Bottom Lines: ENGOs and Groundfish Trawlers Develop Innovative Conservation Measures

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Canadian Pacific EEZ

Deepsea Conservation Concerns



Rougheye rockfish: 205 years (max age)



Yelloweye rockfish: 117 years (max age),



Pacific rockfishes: 39 species, late maturing, long lived

Longspine thornyhead (800+ meters)

British Columbia has several glass sponge reefs, seapen fields, and other Vulnerable Marine Ecosystems (VMEs)



Photo credit: Living Oceans Society

Conservation Milestones in Canada's Pacific Groundfish Fishery

Year	Event
1996	Government shuts down groundfish bottom trawl fishery
1997	Trawl fishery reopens with 100% observer coverage, 100% dockside monitoring and ITQs (57 species/area quotas)
2003	164 Rockfish Conservation Areas implemented coastwide (20% of habitat) Glass sponge reefs closed to bottom trawling ~1000 km ²
2005	Government threatens closure of bottom longline fishery due to catch accountability.
2006	Longline fishery moves to 100% at sea video monitoring and bycatch limits for sensitive species.
2012	ENGO-Trawl industry habitat collaboration

Pre-Collaboration Conditions



• ITQ since 1997

- 100% observer coverage
- No subsidies
- 57 species/area quotas
- 100% dockside monitoring
- Excellent catch data
- Research surveys

Photo credit: Brian Mose

No regulation of habitat impacts



Bottom area trawled between 1997-2011

40,683 km²

~70 vessels

50,000 t/yr

Trend in annual area trawled



dragging our assets



Purpose of reports was to influence government.



ENGO-Industry Collaboration



Goal of the Collaboration





Ranking Codes



Best Choice seafood is well managed, abundant, and caught or farmed in environmentally sustainable ways.



Some Concerns seafood Avoi should be consumed this infrequently, or when a from green choice is not available. With There are concerns with critic abundance, management, dam or impacts on habitat or other marine life. Down



Avoid seafood items from this list for now. They come from farmed or wild sources with a combination of critical problems—habitat damage, lethal impacts on other species, critically low populations, or poor management. Reduce impact to sensitive habitats/species using Seafood Watch habitat criteria as the guidepost.

HABITAT SCORE STARTING POSITION: GEAR TYPE X HABITAT SENSITIVITY







PACIFIC REGION

INTEGRATED FISHERIES MANAGEMENT PLAN

GROUNDFISH

FEBRUARY 21, 2011 TO FEBRUARY 20, 2013

March 28, 2012 - Version 2.1



Redbanded Rockfish, Sebastes babcocki



Fisheries and Oceans Pêches et Océans Canada Canada

Canadä

This Harvest Plan is intended for general purposes only. Where there is a discrepancy between the Harvest Plan and the regulations, the regulations are the final authority. A description of Areas and Subareas referenced in this Harvest Plan can be found in the Pacific Fokery Management Area Regulations. April 2, 2012, four major measures were introduced to the Integrated Fisheries Management Plan

1.Ecosystem based trawlboundaries2.Habitat Bycatch Limits3.Encounter Protocol4.Habitat Review Committee



Measure 1: Boundaries

•Freeze footprint

Remove known
 coral and sponge
 areas

Habitat
 representivity

•9,000 km² removed





Measure 1: Boundaries

Problem:

Known high coral/sponge zones still in allowable footprint



Measure 2: Habitat Bycatch Limits

Corals

Sponges





= Annual fleet limit 4,500 kg

50,000,000 kg of groundfish

Measure 2: Habitat Bycatch Limits

Annual fleet limit 4,500 kg Management objective: <900 kg

70 vessels (ITQ between 6kg-141kg)
100% observer coverage since 1996
~15,000-20,000 tows per year
2011 1,100 kg of sponge in a single tow
Individual Accountability
First fishery to use habitat bycatch limits

