

**For Bycatch breakout group of the Atlantic Marine Bird Conservation Cooperative Workshop.  
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Number of seabirds observed interacting with fishing gear in the US Northwest Atlantic waters (north of South Carolina) in the time period from the first year gear type was observed through July 2006. In addition, the number of years these gear types have been observed and the level of coverage during 2000 to 2005 for the Northeast (NE) and Mid-Atlantic (MA) waters, where available.

Gear Type	Number of Seabirds		Years Observed	Annual Percent Coverage During 2000-2005
	Species	Number		
<b>Gillnets</b>	unk shearwater	860	1989-now	NE: 4, 2, 3, 6, 7
Total number of hauls observed: 85,548	greater shearwater	403		MA: 2, 1, 1, 2, 3
Number of hauls without takes: 83,895	common loon	218		
	unk cormorant	207		
	red-thr loon	201		
	dbl-cr cormorant	177		
	unknown	115		
	unk loon	102		
	nrth gannet	99		
	sooty shearwater	89		
	unk gull	43		
	manx shearwater	35		
	gr cormorant	29		
	brown pelican	26		
	unk grebe	21		
	gr blk-back gull	18		
	thin-bill murre	18		
	herring gull	8		
	nrth fulmar	8		
	blk-leg kittiwake	7		
	cory shearwater	6		
	unk merganser	6		
	wils storm petrel	4		
	ls blk-back gull	2		
	unk storm petrel	2		
	blk guillemot	2		
	black scoter	1		
	bufflehead	1		
	common eider	1		
	horned grebe	1		
	puffin	1		
	surf scoter	1		
	thick-bill murre	1		
	unk murre	1		
	white winged scoter	1		
	SUM	2715		

Gear Type	Number of Seabirds		Years Observed	Annual Percent Coverage During 2000-2005
	Species	Number		
<b>Bottom trawl</b>	greater shearwater	26	1989-now	NE: 0.4, 2, 3, 4, ?
Total number of hauls observed: 88,367	nrth gannet	17		MA: 1, 1, 1, 3, ?
Number of hauls without takes: 87,522	unk gull	14		
	gr blk-back gull	5		
	unk shearwater	3		
	herring gull	2		
	unk storm petrel	2		
	unknown	1		
	dbl-cr cormorant	1		
	unk cormorant	1		
	sooty shearwater	1		
	SUM	73		
<b>Mid-water trawl (including pair trawl)</b>	nrth gannet	58	1991-now	NE: 0.1, 0, 3, 13, 20
Total number of hauls observed: 2,343	greater shearwater	2		MA: 0, 0.3, 2, 6, 8
Number of hauls without takes: 2,331	SUM	60		
<b>Pelagic long line</b>	greater shearwater	26	1993-1998	?
Total number of hauls observed: 1,186	unk gull	10		
Number of hauls without takes: 1,164	herring gull	7		
	nrth gannet	5		
	gr blk-back gull	4		
	unk shearwater	2		
	wils storm petrel	1		
	SUM	55		
<b>Bottom long line</b>	unk gull	20	1991-now	?
Total number of hauls observed: 2,712	greater shearwater	8		
Number of hauls without takes: 2,687	gr blk-back gull	3		
	herring gull	2		
	nrth fulmar	1		
	SUM	34		
<b>Scallop dredge</b>	unk gull	7	1991-now	MA: 11 <sup>1</sup> , 11 <sup>1</sup> , 3, 5, 3
Total number of hauls observed: 85,480	greater shearwater	3		
Number of hauls without takes: 85,465	gr blk-back gull	2		
	herring gull	1		
	common loon	1		
	unk shearwater	1		
	SUM	15		

