## Gulf of Maine Cod and Haddock

Table 1. Gulf of Maine Recreational Catch Estimates (old MRIP)<sup>1</sup>

	FY 2018	FY 2018	FY 2019
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30
	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)
Cod/haddock Angler Trips <sup>2</sup>	121,447	107,268	79,839 (-26%)
Cod Catch (numbers, a+b1+b2)	467,435	455,854	193,343 (-58%)
Cod Kept/Released Dead (numbers, a+b1)	2,085	2,046	6,777 (+70%)
Cod Released Alive (numbers, b2)	465,350	453,807	186,566 (-59%)
Cod Removals (numbers, a+b1+(0.15*b2))	71,888	70,117	34,762 (-50%)
Cod Removals (weight <sup>3</sup> , mt)	147	144	48 (-67%)
Cod Avg. Catch Per Trip (numbers)	3.8	4.2	2.4 (-43%)
Haddock Catch (numbers, a+b1+b2)	1,053,632	967,023	545,236 (-44%)
Haddock Kept (numbers, a+b1)	472,179	438,133	270,660 (-38%)
Haddock Released (numbers, b2)	581,453	528,890	274,576 (-48%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	754,765	699,405	429,310 (-39%)
Haddock Removals (weight <sup>3</sup> , mt)	595	572	332 (-42%)
Haddock Avg. Catch Per Trip (numbers)	8.7	9.0	6.8 (-24%)

<sup>&</sup>lt;sup>1</sup>Source: Available MRIP data (old currency) as of Nov. 5, 2019

Table 2. Gulf of Maine Recreational Catch Estimates (new MRIP)<sup>1</sup>

	FY 2018	FY 2018	FY 2019
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30
	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)
Cod/haddock Angler Trips <sup>2</sup>	289,013	203,435	149,798 (-26%)
Cod Catch (numbers, a+b1+b2)	1,175,233	1,148,919	381,458 (-67%)
Cod Kept/Released Dead (numbers, a+b1)	5,368	5,329	10,541 (+49%)
Cod Released Alive (numbers, b2)	1,169,865	1,143,590	370,917 (-68%)
Cod Removals (numbers, a+b1+(0.15*b2))	180,848	176,868	66,179 (-50%)
Cod Removals (weight <sup>3</sup> , mt)	382	374	87 (-77%)
Cod Avg. Catch Per Trip (numbers)	4.1	5.6	2.5 (-43%)
Haddock Catch (numbers, a+b1+b2)	2,255,068	1,806,365	1,010,958 (-44%)
Haddock Kept (numbers, a+b1)	1,153,311	807,082	483,499 (-40%)
Haddock Released (numbers, b2)	1,101,757	999,282	527,459 (-47%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	1,724,792	1,306,723	747,229 (-43%)
Haddock Removals (weight <sup>3</sup> , mt)	1,485	1,119	612 (-45%)
Haddock Avg. Catch Per Trip (numbers)	7.8	8.9	6.7 (-25%)

<sup>&</sup>lt;sup>1</sup>Source: Available MRIP data (new currency) as of Nov. 5, 2019

<sup>&</sup>lt;sup>2</sup>Number of angler trips that targeted and/or caught cod or haddock

<sup>&</sup>lt;sup>3</sup>All weights are based on round weights calculated from MRIP length frequencies and length to weight equations used in the assessments.

 $<sup>^2\</sup>mbox{Number of angler trips that targeted and/or caught cod or haddock}$ 

<sup>&</sup>lt;sup>3</sup>All weights are based on round weights calculated from MRIP length frequencies and length to weight equations used in the assessments.

