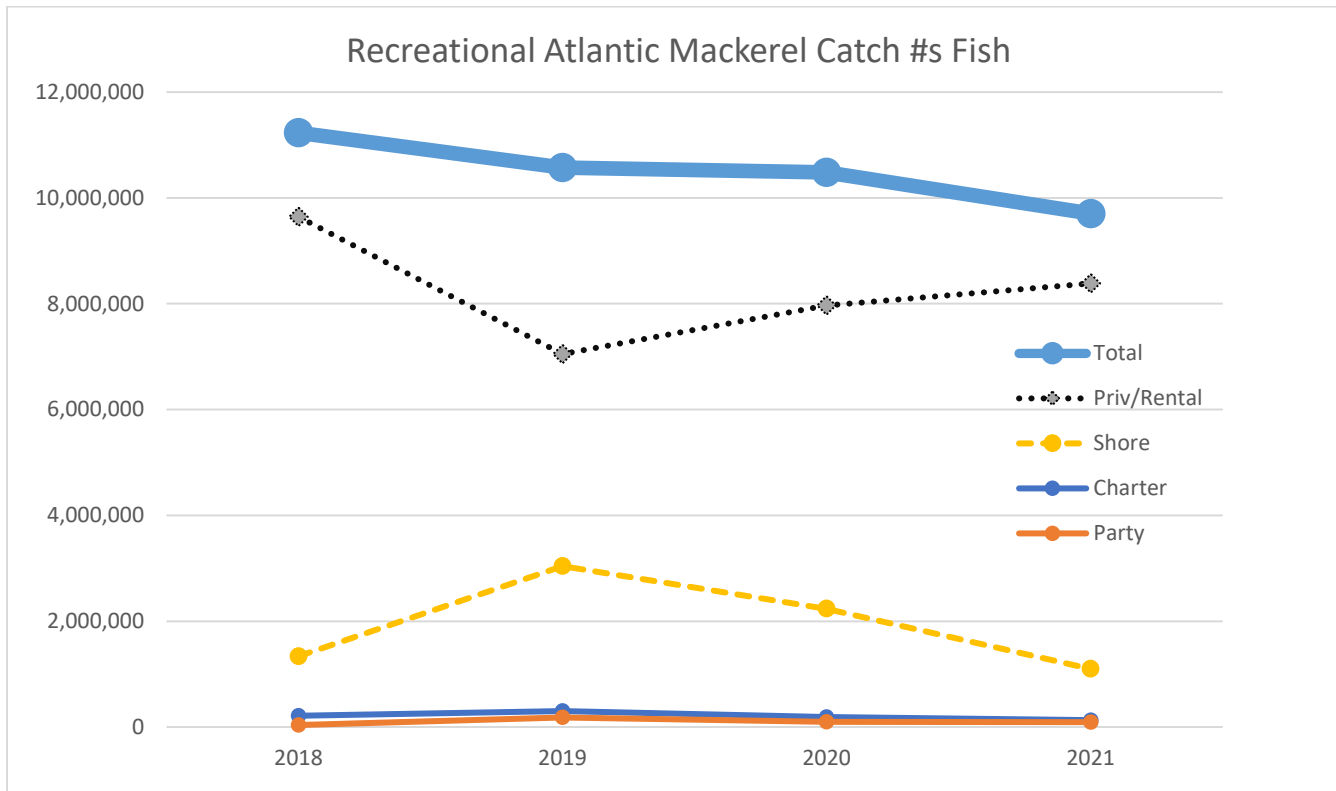
**Your Query Parameters:**

**Query:** MRIP CATCH TIME SERIES  
**Year:** 2018 - 2021  
**Wave:** ANNUAL  
**Species:** ATLANTIC MACKEREL  
**Geographic Area:** NORTH ATLANTIC BY STATE  
**Fishing Mode:** ALL MODES COMBINED  
**Fishing Area:** ALL AREAS COMBINED  
**Type of Catch:** TOTAL CATCH (TYPE A + B1 + B2)  
**Information:** NUMBERS OF FISH

