## **ARTICLE**

## In a Pinch: Snow Crab and the Politics of Crisis in Newfoundland

## Reade Davis and Kurt Korneski

ON 2 JULY 1992, THE CANADIAN federal government imposed a moratorium on the commercial harvesting of cod and other groundfish species in several regions off the country's east coast. Remaining areas followed a year later. These closures brought an abrupt end to a 500-year-old fishery and threw more than 40,000 people (three quarters of whom lived in the province of Newfoundland and Labrador) out of work.¹ This sudden turn of events marked the beginning of far-reaching transformations in the province's economy, society, and ecology – many of which continue to unfold into the present. It also spawned a host of studies aimed at understanding how the collapse could have happened and how to deal with the hundreds of coastal communities that had been devastated by the closure.²

Paradoxically, in spite of the cod moratorium and the predictions of impending doom that accompanied it, those commercial fishers who survived the aggressive restructuring process of the early 1990s experienced several years that ranked among the most profitable in the history of the province's fishery. This was largely due to the rapid expansion of the snow

- 1. Reade Davis, "Compromising Situations: Participation and Politics in the Sustainable Development of Canada's Oceans," PhD thesis, Memorial University of Newfoundland, 2009.
- 2. See, for example, Sean Cadigan, Newfoundland and Labrador: A History (Toronto 2009); Rosemary Ommer, ed., Coasts Under Stress: Restructuring and Social-Ecological Health (Montreal and Kingston 2007); Peter Sinclair and Rosemary Ommer, eds., Power and Restructuring: Canada's Coastal Society and Environment (St. John's 2006); Craig Palmer and Peter Sinclair, When the Fish are Gone: Ecological Disaster and Fishers in Northwest Newfoundland (Halifax 1997); Rosemary Ommer, "Final Report of the Eco-Research Project: Sustainability in a Changing Cold-Ocean Coastal Environment," Unpublished Report, Centre for Newfoundland Studies. 1998.

crab (*Chionoecetes opilio*) fishery in the region and the high prices paid for the species during the late 1990s and early 2000s. In spite of these periods of relative prosperity, however, the crab fishery has been prone to significant price and market fluctuations, and the benefits accruing from it have not been widely shared. Accordingly, the period after the cod moratorium has also been marked by frequent and often bitter conflicts between different crab fishing fleet sectors and between crab fishers, processing companies, and processing plant workers. These tensions reflect fundamentally different visions of how to sustain the fishery into the future and which priorities should be used to decide who should benefit most from the crab resource.

This paper draws upon historical documents, published works, and interviews conducted in Notre Dame Bay, Bonavista Bay, Trinity Bay, Conception Bay, and Placentia Bay in 2003, 2004, 2009, 2010, and 2011 to examine the development of the Newfoundland crab fishery and the politics that have come to surround it in recent years. We argue that, while the rise of the snow crab fishery cannot be understood in isolation from the history of the cod fishery, it has nevertheless had its own distinct logic and historical trajectory which necessitate that it be examined as a separate entity. Efforts to "modernize" the cod fishery and subject it to new managerial regimes designed to increase efficiency have long met with resistance from small-scale coastal fishers intent on articulating their rights to prosecute fishery resources and continue to derive their livelihoods from the sea. As a result, federal government planners pushing for increasing managerial control and fleet rationalization often found themselves pitted against community activists and academics who called for the recognition of access rights for small-scale fishing communities,

<sup>3.</sup> Semi-structured interviews were carried out with 32 fish harvesters in Notre Dame Bay, Bonavista Bay, Trinity Bay, Conception Bay, and Placentia Bay, Newfoundland in 2003 and 2004 as part of Davis' doctoral dissertation fieldwork. Ethical clearance for these interviews was obtained from Memorial University's Interdisciplinary Committee on Ethics in Human Research (ICEHR) in 2002. An additional 20 interviews were carried out with fish harvesters in Placentia Bay by Davis and Korneski in 2009, 2010, and 2011 as part of the Reconceptualizing Ecosystem Complexity Project, which obtained ethical clearance from the ICEHR in 2009. In both cases, informants were identified using a snowball sampling method and were taken from both the inshore (under 35 foot vessels) and midshore (35–65 foot vessels) fleet. In all cases, the individuals we interviewed were the owner-operators of the vessels they fished on. In collecting historical material, Korneski undertook a survey of material held at Memorial University's Centre for Newfoundland Studies, Memorial's Archives and Special Collections unit, as well as published primary documents.

acknowledgement of the validity of fishers' ecological knowledge,<sup>4</sup> and/or attention to issues of social justice.<sup>5</sup>

By contrast, from its inception in the 1960s, the snow crab fishery was a prototype of what federal fisheries managers thought a modern fishery should be. Government planners envisioned the snow crab fishery as a wholly "modern" sector – one unencumbered by the bitter politics that long plagued the cod fishery and guided by scientific stock assessment techniques - that could bolster Canada's growing fleet of longliners and make them competitive players in the international crab market. Indeed, for three decades, small-scale fishers and their supporters largely ignored snow crab and did not consider it a viable option for them. The species was typically found farther from shore in rougher waters that were not accessible to small boats for most of the year. As cod and other staple fisheries declined and crab prices spiked, however, the snow crab fishery grew in significance for small-boat harvesters as well. It is now fished by large and small boats alike and has emerged as the anchor of remaining rural fishing communities. Since there is only so much crab to go around, however, the allocation of quotas and other management decisions are now hotly contested.

I

SINCE THE FIRST EUROPEAN VESSELS arrived off the shores of Newfoundland in 1497, people have exploited the rich inshore and offshore cod stocks around the island to supply overseas markets. Salted and dried Newfoundland cod quickly became an inexpensive source of food for many people around the world. It was particularly sought after in southern Europe and in Spanish and Portuguese colonies in South America and the Caribbean. Although fishers have also targeted other species, such as salmon, herring, and seals, salt cod has remained the economic foundation of many rural coastal areas for centuries. Since the vast majority of coastal fishers used small boats and fished