Measure 2:Habitat Bycatch Limits Daily Updates

Fisheries and Oceans Canada	Pêches et Océans Canada	Sector Catch Summary		Effective	e Date: 30-Ap	or-2013 07:30	:00 AM
Rock Sole	3C, 3D	124.08	0.61	123.72	99.7	0	0.2
	5A, 5B	770.92	2.00	770.67	100.0	2	0.2
	5C, 5D	794.46	0.60	795.71	100.2	2	0.2
English Sole	3C, 3D, 5A, 5B	221.27	5.74	216.00	97.6	0	0.2
	5C, 5D, 5E	750.46	81.37	688.16	91.7	19	2.5
Petrale Sole Coastwide		681.90	155.91	531.58	78.0	6	0.8
Lingcod	3C	947.75	15.26	934.48	98.6	2	0.2
	3D	439.92	32.16	408.36	92.8	1	0.1
	5A, 5B	955.42	2.32	955.28	100.0	2	0.2
	5C, 5D, 5E	690.87	2.56	689.75	99.8	1	0.2
Spiny Dogfish	3C, 3D, 5A, 5B, & 5C, 5D, 5E	4,607.71	3.61	4,613.49	100.1	9	0.2
	4B	772.68	0.34	775.23	100.3	3	0.4
Sablefish	Coastwide	191.73	17.92	174.05	90.8	0	0.1
Walleye Pollock	Gulf	1,228.69	0.00	1,231.46	100.2	3	0.2
	5A, 5B, Area 12	1,361.50	0.20	1,549.62	113.8	188	13.8
	5C, 5D, 5E	1,280.97	4.91	1,279.26	99.9	3	0.2
Pacific Hake	Gulf	8,401.76	0.00	8,401.86	100.0	0	0.0
	Offshore	33,749.42	4.26	33,760.65	100.0	15	0.0
	Offshore JV	770.50	0.00	770.89	100.1	0	0.1
Big Skate	5C, 5D	674.51	69.78	625.36	92.7	21	3.1
Long Nose Skate	5C, 5D	56.15	0.89	55.35	98.6	0	0.2
Arrowtooth Flounder	Coastwide	19 217 05	1,743 67	17.004.17	93.3	530	2.9
Halibut	Coastwide	469.29	24.99	446.10	95.1	2	0.4
Corals And Sponges	Coastwide	4.44	0.05	4.38	98.8	0	0.0
Bocaccio Coastwide		134.78	9.38	125.39	93.0	0	0.0
	155		10000				



Measure 3: Encounter Protocol





≥ 20kg in a single tow

2012/2013 Commercial GROUNDFISH TRAWL Coral and Sponge Incident Report

Incident #	Date	Tow Start Coordinate/Position		Tov Coordina	Coral/Sponge Weight	
		Latitude	Longitude	Latitude	Longitude	(kg)
1	April 06, 2012	49° 19.00'	127° 5.50'	49° 23.70'	127° 10.90'	36.29
2	May 24, 2012	53° 28.90*	131° 6.20'	53° 24.60'	131° 11.50'	45.36
3	May 24, 2012	53° 24.60'	131° 11.40'	53° 24.70'	131° 11.30'	22.68
4	May 24, 2012	53° 25.30'	131° 10.60'	53° 29.10'	131° 1.10'	22.68

Updated: May 30, 2012 11:56





Location of encounters greater than 20 kg since April 2012

Measure 4: Habitat Review Committee

18.8. Habitat Conservation Review Committee

The BC groundfish trawl industry, MCC and Fisheries and Oceans Canada staff agree to work collaboratively in the monitoring and evaluation of the habitat conservation measures. A joint Habitat Conservation Review Committee (HCRC) will be established to review and assess annually and over time:



Experience from Year 1

-Habitat Bycatch Limit –only 10% used.
-4 encounters over 20 kg
-compliance to boundary (4 infractions, 6622 tows)
-fishermen fishing cautiously
-Appears to be having the anticipated outcome

Experience from Year 1:

Case Study: directed rock sole bottom trawl fishery



Conclusions and Lessons Learned

- robust catch monitoring data is essential
- data must be available to all user groups
- strong incentive required for change (fishery closed)
- working together can be efficient and creative
- solutions can be developed outside of government
- need government leadership and support

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Rock sole case study



20% decrease in area trawled after first year

2012: 1356 km² 2008-11: 1701 km²/year



Bruce Turris, Canadian Groundfish Research and Conservation Society



John Driscoll, former Sustainable Fisheries Campaign Manager, Living Oceans Society



Brian Mose, 5th Generation Fisherman, Deep Sea Trawlers Association