Estimate Status	Year	State	Common Name	Total Catch (A+B1+B2)	PSE	** Contribution of Imputed Data to Total Catch Rate
FINAL	2018	CONNECTICUT	ATLANTIC MACKEREL	63	71.6	0%
FINAL	2018	MAINE	ATLANTIC MACKEREL	2,851,922	21	0%
FINAL	2018	MASSACHUSETTS	ATLANTIC MACKEREL	6,396,674	11.9	0%
FINAL	2018	NEW HAMPSHIRE	ATLANTIC MACKEREL	1,961,169	18.9	0%
FINAL	2018	RHODE ISLAND	ATLANTIC MACKEREL	21,119	71.5	0%
FINAL	2019	CONNECTICUT	ATLANTIC MACKEREL	.	.	.
FINAL	2019	MAINE	ATLANTIC MACKEREL	3,275,535	20.8	0%
FINAL	2019	MASSACHUSETTS	ATLANTIC MACKEREL	5,647,588	10.5	0%
FINAL	2019	NEW HAMPSHIRE	ATLANTIC MACKEREL	1,637,111	16.9	0%
FINAL	2019	RHODE ISLAND	ATLANTIC MACKEREL	11,262	79.5	0%
FINAL	2020	CONNECTICUT	ATLANTIC MACKEREL	11,283	69.1	0%
FINAL	2020	MAINE	ATLANTIC MACKEREL	3,628,454	18.5	1%
FINAL	2020	MASSACHUSETTS	ATLANTIC MACKEREL	5,318,596	20.1	1%
FINAL	2020	NEW HAMPSHIRE	ATLANTIC MACKEREL	1,525,643	19.3	10%
FINAL	2020	RHODE ISLAND	ATLANTIC MACKEREL	1,420	62.5	77%
PRELIMINARY	2021	CONNECTICUT	ATLANTIC MACKEREL	1,297	93.2	0%
PRELIMINARY	2021	MAINE	ATLANTIC MACKEREL	3,752,018	17.4	1%
PRELIMINARY	2021	MASSACHUSETTS	ATLANTIC MACKEREL	4,725,091	14.2	0%
PRELIMINARY	2021	NEW HAMPSHIRE	ATLANTIC MACKEREL	1,223,334	13.2	0%
PRELIMINARY	2021	RHODE ISLAND	ATLANTIC MACKEREL	2,825	40.8	0%

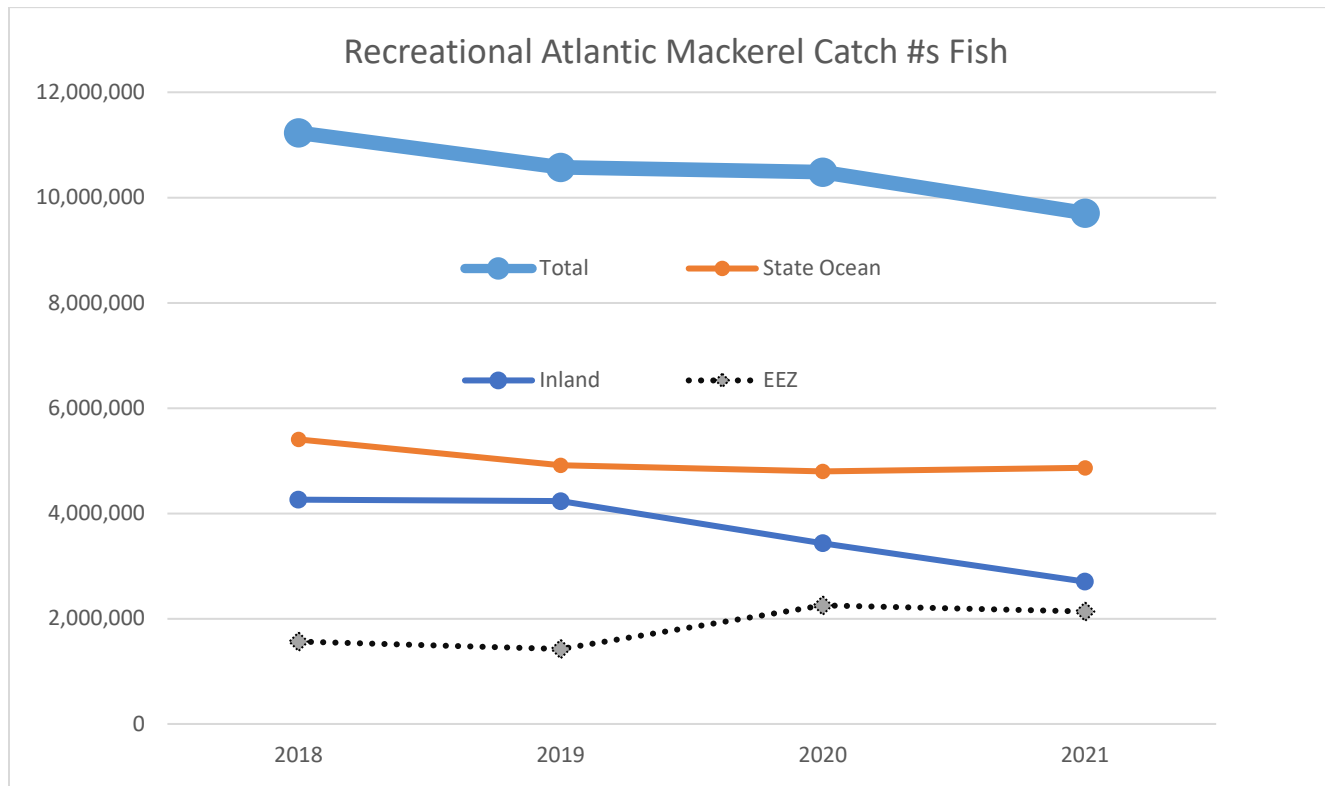
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**Query:** MRIP CATCH TIME SERIES  
**Year:** 2018 - 2021  
**Wave:** ANNUAL  
**Species:** ATLANTIC MACKEREL  
**Geographic Area:** NORTH ATLANTIC  
**Fishing Mode:** ALL MODES BY MODE  
**Fishing Area:** ALL AREAS COMBINED  
**Type of Catch:** TOTAL CATCH (TYPE A + B1 + B2)  
**Information:** NUMBERS OF FISH