- 4. As other scholars have shown, part of what made the eventual collapse of cod stocks so contentious was that it occurred after repeated warnings and protestations from inshore fishers. The heavy dependence of this sector on the resource and the historically grounded knowledge inshore fishers had about local marine ecology made them aware of the changes taking place in the fishery, long before signs of the impending crisis became visible to fisheries managers, who were reliant on data provided by offshore draggers. See Craig Palmer and Peter Sinclair, When the Fish are Gone; Dean Bavington, Managed Annihilation: An Unnatural History of the Newfoundland Cod Collapse (Vancouver 2010).
- 5. Sean T. Cadigan, "Whose Fish? Science, Ecosystems and Ethics in Fisheries Management Literature Since 1992," *Acadiensis*, 31(Autumn 2001), 171–195.
- 6. Numerous scholars have discussed the importance of the salt cod economy in Newfoundland. See, for example, David Alexander, "Newfoundland's Traditional Economy and Development to 1934," in James Hiller and Peter Neary, eds., *Newfoundland in the Nineteenth and Twentieth Centuries: Essays in Interpretation* (Toronto 1978), 17–39; Eric Sager, "The Merchants of Water Street and Capital Investment in Newfoundland's Traditional

close to shore, the need for convenient access to cod fishing grounds shaped patterns of settlement in coastal areas across the island and along the coast of Labrador.<sup>7</sup> Furthermore, the all-consuming nature of the fishery during the spring and summer months contributed to the formation of deeply ingrained beliefs and practices over time, some of which appear to have contributed to the maintenance of fishery resources.<sup>8</sup> Indeed, as Cadigan, Bavington, and others have shown, one of the central themes of the history of Newfoundland's cod fishery is the struggle between small-scale fishers and mercantile and government elites, one in which the latter groups sought to increase exploitation to sustain profits, while the former groups warned of, and protested against, overfishing.<sup>9</sup>

After Newfoundland joined Canada in 1949, the locus of struggle shifted somewhat as Canadian officials (rather than local merchants or British commissioners) began to view many of these same values and practices as obstacles to progress, and attempted to bring the fishery and those who prosecuted it under increasing managerial control.<sup>10</sup> At the forefront of these efforts was

Economy," in Lewis Fischer and Eric Sager, eds., *The Enterprising Canadians: Entrepreneurs and Economic Development in Eastern Canada, 1820–1914* (St. John's 1979), 77–95; Shannon Ryan, *Fish Out of Water: The Newfoundland Saltfish Trade, 1814–1914* (St. John's 1986); Ryan, *The Ice Hunters: A History of Newfoundland Sealing to 1914* (St. John's 1994); Sean Cadigan, "The Moral Economy of the Commons: Ecology and Equity in the Newfoundland Cod Fishery, 1815–1855," *Labour/Le Travail*, 43 (Spring 1999), 9–42; Sean Cadigan and Jeffery A. Hutchings, "Nineteenth-Century Expansion of the Newfoundland Fishery for Atlantic Cod: An Exploration of Underlying Causes," in Paul Holm, Tim D. Smith, and David J. Starkey, eds., *The Exploited Seas: New Directions for Marine Environmental History* (St. John's 2004), 31–65.

- 7. John Mannion, ed., *The Peopling of Newfoundland: Essays in Historical Geography* (St. John's 1977).
- 8. See, for example, Melvin Firestone, Brothers and Rivals: Patrilocality in Savage Cove (St. John's 1967); James Faris, Cat Harbour: A Newfoundland Fishing Settlement (St. John's 1972); Cato Wadel, Now Whose Fault is That? The Struggle for Self-Esteem in the Face of Chronic Unemployment (St. John's 1973); Raoul Andersen, ed., North Atlantic Maritime Cultures: Anthropological Essays on Changing Adaptations (The Hague 1979).
- 9. Bavington, *Managed Annihilation*; Cadigan, "The Moral Economy of the Commons"; Cadigan, "Failed Proposals for Fisheries Management and Conservation in Newfoundland, 1855–1880," in Dianne Newell and Rosemary Ommer, eds., *Fishing Places, Fishing People: Traditions and Issues in Canadian Small-Scale Fisheries* (Toronto 1999), 147–169.
- 10. Many social scientists and historians documented these changes during the 1960s, 1970s, and 1980s, highlighting the ways in which federal and provincial policies sought to engineer significant and lasting changes to the structure of rural coastal livelihoods and the degree to which some members of those communities resisted such efforts in practice. See Miriam Wright, *A Fishery For Modern Times: The State and the Industrialization of the Newfoundland Fishery, 1934–1968* (Toronto 2001); Barbara Neis, "Familial and Social Patriarchy in the Newfoundland Fishing Industry," in Newell and Ommer, eds., *Fishing Places, Fishing People,* 32–54; Barbara Neis and Susan Williams, *Microtechnology and the Social Impact of Technological Change in the Deepsea Fishing Industry in Newfoundland* (St. John's 1987); Peter R. Sinclair, *From Traps to Draggers: Domestic Commodity Production in Northwest*

the Department of Fisheries and Oceans (DFO). Influenced by the postwar celebration of expert knowledge across a wide range of fields, the modernization theory of mid-20th-century economists like W. W. Rostow, and the structural functionalist theories of sociologists like Talcott Parsons, DFO officials accepted the view that groups of people tended to progress over time from "traditional" or "backward" societies to "modern" or "advanced" ones. "Modern" societies, in this view, were those that were characterized by increasing complexity and centralization and which made use of advanced technologies to amplify the productivity of labour, thereby increasing the standard of living of all citizens. In their view, the failure of a society to advance along this continuum was evidence that it had stalled and was in need of outside intervention to assist it in its development. Citizens needed to be infused with capital, technology, education, and a more overtly individualistic and entrepreneurial ethos so they too could join the ranks of more "advanced" industrial capitalist regions. <sup>12</sup>

Federal policy makers' attachment to such views was nowhere more clear than in their approach to fleet renewal. A major aim of federal fisheries policy in the 1960s was to accelerate the development of a fleet of offshore trawlers that would be capable of competing with foreign fleets. The government also subsidized the building of "midshore" longliners and seiners, usually between 35 and 65 feet in length, and actively discouraged the small-boat inshore fishery and the seasonal cycle of subsistence practices that went along with it.<sup>13</sup> On land, both federal and provincial officials discouraged the supposedly "backward" practice of community-based salt fish production, and encouraged modern fresh and frozen fish processing plants, and Fordist "assembly line" production methods.<sup>14</sup> To regulate fishers and to ensure a stable and predictable supply of fish, DFO introduced new models of scientific fisheries management inspired by existing management approaches in Europe and

Newfoundland: 1850-1982 (St. John's 1985); Palmer and Sinclair, When the Fish are Gone.

- 11. Miriam Wright, "Fishing in Modern Times: Stewart Bates and the Modernization of the Canadian Atlantic Fishery," in James Candow and Carol Corbin, eds., *How Deep is the Ocean?: Historical Essays on Canada's Atlantic Fishery* (Sydney 1997), 199.
- 12. Miriam Wright, "Women, Men and the Modern Fishery: Images of Gender in Government Plans for the Canadian Atlantic Fisheries," in Carmelita McGrath, *et al.*, eds., *Their Lives and Times: Women in Newfoundland and Labrador, A Collage* (St. John's 1995), 131; and *A Fishery for Modern Times*, 37–64.
- 13. Raul Andersen, ed., North Atlantic Maritime Cultures; J.T. Omohundro, Rough Food: The Seasons of Subsistence in Northern Newfoundland (St. John's 1994); Peter Sinclair, From Traps to Draggers; R. Apostle, et al., Community, State, and Market on the North Atlantic Rim: Challenges to Modernity in the Fisheries (Toronto 1998); Wright, A Fishery For Modern Times; Gerald Sider, Between History and Tomorrow: Making and Breaking Everyday Life in Rural Newfoundland (Peterborough 2003).
- 14. Wright, A Fishery for Modern Times; Sider, Between History and Tomorrow.

