



# Vessel Speed Report in Mandatory SMA - United States

01/22/2020 - 03/06/2020

Along the eastern coast of the United States, there are numerous speed restriction zones for maritime vessels, known as Seasonal Management Areas (SMAs) and Dynamic Management Areas (DMAs). These are active throughout different times of the year and have been created to reduce the incidence of North Atlantic right whale ship strikes. Reduced speeds in these critical zones allows for the increased maneuverability around spotted whales, as well as increased survivability in the event of a strike. SMAs observe mandatory speed-restrictions of 10-knots when active, while DMAs observe voluntary 10-knot speed restrictions and are only activated when large aggregations of whales are spotted in a particular area.

## Methods-

Using Global Fishing Watch, Oceana has compiled a list of vessels that exhibited speeds exceeding the voluntary 10-knot limit in active DMAs. The “Pings over 10 knots” column represents the number of distinct AIS signals above the 10-knot speed limit that were transmitted by a vessel inside the DMA on a given day, and the “Maximum Speed” column represents the highest speed attained by that vessel on that particular day. In some cases, a vessel may have transmitted speeds in excess of 10 knots on separate days and will appear in the tables below as two entries but in the summary statistics, these are treated as one distinct vessel.

Data for the DMA/SMA report was pulled from Global Fishing Watch’s (GFW) vessel database. The data was filtered to only include vessels that recorded at least two AIS signals in the timeframe of January 22, 2020 – March 6, 2020. Furthermore, the data was analyzed for erroneously high speeds, which were also removed. For example, if a ship’s AIS recorded the following consecutive speeds: 11, 12, 11, 11, 38, 12, then the outlier would be removed from the data as an error. In some cases, a vessel's highest recorded AIS signal was cross-referenced with online resources and could be discounted as an error based on a large discrepancy between the AIS signal and the maximum attainable speed of that vessel.

To obtain the speed compliance value, the number of distinct vessels with at least two AIS signals and at least one AIS signal over 10 knots in the DMA was divided by the number of distinct vessels with at least five AIS signals in the DMA.

## Results-

*Number of distinct vessels traveling above 10 knots: 60*

*Number of distinct vessels traveling through the SMA: 516*

*Percent of vessels relative to all active vessels in the Block Island SMA with a maximum speed over 10 knots: 11.63%*

*Percent of U.S. vessels relative to all active vessels in the Block Island SMA with a maximum speed over 10 knots: 5.04%*

*Fastest observed vessel speed in the Block Island SMA: 20.9*

## Distinct Speed Events Over 10 Knots

Class	Length (meters)	Flag	Day	Pings over 10 knots	Maximum speed (knots)
pots and traps	44.18	United States	2020-01-19	35	12.6
tanker	150.46	Singapore	2020-01-20	5	10.4
seismic vessel	70.00	Panama	2020-01-20	10	10.3
tug	34.46	United States	2020-01-20	2	10.6
non fishing	67.08	United States	2020-01-21	3	10.2
tanker	150.46	Singapore	2020-01-21	8	10.3
cargo	111.23	Marshall Islands	2020-01-21	7	11.4
cargo	113.46	Marshall Islands	2020-01-22	3	10.2
tanker	138.36	Marshall Islands	2020-01-22	7	10.2
non fishing	39.96	United States	2020-01-22	5	10.2
non fishing	39.96	United States	2020-01-23	7	10.4
tanker	124.34	Marshall Islands	2020-01-23	3	10.4
tanker	183.00	Hong Kong	2020-01-23	9	10.4
non fishing	39.96	United States	2020-01-24	22	10.6
passenger	27.43	United States	2020-01-24	4	10.4

