

<b>Variable Definitions for trawl gears</b>	
<b>Variable Name</b>	<b>Definition</b>
No.	number of the take (in sequential order)
Take Species	common name of the incidentally taken animal
# of takes	number of takes in a tow
Target Species	common name of the species targeted for the trip, reported by the captain. See Table 1 for abbreviations.
Year	year that the trip took place in
Month	month that the trip took place in
State	state that the trip landed in
County	county that the trip landed in
Region	area of the country the trip took place in (i.e.: New England (NE) and Mid-Atlantic (MidAtl))
Stat Area	Statistical Area that the trip took place in, either calculated or given by captain (see plot)
Haul Day	day that the haul began
Haul Begin Time	time that the haul began (the hauling equipment is put into gear)
Haul Duration	derived field using the haul begin time and haul end time
SST	using the location that the haul began at, SST is derived from satellite imagery (in Celsius)
Slope	using the location that the haul began at, slope is derived from bottom topography (in degrees)
Depth	using the location that the haul began at, the water depth derived from topography data (in meters)
Weather	weather at the beginning of the tow. Choices are in Table 2.
Wind Speed	wind speed at the beginning of the tow (in whole knots)
Wave Height	wave height at the beginning of the tow (in whole feet)
Vessel Gross Tons	gross tonnage of the vessel
Vessel Horsepower	horsepower of the vessel engine(s)
Tow Speed	average towing speed that the vessel towed the net over the bottom (to the nearest tenth of a knot)
Net Design	construction design of the net (applies only to mid-water trawl gear). Choices are: unknown, 2 seam, 4 seam equal panels, 4 seam unequal panels, other.
Transducer Used	indicates whether a transducers was mounted on the gear
Transducer Brand	brand of transducer mounted on the gear. Choices are: unknown, Furuno, Simrad, other, none.
Wireout	amount of wire paid out (in whole fathoms)
Scope	derived field of the wireout/depth
Fishing Circle Mesh Size	inside mesh measurement from the fishing circle (to the nearest tenth of an inch)
Number of Mesh in Fishing Circle	number of meshes in the fishing circle (if can't be measured directly, it can be obtained from captain)
Presence of Excluder (includes TEDs for turtles)	indicates whether an excluder or separator device was used on the gear

Working TED Used	indicates whether a TED was working
Presence of Fish Outlet	indicates whether a fish outlet was used on the gear
Gear Condition	indicates condition of the gear at the time of haulback. Choices are in Table 3.
Groundcable Length	length of the wire connecting the bridles and the back strap (in whole feet)
Headrope Length	length of the rope along the top of the net, either directly measured or from captain (in whole feet)
Footrope/Sweep Length	length of the rope along the bottom of the net, either directly measured or from captain (in whole feet)
Sweep Type	type of gear making up the sweep. Choices are: unknown, chain, cable/wire, wrapped cable, rock hopper, roller, rubber cookie, bobbin, none, other.
Days Fished	derived field of the days the boat fished on a haul
Net Name	name of the net used.
Cod Mesh Size	inside measurement of mesh in the cod end (in whole millimeters)

**Table 1. Target species codes and names.**

<b>TARGET SPECIES</b>	
Code	Name
acod	american cod
lobs	american lobster
apfl	american plaice flounder
croa	croaker
flnk	flounder, nk
hadd	haddock
herr	herring
lfsq	long-fin squid
mack	mackerel
mxgr	mixed groundfish
monk	monkfish
sfsq	short-fin squid
silh	silver hake
suf1	summer flounder
weak	weak fish
whih	white hake
winf	winter flounder
wifl	witch flounder
yfl	yellowtail flounder

**Table 2. Weather condition choices available to observers.**

<b>WEATHER CONDITIONS</b>
Choices
Unknown
Clear
Partly cloudy
Continuous layers of clouds
Drizzle
Rain
Showers
Thunderstorms
Rain and fog
Fog or thick haze
Snow, or rain and snow mixed
Blowing snow
Other

**Table 3. Gear condition choices available to observers.**

<b>GEAR CONDITIONS</b>
Choices
No gear damage, or very few small, scattered holes
Wings twisted or tron, not exceeding 50% of meshes
Wings twisted or tron, exceeding 50% of meshes
Square and/or bosom torn, not exceeding 50% of meshes
Square and/or bosom torn, exceeding 50% of meshes
Belly torn, not exceeding 50% of meshes
Belly torn, exceeding 50% of meshes
Codend and/or extension piece torn, not exceeding 10% of meshes
Codend and/or extension piece torn, exceeding 10% of meshes
Hang-up, causing gear to be hauled back before secheduled time; minor damage
Parted legs, sweep, or headrope.
Tear up exceeding gear condition number 2, but not total net destruction
Obstruction in gear, such as a large amount of fixed gear, boulders, etc.
Crossed doors
Open codend
Major hang-up, tear-up, or loss of gear
Grate clogged with fish or debris
Other