Asia.<sup>15</sup> The Department imposed similar initiatives in other parts of Atlantic Canada, as well as on the Pacific and Arctic Coasts, and in large freshwater lakes with sizeable fisheries, such as Lake Winnipeg in Manitoba.<sup>16</sup> At the core of this new approach was the use of new technologies to locate fish stocks and the application of quantitative models to estimate the size of different populations and determine the maximum sustainable yield.<sup>17</sup> At the same time, however, recognition of the high cost of operating larger vessels and the inherently episodic nature of the cod fishery prompted a search for alternate species that could supplement income derived from cod and provide some insurance against the uncertainty associated with that fishery.<sup>18</sup> The commercial fishery for snow crab was one of the first of these efforts.

П

Until the last third of the 20th century, few commercial fishers actively targeted snow crab, though most had long been aware of its existence. When they landed crab, they usually did so unintentionally. Most viewed crab as a curse rather than a blessing, as it often became entangled in fishing nets,

- 15. Isamu Hayashi, "Experimental Operations of Japanese Type Cod Traps in Newfoundland," Industrial Development Service Department of Fisheries of Canada, Project Report No.1, September 1966; G.R. Peters and W.D. McDougall, "The Mechanical Drying of Light Salted Codfish," Industrial Development Service Department of Fisheries of Canada, Project Report No. 8, May 1967; Marvin Barnes, "Program of Technical Assistance to Salted Cod Producers in Newfoundland and Labrador," Industrial Development Service Department of Fisheries of Canada, Project Report No. 17, February 1968; W.D. McDougall and M. Barnes, "Report on Visit to Iceland, Faroe Islands, and Norway to Observe Fish Catching, Handling, and Processing Methods With Particular Emphasis on Salted Cod Production (April 18—May 10, 1968)," Industrial Development Service Department of Fisheries of Canada, Project Report No. 23, May 1968.
- 16. See, for example, Joseph Taylor, *Making Salmon: An Environmental History of the Northwest Fisheries Crisis* (Seattle 1999), esp. 203–36; R.W. Crowley, B. McEachem, R. Jasperse, "Review of Federal Assistance to the Fishing Industry Since 1945," Economic and Commercial Analysis Report No. 71, (Ottawa 1990), 1–17. Historians of the United States have also pointed to the importance of these changes south of the border. See, for example, Mary Carmel Finley, "A Political History of Maximum Sustained Yield, 1945–1955," in David J. Starkey, Poul Holm, and Michaela Barnard, eds., *Oceans Past: Management Insights from the History of Marine Animal Populations* (London 2008), 189–206; Arthur McEvoy, *The Fisherman's Problem Ecology and Law in the California Fisheries, 1850–1980* (Cambridge 1986), 198–226. For a more general analysis see, Mary Carmel Finlay, *All the Fish in the Sea: Maximum Sustainable Yields and the Failure of Fisheries Management* (Chicago 2011).
- 17. Bavington, Managed Annihilation.
- 18. Sean Cadigan, "Science, Industry, and Fishers in Fisheries Management: The Experience of Newfoundland and Labrador, 1890s–1990s," *Studia Atlantica*, 13 (2009), 75–92; J.G. Eales, "A Survey of Eel Fishing in the Maritime Provinces," Industrial Development Service Department of Fisheries of Canada, Report No. 3, December 1966.

leading to expensive and time-consuming repairs.<sup>19</sup> Some people fishing on the east coast of Newfoundland reportedly avoided certain areas altogether, believing that the crab density was so high that it was not worth the nuisance.<sup>20</sup> The first attempts to commercially exploit snow crab did not begin until the 1960s. The impetus for this decision came when the crew of the *Stella Maris*, a Danish seiner the Nova Scotia government chartered to find new stocks of ground fish off Cape Breton Island, inadvertently landed about 4500 pounds of crab. According to J. Watson and S.L. Simpson, two researchers working for the Industrial Development Service (IDS), a research and development wing of the Department of Fisheries, a subsequent directed fishery focused on crab resulted in the landing of an additional 15,000 pounds.<sup>21</sup>

The ease with which the crew of the *Stella Maris* landed this quantity suggested to provincial and federal officials that there might be a future in large-scale commercial crab harvesting. The appeal of the species, however, also had much to do with conditions abroad. Part of the reason that IDS researchers took an interest in snow crab was that they were aware of the tremendously successful king crab fishery off the coast of Alaska. The prosperity generated by the Alaskan crab fishery led them to speculate about the possibility of developing a parallel industry on the east coast of North America which might be able to tap into the same market.<sup>22</sup> The high yields, high prices, and large number of workers required for processing the resource was encouraging and led another IDS planner to conclude that "if we visualize on our Atlantic seaboard a crab fishery of a magnitude approaching that of the king crab in the Pacific ... it is apparent that this new fishery warrants the most intensive exploration."<sup>23</sup>

Since the late 1950s Alaskan fishers enjoyed the benefits of a highly lucrative king crab fishery. By the mid-1960s, however, catches began to fall significantly.<sup>24</sup> Though they were aware of this decline, IDS researchers reflected little on the reasons behind it.<sup>25</sup> Instead, they focused on the fact that this

- 19. "Queen Crab: From Pest to Profit," Canadian Food Industries, February 1970, 38-40.
- 20. John Parsons, "The Queen Crab Industry in Newfoundland," unpublished paper, Centre for Newfoundland Studies, 1972, 10.
- 21. S.L. Simpson and J. Simpson, "Interim Report: The Queen Crab Fishery in the Atlantic Provinces, 1967," Industrial Development Service Department of Fisheries of Canada, Report No. 18, February 1968, 8.
- 22. Simpson and Simpson, "Interim Report," 2.
- 23. Simpson and Simpson, "Interim Report," 2.
- 24. Robert Otto, "Management and Assessment of Eastern Bering Sea King Crab Stocks," in G.S. Jamieson and J. Bourne, eds., North Pacific Workshop on Stock Assessment and Management of Invertebrates, *Canadian Journal of Fisheries and Aquatic Sciences*, Special Issue 92, 1986, 86.
- 25. Frank Pinhorn, "The Queen Crab Industry In Newfoundland," unpublished paper, Centre For Newfoundland Studies, 25. It is apparent that not only the United States, but also Russia

downturn presented an economic opportunity for them to market their own crab to supplement or even supplant king crab (and to a lesser extent dungeness crab) in the United States market.<sup>26</sup> Indeed, the decision to rename what had previously been unappealingly called "spider crab" as "queen crab" before eventually settling on "snow crab" reflected seafood marketers' efforts to make the species more appealing to American consumers.<sup>27</sup>