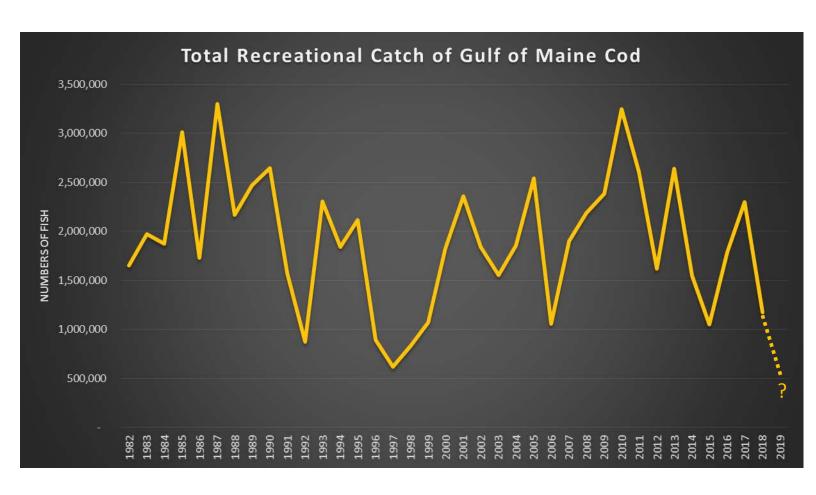


Table 3. Gulf of Maine Cod/Haddock Angler Trips by Mode (old MRIP)<sup>1</sup>

	FY 2018	FY 2018	FY 2019
	May 1 - April 30	May 1 - Aug. 30	May 1 - Aug. 30
	(All waves)	(Waves's 3, 4)	(Waves's 3, 4)
Head	37,475	34,518	23,768 (-31%)
Charte	er 13,896	11,785	11,514 (-02%)
Private	e 69,462	60,351	44,557 (-26%)
Shore	614	614	- (-100%)
	121,447	107,268	79,839 (-26%)

<sup>&</sup>lt;sup>1</sup>Number of angler trips that targeted and/or caught cod or haddock

Table 4. Gulf of Maine Cod/Haddock Angler Trips by Mode (new MRIP)<sup>1</sup>

	FY 2018	FY 2018	FY 2019
	May 1 - April 30	May 1 - Aug. 30	May 1 - Aug. 30
	(All waves)	(Waves's 3, 4)	(Waves's 3, 4)
Head	37,475	34,518	23,768 (-31%)
Charte	er 13,896	11,785	11,514 (-02%)
Privat	e 234,474	153,962	114,517 (-26%)
Shore	3,169	3,169	- (-100%)
	289,014	203,434	149,799 (-26%)

<sup>&</sup>lt;sup>1</sup>Number of angler trips that targeted and/or caught cod or haddock

Table 5. Gulf of Maine Cod Recreational Catch Estimates by Mode (old MRIP)

	FY 2018	FY 2018	FY 2019	
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30	
Mode	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)	
Head				
Cod Catch (numbers, a+b1+b2)	60,665	56,926	50,039	(-12%)
Cod Kept/Released Dead (numbers, a+b1)	530	491	1,001	(+104)
Cod Released Alive (numbers, b2)	60,135	56,435	49,038	(-13%)
Cod Removals (numbers, a+b1+(0.15*b2))	9,550	8,956	8,357	(-7%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	1.6	1.6	2.1	(+31%)
Charter				
Cod Catch (numbers, a+b1+b2)	21,381	20,466	37,955	(+85%)
Cod Kept/Released Dead (numbers, a+b1)	407	407	1,928	(+374%)
Cod Released Alive (numbers, b2)	20,974	20,058	36,027	(+80%)
Cod Removals (numbers, a+b1+(0.15*b2))	3,553	3,416	7,332	(+115%)
${\sf Cod\ Avg.\ Catch\ Per\ Angler\ Trip\ (numbers)}^1$	1.5	1.7	3.3	(+94%)
Private				
Cod Catch (numbers, a+b1+b2)	384,775	377,848	105,349	(-72%)
Cod Kept/Released Dead (numbers, a+b1)	534	534	3,848	(+621%)
Cod Released Alive (numbers, b2)	384,240	377,315	101,501	(-73%)
Cod Removals (numbers, a+b1+(0.15*b2))	58,170	57,131	19,073	(-67%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	5.5	6.3	2.4	(-62%)
Shore				
Cod Catch (numbers, a+b1+b2)	614	614	-	(-100%)
Cod Kept/Released Dead (numbers, a+b1)	614	614	-	(-100%)
Cod Released Alive (numbers, b2)	-	-	-	(0%)
Cod Removals (numbers, a+b1+(0.15*b2))	614	614	-	(-100%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	1.0	1.0	_	(-100%)