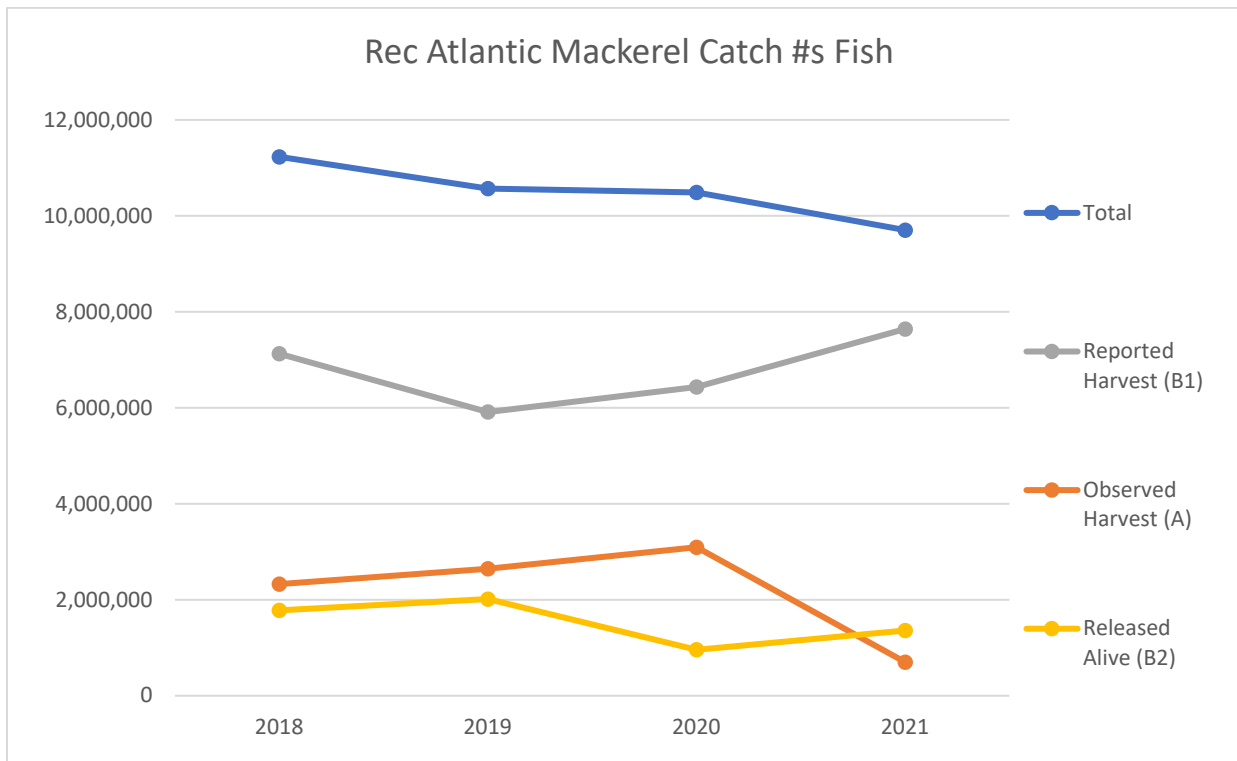
**Your Query Parameters:**

**Query:** MRIP CATCH TIME SERIES  
**Year:** 2018 - 2021  
**Wave:** ANNUAL  
**Species:** ATLANTIC MACKEREL  
**Geographic Area:** NORTH ATLANTIC  
**Fishing Mode:** ALL MODES COMBINED  
**Fishing Area:** ALL AREAS BY AREA  
**Type of Catch:** TOTAL CATCH (TYPE A + B1 + B2)  
**Information:** NUMBERS OF FISH