In 1966 the IDS, in collaboration with provincial Department of Fisheries officials in the Maritime provinces, launched an extensive program of exploratory fishing to determine whether the snow crab resource was abundant enough to sustain a significant commercial fishery.<sup>28</sup> They also conducted a series of experiments to determine which methods of catching, storing, and processing crabs would be most successful.<sup>29</sup> IDS funding and expertise was also critical in gathering information about existing crab fisheries in the United States and Japan, both of which also represented significant potential markets.<sup>30</sup> After launching several crab fisheries in the Maritimes, IDS officials turned their attention to Newfoundland.<sup>31</sup> The first investigations into the Newfoundland crab fishery began in 1967, when a trial fishing program began in Trinity Bay, between Old Perlican and Heart's Content. It then expanded into Notre Dame

and Japan had large scale king crab fisheries. It is possible that the combined pressure of the three fleets depleted the resource locally or more generally.

- 26. L.E. Deveau and J.W. Aucoin, "Spider Crab Explorations Gulf of St. LawrenceDecember 1965 to February 1966," Industrial Development Service Department of Fisheries of Canada, March 1966, 1.
- 27. The names "snow crab," "queen crab," and "spider crab" refer to a range of species. Apparently the adoption of the name "queen crab" for *Chionoecetes opilio* caught off of Newfoundland was a point of contention in the United States. Canadian producers worried that the US Food and Drug Administration would yield to US producers' dissatisfaction with the name. The bulk of Newfoundland's crab went to these markets. While "snow crab" is the most common name for *Chionoecetes opilio* now, some sources still refer to the species as "queen crab." W.S.W. Nowak mentions the origins of and debate surrounding the name "queen crab" in his *The Marketing of Shellfish* (London 1970), 193. See also, "Queen Crab: From Pest to Profit," 39. For an example of policy makers using "spider," "snow," and "queen" interchangeably to refer to Newfoundland crab, see Deveu and Aucoin, "Spider Crab Explorations"; and the speech of Dr. Leonce Chenard in *Proceedings of Meeting on Atlantic Crab Fishery Development* (Ottawa 1969). For a latter day reference to "queen crab" see Andrew Smith, *The Oxford Companion to American Food and Drink* (New York 2007).
- 28. L.E. Deveau and Hiram McAllister, "A Report on the Development of the Queen Crab Fishery in the Maritime Provinces of Canada," Industrial Development Service Department of Fisheries of Canada, Project Report No. 4, January 1967.
- 29. Deveau and Aucoin, "Spider Crab Explorations," 1-12, 24-25.
- 30. Whereas the American market primarily demanded crab meat, the Japanese market demanded crab legs and sections. Over time however, demand for crab sections in the U.S. and Canada increased considerably.
- 31. Pinhorn, "The Queen Crab Industry in Newfoundland," 1-2.

Bay followed by Conception Bay.<sup>32</sup> During this experimental phase there were few regulations in the fishery. In 1975, however, officials decided to introduce mandatory licensing and other regulations. There is little evidence to suggest that conservation was a major motivation behind this decision. Instead, the trigger seems to have been changes in the market for crab. The rebounding of Alaskan king crab ended the privileged place Canadian snow crab had held since the beginning of exploratory fishing, and it was this downturn in the market for snow crab that led to the restructuring of the fishery.<sup>33</sup>

Industry and government officials who had been at the centre of the development of the industry in the first place were central to post-1975 changes in the Newfoundland crab fishery. So too was the recently organized Newfoundland Fishermen, Food, and Allied Workers Union (NFFAWU). The latter organization was the product of an amalgamation of the Newfoundland portions of the Canadian Food and Allied Workers Union, a Toronto-based organization to which the Canadian Labour Congress had awarded jurisdiction over the fishing industry, and the Northern Fishermen's Union, a Newfoundlandbased organization spearheaded by Richard Cashin and Reverend Desmond McGrath.<sup>34</sup> Under the Fishing Industry Collective Bargaining Act, the union became the main bargaining agent for fishermen in the province as the government issued certification orders.<sup>35</sup> The NFFAWU, which was renamed the Fish, Food and Allied Workers' Union (FFAW) after it became affiliated with the Canadian Auto Workers in 1987, has remained continuously involved in discussions about the policy process governing the crab fishery through its participation in advisory committees since the late 1970s. <sup>36</sup> This relationship

- 32. Parsons, "The Queen Crab Industry in Newfoundland," 18; Pinhorn, "The Queen Crab Industry in Newfoundland," 2.
- 33. Otto, "Management and Assessment of Eastern Bering Sea King Crab Stocks," 84.
- 34. On the founding of the NFFAWU see Gordon Inglis, *More Than Just a Union: The Story of the* NFFAWU (St. John's 1985), 15–38; David MacDonald, *Power Begins at the Cod End: The Newfoundland Trawlermen's Strike, 1974–75* (St. John's 1980), 47; Peter Sinclair, *From Traps to Draggers: Domestic Commodity Production in Northwestern Newfoundland, 1850–1982* (St. John's 1985), 126–35.
- 35. The Smallwood government passed the Act in 1971 to spell out the rights and procedures for collective bargaining in the fishery. This legislation gave fish harvesters the right to organize into a union. It gave processors the right to organize into an association. Moreover, it guaranteed the right of harvesters to bargain collectively with processors, and the right to cease business dealings (i.e. strike) if a collective agreement could not be reached. See David Vardy, Joseph O'Neill, David Jones, and Brian Delaney, "New Beginnings: Bringing Stability and Structure to Price Determination in the Fishing Industry," Report of the Task Force on Fish/Crab Price Settlement Mechanisms in the Fishing Industry Collective Bargaining Act, 15 January 1998, 10.
- 36. Vardy, et al. "New Beginnings," 10; Earle McCurdy, "Notes for an Address to Crab Fishery Seminar," Gander, Newfoundland, 24 January 1984, 10; Department of Fisheries and Oceans, "History of Management Newfoundland Crab Fishery," Background Paper, Crab Seminar, Hotel Gander, 24–27 January 1984, 5; for an agenda for a recent meeting see, "Snow Crab

has been a tumultuous one, however, and union leaders have often expressed frustration at federal officials' for their perceived failure to adequately consult them on major decisions, such as the imposition of zonal management in 1982 (at this time the DFO divided Newfoundland into 40 crab management zones).