<sup>&</sup>lt;sup>1</sup>Number of angler trips that targeted and/or caught cod or haddock

Table 6. Gulf of Maine Cod Recreational Catch Estimates by Mode (new MRIP)

	FY 2018	FY 2018	FY 2019	
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30	
Mode	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)	
Head				
Cod Catch (numbers, a+b1+b2)	60,665	56,926	50,039	(-12%)
Cod Kept/Released Dead (numbers, a+b1)	530	491	1,001	(+104)
Cod Released Alive (numbers, b2)	60,135	56,435	49,038	(-13%)
Cod Removals (numbers, a+b1+(0.15*b2))	9,550	8,956	8,357	(-7%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	1.6	1.6	2.1	(+31%)
Charter				
Cod Catch (numbers, a+b1+b2)	21,381	20,466	37,955	(+85%)
Cod Kept/Released Dead (numbers, a+b1)	407	407	1,928	(+374%)
Cod Released Alive (numbers, b2)	20,974	20,058	36,027	(+80%)
Cod Removals (numbers, a+b1+(0.15*b2))	3,553	3,416	7,332	(+115%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	1.5	1.7	3.3	(+94%)
Private				
Cod Catch (numbers, a+b1+b2)	1,090,017	1,068,359	293,464	(-73%)
Cod Kept/Released Dead (numbers, a+b1)		1,262	7,612	(+503%)
Cod Released Alive (numbers, b2)	1,088,756	1,067,098	285,852	(-73%)
Cod Removals (numbers, a+b1+(0.15*b2))	164,575	161,327	50,490	(-69%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	4.6	6.9	2.6	(-62%)
Shore				
Cod Catch (numbers, a+b1+b2)	3,169	3,169	-	(-100%)
Cod Kept/Released Dead (numbers, a+b1)	3,169	3,169	-	(-100%)
Cod Released Alive (numbers, b2)	-	-	-	(0%)
Cod Removals (numbers, a+b1+(0.15*b2))	3,169	3,169	-	(-100%)
Cod Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	1.0	1.0	-	(-100%)

<sup>&</sup>lt;sup>1</sup>Number of angler trips that targeted and/or caught cod or haddock

Table 7. Gulf of Maine Haddock Recreational Catch Estimates by Mode (old MRIP)

	FY 2018	FY 2018	FY 2019	
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30	
Mode	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)	
Head				
Haddock Catch (numbers, a+b1+b2)	350,185	326,323	126,459	(-61%)
Haddock Kept/Released Dead (numbers, a+b1)	165,955	157,304	73,694	(-53%)
Hadock Released Alive (numbers, b2)	184,229	169,019	52,765	(-69%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	255,490	240,799	104,182	(-57%)
Haddock Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	9.3	9.5	5	(-47%)
Charter				
Haddock Catch (numbers, a+b1+b2)	188,578	177,060	145,825	(-18%)
Haddock Kept/Released Dead (numbers, a+b1)	81,878	79,000	78,845	(-0.02%)
Hadock Released Alive (numbers, b2)	106,707	98,060	66,980	(-32%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	133,738	126,657	117,546	(-7%)
Haddock Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	13.6	15.0	12.4	(-17%)
Private				
Haddock Catch (numbers, a+b1+b2)	514,870	463,641	272,952	(-41%)
Haddock Kept/Released Dead (numbers, a+b1)	224,353	201,830	118,120	(-41%)
Hadock Released Alive (numbers, b2)	290,516	261,811	154,832	(-41%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	365,544	329,070	207,582	(-37%)
Haddock Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	7.4	7.7	6.1	(-20%)

<sup>&</sup>lt;sup>1</sup>Number of angler trips that targeted and/or caught cod or haddock

Table 8. Gulf of Maine Haddock Recreational Catch Estimates by Mode (new MRIP)

