

## How To Use *Ship Speed Watch*

*Ship Speed Watch* updates daily with Automatic Identification System (AIS) signals from vessels in active speed restriction zones from the past 30 days. Click on a point to view a vessel's name, speed, and the Maritime Mobile Service Identity (MMSI) number. The MMSI is a unique 9-digit number that is assigned to an AIS unit. Use the "Shipname" drop-down box to select a specific vessel of interest, then set the desired date range and click "Submit." To display the name of each respective zone, simply click within a speed restriction zone boundary. The speed restriction zones and critical habitat boundaries can be toggled on and off by hovering over the panel below the map legends.

Once a vessel has been selected, click on the "Data" tab to view associated vessel information. A table will display the vessel classification, length, MMSI, speed, flag state, and AIS timestamp. The "Information" tab has two sub-tabs: "NOAA Whale Sightings Map" and "Speed Restriction Zones." "NOAA Whale Sightings Map" includes a brief overview of the North Atlantic right whale sightings data that the National Oceanic and Atmospheric Administration (NOAA) has compiled, as well as a link to their map. The "Speed Restriction Zones" sub-tab provides information on the active periods for speed restriction zones and includes links to the regulations outlined by NOAA and Fisheries and Oceans Canada (DFO).

Selecting a new vessel or date range will re-populate the map. Note that dates set more recent than 3 days prior will return no results. Similarly, if there were no AIS signals broadcasted by a vessel in a given timeframe, the map will remain blank. Refreshing the webpage will repopulate the map with the past 30 days' worth of data.

\**Ship Speed Watch* uses vessel information in the Global Fishing Watch database. This information is transmitted from a vessel's Automatic Identification System (AIS) device, which is collected via satellites and terrestrial receivers. Faulty AIS devices, user error, intentional manipulation, crowded areas, poor satellite reception, and transmission flaws are factors that contribute to noise and errors in AIS data, and sometimes those inaccuracies can be reflected in the speed and location of a vessel. Vessel operators can accidentally or purposefully enter false information into their ship's AIS thus concealing their identity or location. In crowded areas, such as ports, the massive number of radio transmissions can crowd the bandwidth of satellite and terrestrial receivers, leading to inaccuracies as well. For these reasons, *Ship Speed Watch* information must be relied upon solely at your own risk.