Working together in the wake of the market collapse, government, harvesters, and processors developed and implemented measures that favoured larger harvesting and processing operations, which they deemed to be more stable and efficient and better able to compete for market share. In 1976, entry into the fishery was capped, and participation was limited to those who had already obtained licenses. The Department of Fisheries also developed a license utilization requirement, which specified the amount that crab fishers had to land to maintain their licenses. Vessels less than 50 feet had to land at least 50,000 pounds per season, while vessels greater than that length had to land at least 70,000 pounds. These changes contributed to a decline in the number of crab licences, from 160 in 1974 to 64 by the end of 1976<sup>37</sup> and 52 by 1978. <sup>38</sup> In these years, few plants were willing to buy crab in Newfoundland and prices remained low. Accordingly, in 1979 the government, in consultation with harvesters and processors, attempted to contract the industry by imposing a new minimum catch size of 75,000 pounds for vessels under 50 feet and 100,000 pounds for those over 50 feet, and introducing a new limit of 800 crab pots per licence holder. The latter regulation favoured fishers using medium to largesized boats, although the total number of licences remained unchanged.<sup>39</sup>

The policy focus of restricting access to the fishery did, however, begin to be challenged after Canada's declaration of a 200 nautical mile exclusive economic zone in 1977. At that time, the federal Minister of Fisheries and Oceans, Romeo Leblanc, confident that fishers and processing plants would soon be overrun with fish because of this decision, unveiled a new policy direction that was designed to ensure that fisheries would be managed to maximize employment benefits for people living in small coastal communities. Two federal policies that went into effect during this era – the Fleet Separation Policy and the Owner-Operator Policy – clearly reflected this shift. The Fleet Separation Policy divided the Atlantic fishing fleet into three sectors, "inshore" (vessels under 35 feet in length), "midshore" (vessels between 35 and 65 feet in length) and "offshore" (vessels over 65 feet in length). The Owner-Operator Policy stipulated that vessels in the inshore and midshore fleets were required to

Consultations," <a href="http://www.nfl.dfo-mpo.gc.ca/e0018233">http://www.nfl.dfo-mpo.gc.ca/e0018233</a> (1 March 2012).

<sup>37.</sup> Gardner Pinfold Consulting Economists Limited, *The Impact of Newfoundland Processing and Licensing Regulations on the Landed Price for Snow Crab* (Halifax 1993), 8–9.

<sup>38.</sup> John F. Collins, *The Economics of the Crab Fishery, Newfoundland Region, 1979–1985* (Ottawa 1986), 13.

<sup>39.</sup> Collins, *The Economics of the Crab Fishery*, 14; Department of Fisheries and Oceans, "History of Management Newfoundland Snow Crab," unpublished paper, Centre for Newfoundland Studies, 1984.

be owned by the independent harvesters who operated them. The combined effect of the two policies was to ensure that corporate entities, most notably fish processing and distribution companies, could not gain ownership of the inshore and midshore fleets and that control of those two sectors was left in the hands of independent fishers. No such restriction was placed on vessels over 65 feet in length, which were already owned predominately by processing companies.<sup>40</sup>

In 1983 and 1984, the Department of Fisheries and Oceans also strayed from its policy of reducing the number of crab licensees and issued thirteen new "exploratory licenses" to commercial "midshore" longliner fishermen in four main areas of Newfoundland: Canada Bay, on the east side of the Great Northern Peninsula, and the areas around Twillingate, Fogo Island, and the Baie Verte Peninsula. Unlike those issued in the 1970s, these licenses had to be renewed each year. The decision to issue new crab licences resulted from scarcity rather than abundance. It was a response to a sudden and significant drop in crab landings and in catch per unit of effort in many areas of the province during the early years of the 1980s. The intention was that the new license-holders would be tasked with fishing in previously unexplored areas in an effort to locate new crab stocks that might help to sustain the existing fleet. 42

While cod stocks on the south and west coasts of Newfoundland appear to have remained comparatively strong throughout the 1980s, fishers on the northeast coast of Newfoundland and the coast of Labrador experienced pronounced declines in their catch rates. Catches in some areas fell to the point that many people in the longliner fleet found it increasingly difficult to cover their operating costs. In the face of growing uncertainty about the future, many of these individuals began to demand that they be given access to crab stocks as well. The DFO responded by issuing what they called "supplementary" crab licenses. Beginning in 1986 and continuing into the early 1990s, the Department granted supplementary licences to longliner operators across the province.<sup>43</sup> At this time, both landings and demand for snow crab remained modest and the prices stayed comparatively low. The willingness of harvesters to apply for supplementary licences and enter into the crab fishery probably speaks more to the desperation they were experiencing as their staple fishery collapsed than it does to the stability of the crab stocks and markets. Once again, supplementary licences were restricted to individuals in the "midshore"

<sup>40.</sup> Fisheries Council of Canada, Building a Fishery that Works: A Vision for the Atlantic Fisheries (Ottawa 1994).

<sup>41.</sup> Collins, The Economics of the Crab Fishery, 14.

<sup>42.</sup> Collins, The Economics of the Crab Fishery, 14.

<sup>43.</sup> Bonnie McCay, "'That's Not Right': Resistance to Enclosure in a Newfoundland Crab Fishery," in Newell and Ommer, eds., *Fishing Places, Fishing Peple*, 305–306.

longliner fleet (vessels between 35 and 65 feet in length). <sup>44</sup> They were called supplementary because they were seen as a secondary fishery, designed to enable eligible fishermen to supplement their primary earnings from cod and other species with a small crab allocation. As a concession to the larger fleet, supplementary license holders were limited to 150 pots, as compared with the 800 pots that could be used by those in the original crab fleet. <sup>45</sup> As Bonnie McCay has noted in her study of the emergence of the crab fishery on Fogo Island, as the cod fishery declined and eventually collapsed completely on the northeast coast in the late 1980s, the supplementary license holders had little else to turn to and eventually came to rely on the crab fishery for most of their income. <sup>46</sup> As a result of the supplementary program, the number of license holders in Newfoundland ballooned from 67 in 1985 to 659 by 1991. <sup>47</sup>

The period that followed the decision to expand the supplementary fishery also brought about a significant regulatory change in the regulation of the crab fishery. In 1995 the DFO phased out the competitive fleet quota system it had employed in the past and introduced an individual quota system in which each licence holder would be allocated a fixed amount of crab each season rather than having to compete with others to catch as much crab as they could before the season was closed. IQs were optional in 1995, but were made mandatory in 1996 and 1997. <sup>48</sup> These were not individual transferable quotas (ITQs), however, since, in keeping with the government's Owner-Operator Policy, fishing rights could not be transferred away from the individually owned vessels with which they were associated. <sup>49</sup>