Gear Type	Number of Seabirds		Years Observed	Annual Percent Coverage During 2000-2005
	Species	Number		
<b>Pelagic drift gillnet</b>	unk shearwater	1	1989-1998	?
Total number of hauls observed: 900				
Number of hauls without takes: 899				
<b>Handline</b>	nrth gannet	1	1992-2004	?
Total number of hauls observed: 258				
Number of hauls without takes: 257				
<b>Pot &amp; traps</b>	Number of hauls without takes	3450	1991-now	?
<b>Purse seine</b>	Number of hauls without takes	171	2003-now	?
<b>Troll line</b>	Number of hauls without takes	140	1992-now	?
<b>Scottish seine</b>	Number of hauls without takes	109	1999-2004	?
<b>Beam trawl</b>	Number of hauls without takes	88	1995	0
<b>Swordfish harpoon</b>	Number of hauls without takes	25	1993-1998	0
<b>Hydraulic clam dredge</b>	Number of hauls without takes	1483	2004-now	?
				<sup>1</sup> only parts of the Mid-Atlantic

Number of Observed Incidental Takes of Seabirds in Gillnets  
Northeast (NE) Region

Northeast Fisheries Observer Program, 1989 - 2005

Species	1989-1999		2000-2005		NE Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
unknown	83	0	8	0	91	114
cormorant, unk	6	0	0	0	6	210
cormorant, dbl-cr	28	0	0	0	28	177
cormorant, gr	29	0	0	0	29	29
eider, common	0	0	1	0	1	1
fulmar, nrth	7	0	1	0	8	8
gannet, nrth	24	1	2	0	26	97
grebe, unk	1	0	0	0	1	21
guillemot, blk	2	0	0	0	2	2
gull, unk	38	0	3	0	41	43
gull, gr blk-back	14	0	4	0	18	18
gull, herring	7	0	1	1	8	8
gull, ls blk-back	2	0	0	0	2	2
kittiwake, blk-leg	5	0	1	0	6	7
loon, unk	28	0	0	0	28	101
loon, common	46	0	13	0	59	217
merganser, unk	1	0	0	0	1	6
murre, unk	1	0	0	0	1	1
murre, thin-bill	13	0	5	0	18	18
murre, thick-bill	1	0	0	0	1	1
puffin	0	0	1	0	1	1
shearwater, unk	850	1	11	0	861	861
shearwater, cory	6	0	0	0	6	6
shearwater, greater	335	1	58	0	393	393
shearwater, manx	34	0	1	0	35	35
shearwater, sooty	80	0	9	1	89	89
storm petrel, unk	2	0	0	0	2	2
storm petrel, wils	4	0	0	0	4	4
scoter, white	1	0	0	0	1	1
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Total observed takes	1648	3	119	2	1767	2703
Total observed hauls	39005		18885		57890	83882

\* Total number of observed takes for the given time period

\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Number of Observed Incidental Takes of Seabirds in Gillnets  
Mid-Atlantic (MA) Region

Northeast Fisheries Observer Program, 1994 - 2005

Species	1994-1999		2000-2005		MA Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
unknown	15	0	8	0	23	114
buffle	0	0	1	0	1	1
cormorant, unk	147	1	57	0	204	210
cormorant, dbl-cr	127	0	22	2	149	177
gannet, nrth	37	6	34	12	71	97
grebe, unk	20	0	0	0	20	21
grebe, horned	1	0	0	0	1	1
gull, unk	2	1	0	0	2	43
kittiwake, blk-leg	1	0	0	0	1	7
loon, unk	12	2	61	1	73	101
loon, common	102	1	56	2	158	217
loon, red-thr	110	4	91	1	201	201
merganser, unk	3	0	2	0	5	6
pelican, brown	13	10	13	12	26	26
scoter, black	1	0	0	0	1	1
Total observed takes	591	25	345	30	936	2703
Total observed hauls	12611		13381		25992	83882

\* Total number of observed takes for the given time period

\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Observer coverage of the Mid-Atlantic region began in 1994.

Number of Observed Incidental Takes of Seabirds in Bottom Trawl  
Northeast (NE) Region

Northeast Fisheries Observer Program, 1989 - 2005

Species	1989-1999		2000-2005		NE Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
unknown	1	0	0	0	1	1
cormorant, dbl-cr	0	0	1	0	1	1
gannet, nrth	1	0	3	1	4	14
gull, unk	0	0	7	0	7	13
gull, gr blk-back	0	0	4	0	4	5
gull, herring	0	0	1	0	1	2
shearwater, unk	0	0	3	0	3	3
shearwater, greater	0	0	10	4	10	26
storm petrel, unk	0	0	2	2	2	2
Total observed takes	2	0	31	7	33	68
Total observed hauls	17274		48001		65275	78918

