Pêches et Océans Canada

GEAR MARKING EASTERN CANADA

for non-tended fixed gear fisheries

In February 2019 Minister Wilkinson announced that Canada would phase-in mandatory gear marking for all fixed-gear fisheries in 2020. Please find below the Eastern Canada gear marking framework.

BRIEF OVERVIEW

- The purpose of these measures are to identify gear from different fisheries, regions and sub-regions in Canada, to support efforts to address lost gear and reduce marine mammal entanglements, and to distinguish between US and Canadian gear involved in marine mammal entanglements.
- To help differentiate between Canadian and US gear marks, the Canadian scheme uses different colour combinations and methods for applying colour marks to rope. For example, the US marking scheme uses segments of different colours in a length of rope (i.e. a 6 inch segment of red followed by a six inch segment of blue), rather than interlacing strands of colour in the full length of a segment of rope. The US also uses tape and paint to add colour segments to rope, rather than integrating lines of coloured twine.

Gear Marking method to be applied in Eastern Canada

- 1) Colour combination are to be implemented using two different strands of twine interlaced on the same segment of rope (see picture Annex1):
 - a) One colour will be used to identify fisheries from a specific Region to be interlaced on the same segment of rope as the second colour.
 - b) A second colour will be used to identify target Species of a fishery to be interlaced on the same segment of rope as the first colour. Each species will be attributed the same colour across all Regions in Eastern Canada (i.e. yellow for lobster).
- 2) For snow crab and lobster fisheries only, a third colour will be used to mark different fishing areas in each region. The third colour will be added to a subsequent segment of rope immediately after the segment of rope with the first two colours, and will not be interlaced with the first and second colour. For example, the Area 12A Crab fishery in the Gulf will have a segment of green and orange strands interlaced in the rope, followed by a segment of rope with only an orange strand interlaced (see Figure B in Annex 1).
- 3) Gear marking will be mandatory for ropes attaching the fishing gear to the primary buoy (vertical line). It could also be included on other rope sections when applicable, at the discretion of fish harvesters, such as the rope section attaching the primary buoy to the secondary buoy, and rope from trap to trap set on a same line (ground lines).
- 4) At a minimum, gear marking will be required at the top, middle and bottom of the vertical line (aligned with minimum requirements in the US) or every 27.4m throughout the length of the rope (aligned with existing practice in GLF and QC). Each strand marking must be a minimum of 15cm in length.
- 5) Use of a "tracer" as an alternative to colour coding requirements will be permitted. Given that a tracer can't be added to existing rope, unlike coloured twine which can be integrated into existing rope, the use of tracers could be phased-in as ropes are replaced. The tracer, a silver transparent tape inside the full length of the rope, must have a visible inscription identifying country, region, species and fishing area. (See ANNEX 3)

MANDATORY COLOUR SCHEME (Region and Species colours)

	GLI	F - blue	MAR - black		NL - red		QC - green		Multi-region fishery ¹	
Toad crab	X	purple			X	purple	X	purple		
Rock crab	X	Blue*	\mathbf{X}	blue	X	blue	X	blue		
Lobster	X	yellow	\mathbf{X}	yellow	X	yellow	X	yellow		
Whelk	X	white	\mathbf{X}	white	X	white	X	white		
Snow crab	X	orange	\mathbf{X}	orange	X	orange	X	orange	X	orange
Gillnet - small pelagic	X	grey	\mathbf{X}	grey	X	grey	X	grey		
Gillnet – groundfish	X	brown	\mathbf{X}	brown	X	brown	X	brown		
Longline	X	pink	\mathbf{X}	pink	X	pink	X	pink		
Squid (trap)					X	green				
Cod (trap/pot)					X	red*				
Shrimp trap			\mathbf{X}	green						
Hagfish			\mathbf{X}	black*						
Red crab			\mathbf{X}	red						
Jonah crab			\mathbf{X}	purple						
Lobs., rock crab and jonah crab ²			X	3						
Clearwater LFA 41			X	3						

^{*}Blue & blue, black & black and/or red & red combination means there should be two distinct strands of the same colour interlaced within the same rope section (one single strand is not acceptable)

^{1 &}quot;Multi-region fishery" is specific to instances of inter-regionally managed fisheries, where each Region is wholly responsible for managing their own fleet but they share the exact same fishing area, licence conditions, and so on, as another fleet in another Region. Each Region issues the same licence conditions to their harvesters. A common base colour was given to ensure a regional division was not created within a shared industry.

² As some fish harvesters in Maritimes Region use the same gear to fish all three fisheries (lobster, rock crab and Jonah crab), at this time they will have a different colour than others to acknowledge, at a minimum, that it can be from either of those fisheries.

³ Pattern strand is necessary as no other solid colours are available. The selected fisheries must use a twine that contains a two colour pattern on one of the single strands (yellow/black pattern, red/white pattern). This is to be used in addition to the Regional colour. See Annex 2 for a pamphlet showing examples of twine colours including a yellow/black patterned strand colour and a red/white pattern strand colour (respectively named "lemon tartan" and "Oh Canada" in pamphlet).

EASTERN CANADA COLOR SCHEME PER FISHING AREA (third color) FOR LOBSTER & SNOW CRAB

As some of the interregional snow crab fisheries in the Gulf of St Lawrence already have some colour marking, efforts were made to avoid completely new colour schemes.

The following is the Eastern Canada break down of the colour scheme for <u>lobster and snow crab fishing areas</u>, per Region:

- the double stacked cells represent the regional colour (top) and species colour (bottom), with the single cell immediately to their right representing the fishing area colour.