McCay noted that on Fogo Island some fishermen viewed the restriction of access to the crab resource through the introduction of individual quotas as a threat to the egalitarian ethic that had predominated within many fishing communities and, accordingly, the policy encountered some resistance. Many fishery workers did, however, see benefits to the change, since it allowed harvesters to refrain from fishing in dangerous weather conditions and appeared to provide them with greater economic certainty from one season to the next. In association with this change, McCay also notes that between 1992 and

- 44. The "Fleet Separation Policy" was part of a more general policy regime that emerged alongside the 1977 declaration of a 200 mile exclusive economic zone.
- 45. Eligible fishermen were those who had a vessel greater than 35 feet and who resided in a fishing community. On these requirements and for insight into changes in licensing see John F. Collins, *The Economics of the Crab Fishery, Newfoundland Region, 1979–1985* (Ottawa 1986), 14–15; Vardy, *et al.*, "New Beginnings," 35.
- 46. Bonnie McCay, "'That's Not Right': Resistance to Enclosure in a Newfoundland Crab Fishery," in Newell and Ommer, eds., *Fishing Places, Fishing People*, 305–306.
- 47. Gardner Pinfold, "The Impact of Newfoundland Processing and Licensing Regulations on the Landed Price for Snow Crab," 9.
- 48. Vardy, et al. "New Beginnings," 35.
- 49. Bonnie McCay, "'That's Not Right'," 301.

1995, she noticed a growing entrepreneurial perspective among many of the fishers she interacted with, as they began to speak of themselves as operators of individual fishing "enterprises" rather than simply as "fishermen" or as members of fishing families or communities. <sup>50</sup> Nicole Power reached a similar conclusion. Her research on the Bonavista Peninsula during the same period pointed to the emergence of a new "lingo" that was deeply rooted in the tenets of neoliberal economics – with "words like enterprise, vessel, and harvester replacing livelihood, boat, and fisherman." <sup>51</sup>

In spite of the modest beginnings of the supplementary crab fishery, after the declaration of the cod moratorium, it became clear that crab was much more than just a stop-gap measure. By the early 1990s, snow crab stocks, along with those of other shellfish species like northern shrimp, boomed in many areas. While the reasons for this transformation are unclear, Frank et al. have surmised that the explosion of shellfish populations just as large predator species like cod were declining is evidence of a "cascading effect." The authors used data from the Scotian shelf, off the south coast of Nova Scotia, which is home to many of the same species that are found in Newfoundland waters. They claim that as overfishing removed cod, haddock, and other large predators, the species that they once preved upon, such as shellfish and smaller pelagic fish, have tended to increase in numbers. This, in turn, has had a trickle-down effect within the food chain. Zooplankton, the tiny animal species on which shellfish and smaller species of fish prey, have experienced a decline of as much as 45 per cent as their predators have grown in numbers. As a result, phytoplankton, the algae species that zooplankton consume, have boomed. Frank *et al.* also note that the recent boom in the seal population in the region is probably related to the decline of large fish species, leading to reduced competition for food sources.<sup>53</sup>

As this biological boom was taking place, snow crab boomed in economic value as well. The cause of this rise in price was similar to that which caused the spike of the early 1960s. It grew out of a bust in the Alaskan crab fishery, Newfoundland's major competitor in the US market. As both snow crab and the more highly valued king crab in Alaska's Bering Sea declined abruptly between 1994 and 1995, the market for Newfoundland snow crab increased dramatically.<sup>54</sup> The increased price and supply of crab made this fishery highly

- 50. Bonnie McCay, "'That's Not Right'," 303.
- 51. Nicole Power, What Do They Call a Fisherman? Men, Gender, and Restructuring in the Newfoundland Fishery (St. John's 2005), 136.
- 52. K.T. Frank, B. Petrie, J.S. Choi, and W.C. Leggett, "Trophic Cascades in a Formerly Cod-Dominated Ecosystem," *Science* 308 (2005), 1621–1623.
- 53. Frank, et.al., "Trophic Cascades in a Formerly Cod-Dominated Ecosystem," 1621–1623.
- 54. K. MacNamara, "Crab bring fishery back to the boil?" The National Post, 29 July 2002.

attractive to commercial fishers still trying to forge a way forward in the wake of the 1992 collapse of cod.

As discussed earlier, vessels in the small-boat inshore fleet were largely excluded from the snow crab fishery historically. While some vessels of approximately 35 feet in length had been eligible to obtain licences, relatively few fishermen applied for them. At the time, crab prices remained low, and few people deemed it worthwhile to invest the necessary time and money that would be needed to prosecute what most saw as a marginal fishery. Interviews with fishers in several bays on the northeast coast of Newfoundland revealed that, at the time, fishers in the inshore sector still widely viewed crab as a pest. By the mid-1990s, however, the surging market for Newfoundland crab changed their perspectives considerably. Between 1992 and 1995, the average price that processing companies paid Newfoundland harvesters for their snow crab multiplied six-fold, from under 40 cents per pound to almost \$2.50 per pound.<sup>55</sup> This brought unprecedented prosperity to those who held crab licences. Most of those in the original crab fleet had annual quotas of about 300,000 pounds per year, while those in the supplementary fleet were landing about 100,000 pounds, depending on the area in which they were licensed to harvest. The sudden increase in price meant that these enterprises often increased their yearly income by hundreds of thousands or even millions of dollars. In many of the northern bays on the island and in Labrador people with larger boats also benefited from unprecedentedly high landings in the offshore fishery for northern shrimp. This convergence of events created a widening gulf in prosperity between those who had access to these fisheries and those who did not. As many offshore and midshore operations with crab or shrimp licences prospered, those in the inshore fishery struggled to make do through a combination of government support payments and smaller scale fisheries for less profitable species like lobster, capelin, and lumpfish. The fact that in many areas changing ocean conditions brought increasing numbers of snow crab into inshore waters, meaning that small boat operators were coming into contact with them much more regularly, made the situation all the more frustrating. As Jack, a fisherman from the south-eastern part of the Burin Peninsula in Placentia Bay explained:

Back before 1992, back in the late 1980s and early 1990s, we used to fish gill nets on the same ground we're fishing crab on now. Back then, it would be a novelty to get a meal of snow crab. There was no crab around here then, but in 1992 or 1993 something changed. All of a sudden, you couldn't even set a gill net there, because it'd be so full of crab. The water got very cold. We always called snow crab deep-water crab, but all of a sudden we were seeing all these big crab with the long legs on them. And we thought: 'where in the hell are they coming from?' They just moved in. <sup>56</sup>

<sup>55.</sup> Government of Newfoundland and Labrador, "The Best Year Ever for Crab," <a href="http://www.exec.gov.nl.ca/exec/publicat/economy/crab.htm">http://www.exec.gov.nl.ca/exec/publicat/economy/crab.htm</a> (17 August 2003).