	FY 2018	FY 2018	FY 2019	
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30	
Mode	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)	
Head				
Haddock Catch (numbers, a+b1+b2)	350,185	326,323	126,459	(-61%)
Haddock Kept/Released Dead (numbers, a+b1)	165,955	157,304	73,694	(-53%)
Hadock Released Alive (numbers, b2)	184,229	169,019	52,765	(-69%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	255,490	240,799	104,182	(-57%)
Haddock Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	9.3	9.5	5	(-47%)
Charter				
Haddock Catch (numbers, a+b1+b2)	188,578	177,060	145,825	(-18%)
Haddock Kept/Released Dead (numbers, a+b1)	81,878	79,000	78,845	(-0.02%)
Hadock Released Alive (numbers, b2)	106,707	98,060	66,980	(-32%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	133,738	126,657	117,546	(-7%)
Haddock Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	13.6	15.0	12.4	(-17%)
Private				
Haddock Catch (numbers, a+b1+b2)	1,716,305	1,302,982	738,674	(-43%)
Haddock Kept/Released Dead (numbers, a+b1)	905,485	570,779	330,959	(-42%)
Hadock Released Alive (numbers, b2)	810,820	732,203	407,714	(-44%)
Haddock Removals (numbers, a+b1+(b2*season/size release mortality))	1,299,544	926,630	566,536	(-39%)
Haddock Avg. Catch Per Angler Trip (numbers) <sup>1</sup>	7.3	8.5	6.5	(-24%)

Number of angler trips that targeted and/or caught cod or haddock

## Georges Bank Cod

Table 9. Georges Bank Cod Recreational Catch Estimates (old MRIP)<sup>1</sup>

	FY 2018	FY 2018	FY 2019
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30
	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)
Cod Angler Trips <sup>2</sup>	21,372	7,070	11,691 (+65%)
Cod Catch (numbers, a+b1+b2)	19,371	7,528	38,182 (+407%)
Cod Kept/Released Dead (numbers, a+b1)	12,499	3,376	21,321 (+531%)
Cod Released Alive (numbers, b2)	6,872	4,151	16,862 (+306%)
Cod Removals (numbers, a+b1+(0.30*b2))	14,561	4,621	26,380 (+470%)
Cod Removals (weight <sup>3</sup> , mt)	37		
Cod Avg. Catch Per Trip (numbers)	0.9	1.1	3.3 (-43%)

<sup>&</sup>lt;sup>1</sup>Source: Available MRIP data (old currency) as of Nov. 5, 2019

Table 10. Georges Bank Cod Recreational Catch Estimates  $(new\ MRIP)^1$ 

	FY 2018	FY 2018	FY 2019
	May 1 - Apr. 30	May 1 - Aug. 30	May 1 - Aug. 30
	(All waves)	(Wave's 3, 4)	(Wave's 3, 4)
Cod Angler Trips <sup>2</sup>	47,343	21,156	25,985 (+23%)
Cod Catch (numbers, a+b1+b2)	41,073	17,582	83,382 (+374%)
Cod Kept/Released Dead (numbers, a+b1)	25,277	7,573	41,644 (+450%)
Cod Released Alive (numbers, b2)	15,796	10,008	29,976 (+200%)
Cod Removals (numbers, a+b1+(0.30*b2))	30,016	10,575	50,637 (+379%)
Cod Removals (weight <sup>3</sup> , mt)	76		
Cod Avg. Catch Per Trip (numbers)	0.9	0.8	3.2 (+286%)

<sup>&</sup>lt;sup>1</sup>Source: Available MRIP data (old currency) as of Nov. 5, 2019

<sup>&</sup>lt;sup>2</sup>Number of angler trips that targeted and/or caught cod.

<sup>&</sup>lt;sup>3</sup>All weights are based on round weights calculated from MRIP length frequencies and length to weight equations used in the

<sup>&</sup>lt;sup>2</sup>Number of angler trips that targeted and/or caught cod.

<sup>&</sup>lt;sup>3</sup>All weights are based on round weights calculated from MRIP length frequencies and length to weight equations used in the