NA	28.00	United States	2020-01-24	2	10.5
patrol vessel	30.92	United States	2020-01-25	6	12.0
non fishing	43.00	United States	2020-01-25	4	10.2
cargo	193.23	Panama	2020-01-25	2	10.1
passenger	30.61	United States	2020-01-25	7	14.1
cargo	162.82	Italy	2020-01-27	5	10.2
patrol vessel	73.56	United States	2020-01-27	8	17.0
cargo	190.00	Singapore	2020-01-28	12	10.7
supply vessel	58.02	United Kingdom	2020-01-28	3	11.3
passenger	38.46	United States	2020-01-28	3	19.7
tanker	135.49	Marshall Islands	2020-01-28	9	10.2
NA	21.97	United States	2020-01-28	4	10.4
other purse seines	33.05	United States	2020-01-29	2	10.4
fishing	31.64	United States	2020-01-29	3	10.7
other purse seines	33.05	United States	2020-01-30	4	10.5
fishing	31.64	United States	2020-01-30	4	11.0
cargo	111.23	Marshall Islands	2020-01-30	26	12.7
cargo	136.81	Hong Kong	2020-01-31	2	10.2
cargo	136.81	Hong Kong	2020-02-01	2	11.5
seismic vessel	70.00	Panama	2020-02-01	27	10.8
passenger	38.46	United States	2020-02-01	8	20.9
non fishing	56.00	United States	2020-02-02	9	11.2
NA	21.97	United States	2020-02-02	9	10.6
cargo	103.94	Netherlands	2020-02-03	12	11.0
NA	21.97	United States	2020-02-03	7	10.7
supply vessel	58.02	United Kingdom	2020-02-04	3	10.1
pots and traps	26.54	United States	2020-02-04	5	10.3
tanker	142.32	Italy	2020-02-05	2	10.2
cargo	134.72	China	2020-02-05	4	11.7
non fishing	56.00	United States	2020-02-06	2	10.6
passenger	42.49	Cayman Islands	2020-02-08	11	11.0
cargo	103.94	Netherlands	2020-02-08	7	11.9
tanker	179.34	United States	2020-02-11	2	10.2
cargo	134.72	China	2020-02-14	15	13.4
tanker	146.71	Marshall Islands	2020-02-14	13	13.0
tug	27.51	United States	2020-02-14	2	10.4
cargo	172.89	Croatia	2020-02-17	6	10.2
NA	21.97	United States	2020-02-17	2	10.3
cargo	183.48	Japan	2020-02-19	15	10.3
cargo	129.15	Panama	2020-02-21	3	10.5
pots and traps	28.00	United States	2020-02-21	3	10.5
cargo	130.79	Cyprus	2020-02-23	31	11.8
cargo	136.96	Panama	2020-02-23	36	11.6
pots and traps	28.00	United States	2020-02-24	6	12.1
tanker	145.81	Hong Kong	2020-02-24	3	10.1
cargo	127.94	Singapore	2020-02-24	81	14.4
fixed gear	26.25	United States	2020-02-24	4	10.2

NA	21.97	United States	2020-02-24	3	11.5
cargo	186.64	Liberia	2020-02-24	2	10.6
tanker	145.40	Cayman Islands	2020-02-26	3	10.3
tanker	145.81	Hong Kong	2020-02-26	4	10.3
cargo	129.15	Panama	2020-02-26	4	10.7
non fishing	59.16	United States	2020-02-26	27	11.2
tanker	145.40	Cayman Islands	2020-02-27	3	10.3
tanker	145.40	Cayman Islands	2020-02-28	10	10.7
fishing	24.55	United States	2020-02-29	3	10.9
cargo	131.62	Marshall Islands	2020-02-29	2	13.0
cargo	127.94	Singapore	2020-02-29	26	13.4
tanker	134.39	Marshall Islands	2020-03-01	27	10.5
tanker	145.94	Denmark	2020-03-03	7	10.8
cargo	136.96	Panama	2020-03-03	35	13.6
non fishing	69.31	United States	2020-03-04	14	10.5
cargo	120.31	Panama	2020-03-04	3	10.7
tanker	121.17	Norway	2020-03-04	3	10.3
tanker	134.39	Marshall Islands	2020-03-04	6	12.4
cargo	166.26	Panama	2020-03-05	21	10.7
pots and traps	30.09	United States	2020-03-05	8	11.5
tanker	121.17	Norway	2020-03-06	6	12.7
fishing	25.60	United States	2020-03-06	4	10.5
non fishing	64.41	United States	2020-03-06	16	14.0
tanker	159.11	Liberia	2020-03-06	3	10.3