Additional notes:

- Areas showing "none" in the single cell means that a third color is not applied.
- Some harvesters fish in multiple fishing areas. Unless otherwise specified, the category "Multiple area" includes these fish harvesters only. This was done so twines do not have to be interchanged between fisheries.

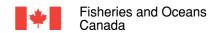
GULF REGION

Lobster fishing area colors

23		24		25		26A		26B		Multiple areas	
blue		blue		Blue		blue		blue	h la al	blue	- 11 -
yellow	red	Yellow	green	Yellow	none	yellow	white	yellow	black	yellow	yellow

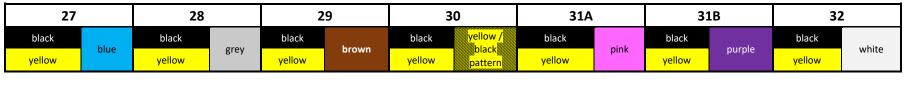
Snow Crab fishing area colors

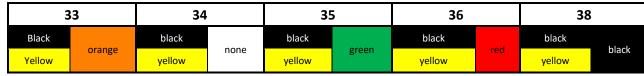
12		12E		12F		19		Multiple areas	
yellow	none	yellow	yellow	yellow	blue	blue	green	blue	vellow
orange		orange	70011	orange	5.00	orange	B. CC	orange	ye

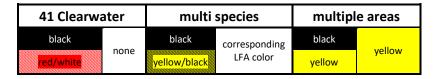


MARITIMES REGION

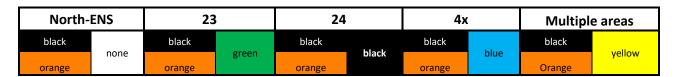
Lobster fishing area colors







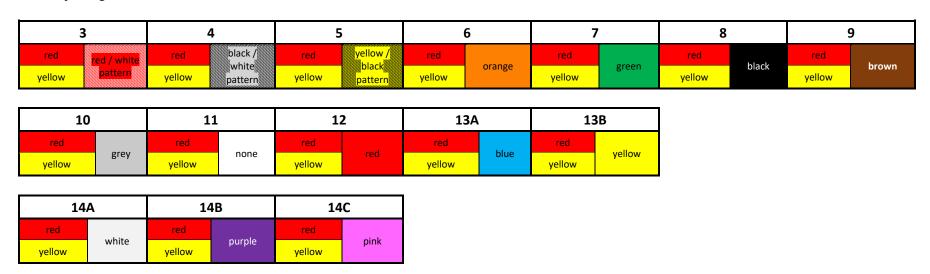
Snow crab fishing area colors



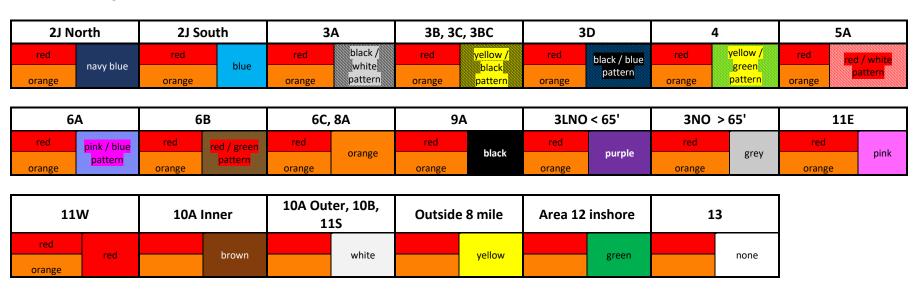


NEWFOUNLAND & LABRADOR REGION

Lobster fishing area colors

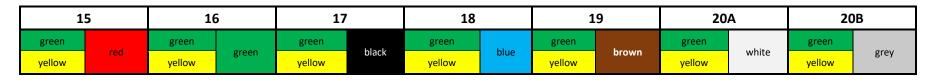


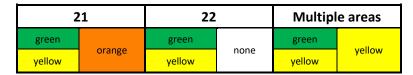
Snow crab management area colors



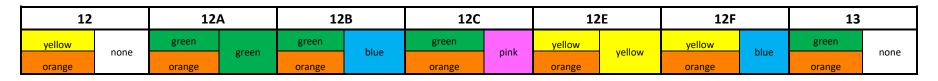
QUEBEC REGION

Lobster fishing area colors

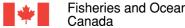




Snow crab fishing area colors







ANNEX 1

Figure A - Colour combo identifying Region and Species as per colour scheme this is Quebec (green), snow crab (orange) interlaced on same rope section

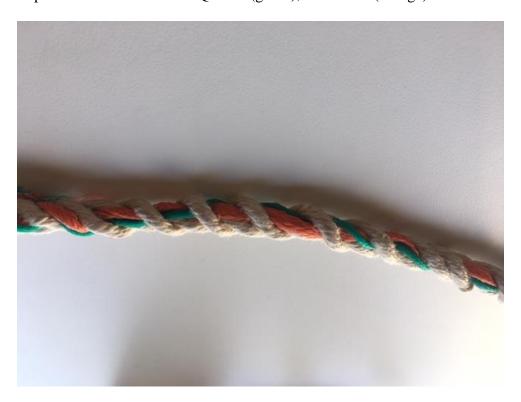


Figure B - Colour combo identifying Region, Species and Fishing Area Region & species interlaced on same section of rope, Fishing area on subsequent section of rope as per colour scheme this would be Quebec (green), snow crab (orange), CFA 12A (green)



ANNEX 2

Canadian company pamphlet showing twine colours and patterns:



There are companies for which the price does not differ between the different colours and patterns : 50 ft = \$6.70 / 100 ft = \$9.25 / 1000 ft = \$50.50

All colours are in stock, and it takes only one to two days to make more if needed.

ANNEX 3

Sample of rope with tracer exposed for gear analysis.