<sup>56.</sup> All interviewees have been assigned pseudonyms to protect their identities. Each transcript was also assigned a distinct number, and any direct quotes that appear in the text will be ref-

Complaints about the injustice of this situation eventually persuaded DFO managers to issue a number of temporary snow crab permits to some inshore fish harvesters in 1995. The DFO used a lottery system to determine 25 harvesters in each of the major bays of the province who would qualify to receive a crab quota for that year. Prices remained strong that summer and this newfound access to crab stocks proved highly profitable for those selected. As Dan, an inshore fisherman from Conception Bay North, recalled:

We got a few permits first. Inshore fishermen fought and fought to get those. We had nothing else. We knew that there was big money in the industry and there seemed to be a lot of crab, so why should the larger boats be the only ones getting to fish it while we were struggling just to hang on, fishing a bit of lump and a bit of lobster and whatever else we could get our hands on? Those guys who got the first permits hit the lottery big time. They got 11,000 pounds of crab at \$2.50 per pound, so that's 27,000 bucks bang just like that. The guys here caught it in less than a week. That drove the rest of the fishermen crazy, myself included. Not that we didn't want those guys to have it, but we said 'Jesus, this is an opportunity'. <sup>57</sup>

On the strength of the 1995 fishery, the Inshore Committee of the FFAW successfully pressured the DFO to distribute inshore snow crab permits more widely throughout the province for the 1996 season. While DFO officials consented to the Committee's demands, they also stipulated that the permits would remain temporary in nature and would have to be reissued annually, depending on the state of the resource. To be eligible to receive a snow crab permit, inshore fishers had to have core status and hold a groundfish licence.<sup>58</sup>

erenced by transcript and page number, in the format TS X, page Y. This quote is taken from an interview with a fisherman who will be referred to as "Jack," 26 August 2009, TS 43, page 12.

57. This quote is taken from "Dan," 18 November 2004, TS 26, page 3.

58. In 1994, the federal and provincial governments worked in consultation with the FFAW to develop a program of buying back groundfish licenses and implementing professional certification for independent fish harvesters in Newfoundland and Labrador. The primary goal of the program was "to reduce the number of fish harvesters by eliminating marginal or part-time fishers from the industry, theoretically retaining those who had the strongest attachment to it." See M. Clarke, "The Professionalization of Inshore Fishers," in R. Byron, ed., Retrenchment and Regeneration in Rural Newfoundland (Toronto 2003), 137. In 1996, the provincial government passed the Professional Fish Harvesters Act, which required that all fishers be certified under a newly created Professional Fish Harvesters Certification Board. The Board divided fishers into three categories: Apprentice, Level I, and Level II. These classifications were also formally recognized at the federal level through Fisheries and Oceans Canada's new "Commercial Fisheries Licencing Policy," which was released in the same year. Many experienced fishers were "grandfathered" into the program and were given "core status" as Level II fish harvesters. To be grandfathered in, "a fisherman had to have fished full time for seven qualifying years" and have "a minimum of \$3,000 (and 75 per cent of reported earned income) from fishing during three of the last four years of his qualifying period." Fishers with core status were the only ones that were eligible to obtain newly issued fishing licenses or to purchase existing licenses from other fishers. It was also decided that the total number of core enterprises in the province would be capped at 5400. Anyone else wishing to obtain core status would have to wait for somebody else to retire. On these matters see, Clarke, "The Professionalization of Inshore Fishers"; Power, What Do They Call a Fisherman?; W.E. Schrank and B. Skoda, "The Cost of Marine Fishery

This last provision created further controversy in many coastal communities because it meant that those individuals who had agreed to sell their groundfish licences back to the federal government after the moratorium, along with those who had not had sufficient cod landings just prior to the moratorium to obtain core status, were excluded from the snow crab fishery altogether.

At the time that the federal government declared a moratorium on cod, none of the inshore harvesters who opted to sell their groundfish licences could have possibly anticipated the consequences of their decision. Inshore groundfish licences usually sold for less than \$25,000, depending on the fishing area in which the licence was held. That figure paled by comparison to the wealth that harvesters with inshore crab quotas would earn in the decade that followed. The decision to reopen the commercial cod fishery to core harvesters in fishing areas on the south and west coasts of the island, where the cod population seemed comparatively healthy, was an added source of frustration for these individuals. In the late 1990s, crab landings and prices remained high in most areas of the province. While permit holders still received much lower quotas than those with full or supplemental crab licences, inshore fishers came to rely increasingly on crab. In most parts of Newfoundland, snow crab came to account for a higher percentage of their annual fishing incomes than all of the other species they fished combined. Because the permits continued to be temporary in nature, however, there was no guarantee that this source of income would continue to be there for them in the future.<sup>59</sup>

This situation changed in 1999, when the inshore committee of the FFAW succeeded in having all temporary permits turned into permanent licences. This was the culmination of years of struggling to persuade Fisheries and Oceans Canada and representatives of larger fleet sectors within the FFAW that inshore harvesters should be given more secure access to a share of the crab resource. Dan, who was on the inshore committee and attended all of the meetings leading up to the final decision, described the unfolding of events as follows:

We fought our way into the crab industry. We had our toe in the door and then we got up to a foot, and then in 1999 we finally broke the door down. There was a big conference in Gander to decide who was going to fish where and how everybody was going to participate. The original full time fleet and the supplementary fleet and the inshore guys were all at the table. We said, we're getting licences or nobody is catching one god damn pound of crab this year. We had arranged three busloads of people that came from the Southern Shore, Conception Bay and Trinity Bay. That wasn't all the fishermen there, but it was a lot of them. Then we had other guys that travelled from different areas by vehicle. So we had seven or eight hundred fishermen that showed up in the parking lot of the hotel wanting to talk to DFO and the FFAW. We weren't all formal inshore committee members or anything, but we

Management in Eastern Canada: Newfoundland 1989/90 to 1997/98," in R. I. Kingston, ed., Working Paper Series of the Institute for the Study of International Aspects of Competition, University of Rhode Island, 1999.

decided we were going to informally organize people and get a group to go down to have a show of force, because if it is just one or two guys speaking, the guys in the other fleets are going to say that we've got no backing. This way they could see them all standing right there outside the window. Right from then, my feeling is that we had won over the large fleets, the full-time and the large supplementary fleet. They didn't mind moving farther offshore. They could go off as far as they wanted to, which they do now. As long as they got paid for their time and their fuel with an increase in quota, they were all for it. But the small supplementary fleet felt differently. Many of them had 35 and 36 foot boats of an older style. A lot of them had been fishing in the bay all their lives and weren't used to dealing with bad weather so they had apprehension about going that far from land. They put up a real fight. 60