**Vessels with Maximum Speeds Between 10-11.99 Knots**

Class	Length (meters)	Flag	Maximum speed (knots)
tanker	150.46	Singapore	10.4
seismic vessel	70.00	Panama	10.8
tug	34.46	United States	10.6
non fishing	67.08	United States	10.2
cargo	113.46	Marshall Islands	10.2
tanker	138.36	Marshall Islands	10.2
non fishing	39.96	United States	10.6
tanker	124.34	Marshall Islands	10.4
tanker	183.00	Hong Kong	10.4
passenger	27.43	United States	10.4
NA	28.00	United States	10.5
non fishing	43.00	United States	10.2
cargo	193.23	Panama	10.1
cargo	162.82	Italy	10.2
cargo	190.00	Singapore	10.7
supply vessel	58.02	United Kingdom	11.3
tanker	135.49	Marshall Islands	10.2
NA	21.97	United States	11.5
other purse seines	33.05	United States	10.5
fishing	31.64	United States	11.0

cargo	136.81	Hong Kong	11.5
non fishing	56.00	United States	11.2
cargo	103.94	Netherlands	11.9
pots and traps	26.54	United States	10.3
tanker	142.32	Italy	10.2
passenger	42.49	Cayman Islands	11.0
tanker	179.34	United States	10.2
tug	27.51	United States	10.4
cargo	172.89	Croatia	10.2
cargo	183.48	Japan	10.3
cargo	129.15	Panama	10.7
cargo	130.79	Cyprus	11.8
tanker	145.81	Hong Kong	10.3
fixed gear	26.25	United States	10.2
cargo	186.64	Liberia	10.6
tanker	145.40	Cayman Islands	10.7
non fishing	59.16	United States	11.2
fishing	24.55	United States	10.9
tanker	145.94	Denmark	10.8
non fishing	69.31	United States	10.5
cargo	120.31	Panama	10.7
cargo	166.26	Panama	10.7
pots and traps	30.09	United States	11.5
fishing	25.60	United States	10.5
tanker	159.11	Liberia	10.3

**Vessels with Maximum Speeds Between 12-13.99 Knots**

Class	Length (meters)	Flag	Maximum speed (knots)
pots and traps	44.18	United States	12.6
patrol vessel	30.92	United States	12.0
cargo	111.23	Marshall Islands	12.7
cargo	134.72	China	13.4
tanker	146.71	Marshall Islands	13.0
pots and traps	28.00	United States	12.1
cargo	131.62	Marshall Islands	13.0
cargo	136.96	Panama	13.6
tanker	134.39	Marshall Islands	12.4
tanker	121.17	Norway	12.7

**Vessels with Maximum Speeds Between 14-15.99 Knots**

Class	Length (meters)	Flag	Maximum speed (knots)
passenger	30.61	United States	14.1
cargo	127.94	Singapore	14.4
non fishing	64.41	United States	14.0

**Vessels with Maximum Speeds Between 16-17.99 Knots**

Class	Length (meters)	Flag	Maximum speed (knots)
patrol vessel	73.56	United States	17

**Vessels with Maximum Speeds Between 18-19.99 Knots**

Class	Length (meters)	Flag	Maximum speed (knots)
N/A			

**Vessels with Maximum Speeds Greater than or Equal to 20 Knots**

Class	Length (meters)	Flag	Maximum speed (knots)
Passenger	38.46	United States	20.9

**Violators Count Based on Vessel Classification with Speeding Events over 10 knots**

Vessel class	10-11.99 knots	12-13.99 knots	14-15.99 knots	16-17.99 knots	18-19.99 knots	Greater than or equal to 20 knots	Total	Percentage of Vessels
Cargo	13	4	1	0	0	0	18	30
Tanker	11	3	0	0	0	0	14	23.33
Fishing	7	2	0	0	0	0	9	15
Non fishing or N/A	8	0	1	0	0	0	9	15
Passenger	2	0	1	0	0	1	4	6.67
Patrol vessel	0	1	0	1	0	0	2	3.33
Tug/Supply	3	0	0	0	0	0	3	5
Seismic vessel	1	0	0	0	0	0	1	1.67