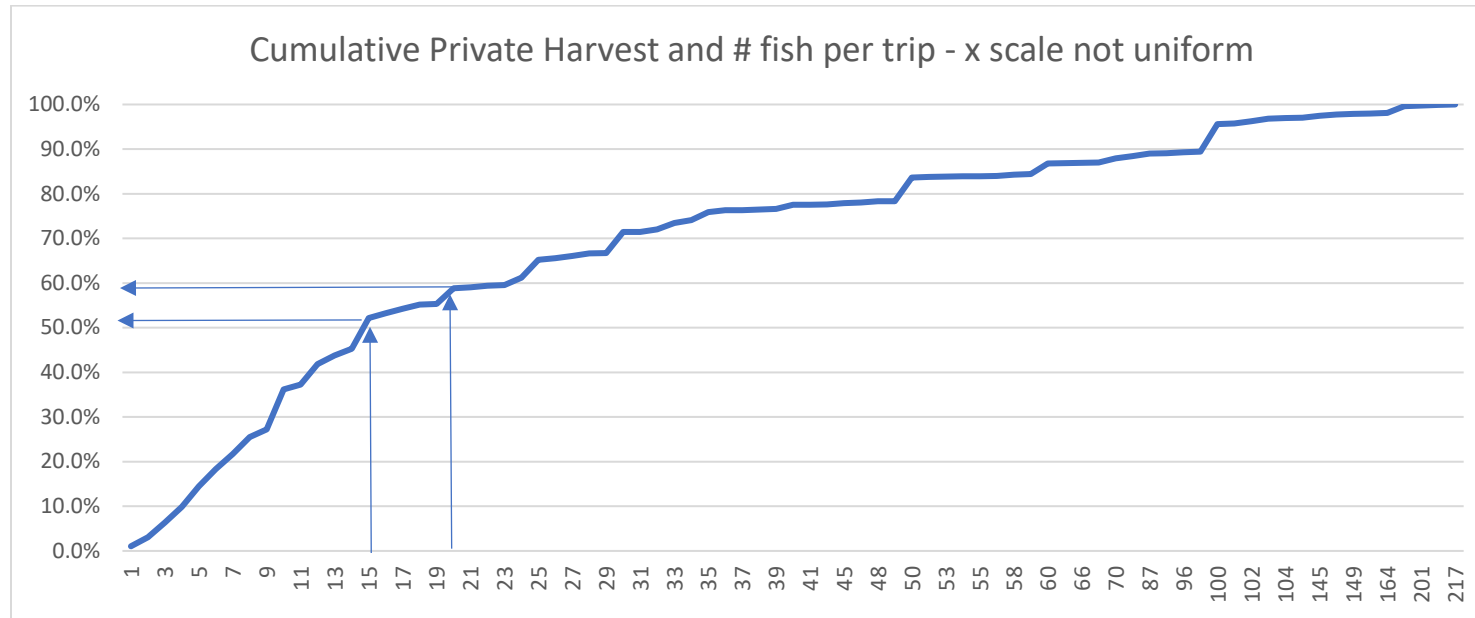
**Your Query Parameters:**

**Query:** MRIP CATCH TIME SERIES  
**Year:** 2018 - 2021  
**Wave:** ANNUAL  
**Species:** ATLANTIC MACKEREL  
**Geographic Area:** NORTH ATLANTIC  
**Fishing Mode:** ALL MODES COMBINED  
**Fishing Area:** ALL AREAS COMBINED  
**Type of Catch:** ALL CATCH TYPES (TYPE A, B1, and B2)  
**Information:** NUMBERS OF FISH



MRIP Staff provided a draft version of a domain estimation template that allows consideration of what kind of mackerel trips, in terms of numbers of fish per angler trip, are responsible for various proportions of mackerel catch:

For example: For all of 2018-2021 combined Atlantic mackerel:



So for the private/rental mode, which is where most catch occurs, trips harvesting 1-15 fish account for about 50% of harvest and trips harvesting 1-20 fish account for about 60% of harvest. Or looking in reverse, trips landing over 20 fish only account for about 40% of harvest. Setting a 20 fish bag limit would not eliminate 40% of harvest, as some portion of those higher harvesting trips will still occur, and just harvest the limit instead. But these kinds of analyses can be used to explore possible bag limits.

Staff also conducted a preliminary investigation of 2018-2021 VTR catch records. Like MRIP, most reported catch is occurring in MA, NH, and ME. There appear to be some directed mackerel trips where party or charter vessels retain 50-200 fish per angler, but only about a quarter of VTR harvest occurred on trips where the average per angler exceeded 25 fish. Again, these data could be further explored for bag-limit analyses.