\* Total number of observed takes for the given time period

\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Number of Observed Incidental Takes of Seabirds in Bottom Trawl  
Mid-Atlantic (MA) Region

Northeast Fisheries Observer Program, 1994 - 2005

Species	1994-1999		2000-2005		MA Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
cormorant, unk	0	0	1	0	1	1
gannet, nrth	6	4	4	0	10	14
gull, unk	1	0	5	0	6	13
gull, gr blk-back	0	0	1	0	1	5
gull, herring	0	0	1	0	1	2
shearwater, greater	15	4	1	1	16	26
Total observed takes	22	8	13	1	35	68
Total observed hauls	6777		6866		13643	78918

\* Total number of observed takes for the given time period

\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Observer coverage of the Mid-Atlantic region began in 1994.

Number of Observed Incidental Takes of Seabirds in Midwater Trawl  
Northeast (NE) Region

Northeast Fisheries Observer Program, 1989 - 2005

Species	1989-1999		2000-2005		NE Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
gannet, nrth	0	0	22	2	22	54
shearwater, greater	0	0	2	0	2	2
Total observed takes	0	0	24	2	24	56
Total observed hauls	126		775		901	2192

Mid-Atlantic (MA) Region, 1994 - 2005

Species	1994-1999		2000-2005		MA Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
gannet, nrth	0	0	32	15	32	54
Total observed takes	0	0	32	15	32	56
Total observed hauls	1111		180		1291	2192

\* Total number of observed takes for the given time period  
\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Observer coverage of the Mid-Atlantic region began in 1994.

Number of Observed Incidental Takes of Seabirds in Demersal Longline  
Northeast (NE) Region

Northeast Fisheries Observer Program, 1989 - 2005

Species	1989-1999		2000-2005		NE Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
fulmar, nrth	0	0	1	0	1	1
gull, unk	1	0	19	2	20	20
gull, gr blk-back	0	0	3	0	3	3
gull, herring	0	0	2	0	2	2
shearwater, greater	1	0	5	0	6	6
Total observed takes	2	0	30	2	32	32
Total observed hauls	281		2170		2451	2470

\* Total number of observed takes for the given time period  
 \*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

No observed takes in Mid-Atlantic region. Nineteen hauls were observed.

Number of Observed Incidental Takes of Seabirds in Scallop Dredge  
Northeast (NE) Region

Northeast Fisheries Observer Program, 1989 - 2005

Species	1989-1999		2000-2005		NE Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
gull, unk	1	0	0	0	1	7
gull, gr blk-back	0	0	1	0	1	2
shearwater, unk	0	0	1	0	1	1
shearwater, greater	0	0	3	0	3	3
Total observed takes	1	0	5	0	6	15
Total observed hauls	19173		10549		29722	84114

Mid-Atlantic (MA) Region , 1994 - 2005

Species	1994-1999		2000-2005		MA Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
gull, unk	1	0	5	0	6	7
gull, gr blk-back	1	0	0	0	1	2
gull, herring	0	0	1	0	1	1
loon, common	0	0	1	0	1	1
Total observed takes	2	0	7	0	9	15
Total observed hauls	24009		30383		54392	84114

\* Total number of observed takes for the given time period  
\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Observer coverage of the Mid-Atlantic region began in 1994.

Number of Observed Incidental Takes of Seabirds in Handline  
Mid-Atlantic (MA) Region

Northeast Fisheries Observer Program, 1994 - 2005

Species	1994-1999		2000-2005		MA Total Observed Takes	Overall (NE & MA) Total Observed Takes
	Num* Takes	Num** Alive	Num* Takes	Num** Alive		
gannet, nrth	1	1	0	0	1	1
Total observed takes	1	1	0	0	1	1
Total observed hauls		52		26	78	241

\* Total number of observed takes for the given time period

\*\* Number of the observed takes that were alive

Note: The number of observed takes may represent multiple takes on the same haul and should not be interpreted as the number of hauls with an incidental take.

Observer coverage of the Mid-Atlantic region began in 1994.

No observed takes in the Northeast region. 163 hauls were observed.