The issue was resolved at another meeting in St. John's a short time later. Dan explained:

There must have been a thousand inshore guys that showed at the next meeting in St. John's. They were very vocal then, because they knew this was the final decision about what would be done. Then, the fire department came and said there were too many people and they had to get out. But they had a chance to say what they wanted to the managers at DFO and to the other fleets. Before they left, one of the leaders of the group said: 'Now look, we're leaving, we're going to give you a chance to have your meeting, but you best make the right decision. Because, we've got a thousand people here, three hundred right here and another seven hundred downstairs and out in the parking lot. We're going to leave and let you guys discuss it, and you better do it right, because we don't have enough crab right now. We are only getting a four or five thousand pound cod quota and the TAGS program is finishing up, so we want something to allow us to make a living. If you don't do it right and you don't give us an opportunity, you guys are going to lose big time. You are going to lose your summer too. There are four thousand of us with permits. With our wives and husbands and children and grandchildren and parents and grandparents, we'll block every wharf in Newfoundland and nobody will be going anywhere.'61

Eventually this show of force proved successful in providing small-scale fishers with more secure access to the resource. Dan explained:

The argument between the under 35 foot inshore fleet and the small supplementary fleet went on all afternoon. Eventually it got to the point where the other two fleets (offshore and large supplementary) were saying absolutely nothing. And finally an inshore guy stood up and said: 'The argument is between us and them. Now here's how we're going to settle it. There's two fleets over there that haven't spoken today. You heard the message this morning, but I think you may have forgotten it. If these guys don't move and give us something close to what we're looking for, you guys aren't getting anything either. You've got sixty-five foot boats to pay off and you're not landing anything this summer and they'll be damned if you are.' So they kind of went white.... So the commissioner said, 'Well, we're going to take a break to let everybody have a chance to think it through. We [DFO] are ultimately going to make the decision, but we'd rather that you guys were on side than if you were not.' Then a couple of days later, we got the word from DFO that they were going to establish zones for the inshore fishery. <sup>62</sup>

- 60. Interview with "Dan," 18 November 2004, TS 26, page 10.
- 61. Interview with "Dan," 18 November 2004, TS 26, page 11.
- 62. Interview with "Dan," 18 November 2004, TS 26, page 11.

This decision had dramatic consequences. Whereas there were only about 700 crab harvesters in the province in 1989, with the entry of the inshore fleet into the fishery this number rose to over 3000 by 1997.63

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While smaller, independent harvesters won some concessions from dfo, their entry into the fishery was tied to a variety of conditions, which contributed to subsequent tensions. As other scholars have shown, a more general neoliberal policy context was taking hold at the federal level in Canada during the mid-1980s.<sup>64</sup> Neoliberal economic policies have been typified by the erosion of postwar "welfare state" era policies, a growing emphasis on private property and exclusive access rights, and a heightened emphasis on individual responsibility.<sup>65</sup> While governments generally retain ultimate decision-making power, neoliberal policies typically include incentive structures designed to require citizens, communities, and corporations to assume a more active role in managing themselves and their interactions with the environment rather than counting on assistance from government agencies. In fisheries policy, neoliberalism has often been associated with a growing emphasis on public-private partnerships as mechanisms through which to fund and implement research, monitoring, and enforcement programs.<sup>66</sup>

For inshore fishers, then, access to crab clearly came at a price. In granting new snow crab licences, the Department of Fisheries and Oceans demanded that inshore harvesters assume greater responsibility for reducing the number of people who depend on the fishery. They were required to adopt a "self-rationalization program," wherein one fisher would be allowed to buy another one out and combine their two quotas under a single licence. This was, in effect, a transferable quota system, in that it allowed quotas to be bought and sold and created a mechanism through which licences could be removed from the system. The number of licences that could be combined was limited to two, however, and the Owner-Operator Policy prevented private companies from purchasing these licences.

- 63. Vardy, et al. "New Beginnings," 35.
- 64. See David Clark, "Neoliberalism and Public Service Reform: Canada in Comparative Perspective," *Canadian Journal of Political Science*, 35 (December 2002), 771–793.
- 65. See Michel Foucault, *The Birth of Biopolitics: Lectures at the College de France 1978–1979* (London 2005); Mitchell Dean, *Governmentality: Power and Rule in Modern Society* (London 1999); Nikolas Rose, *Powers of Freedom: Reframing Political Thought* (Cambridge 1999); Wendy Brown, "Neo-liberalism and the End of Liberal Democracy," *Theory & Event*, 7 (Fall 2003), 1–21; David Harvey, *A Brief History of Neoliberalism* (New York 2005).
- 66. Becky Mansfield, "Neoliberalism in the Oceans: 'Rationalization,' Property Rights, and the Commons Question," *Geoforum* 35 (May 2004), 313–326; Reade Davis, Jennifer Whalen, and Barbara Neis, "From Orders to Borders: Toward a Sustainable Co-managed Lobster Fishery in Bonavista Bay, Newfoundland," *Human Ecology*, 34 (December 2006), 851–867.

Nevertheless, to a considerable extent, the latitude afforded large corporations in the fishery in the new policy context meant that these barriers to concentration and monopoly were less meaningful than at earlier times. During the 1990s, many processing companies moved quickly into the crab sector, buying from Newfoundland fishers and reselling to markets in the US, mainland Canada, and Japan. Whereas in the early 1990s there were only nineteen plants licensed to process crab in the province, by 2002 there were 44. While many of these plants initially focused on the production of crab meat, over the course of the decade, producers increasingly targeted the more profitable market for crab legs and sections, initially in Japan, but eventually moving into North America as well. About 95 per cent of the crab landed in Newfoundland in 1990 was processed into meat, but by the end of the decade, virtually all crab was being processed into sections.<sup>67</sup> This was due in part to the lifting of a longstanding provincial government restriction on exporting unprocessed crab. The sudden conversion of so many groundfish plants into crab plants in the early 1990s, followed by the shift toward exporting crab with minimal processing, soon led to significant overcapacity in the processing sector. A 2005 study by the Newfoundland and Labrador provincial government concluded that there was now enough processing capacity in Newfoundland and Labrador to handle four times the total volume of crab landed worldwide each vear.68

The overcapacity in the industry, in combination with the booming demand for snow crab in the United States and Japan, created fierce competition between processing companies and led to a bidding war for the crab that was available. Catches tended to be sold to the highest bidder, and crab was often trucked across the island for processing rather than being processed in the town or bay in which it was landed.<sup>69</sup> This situation prompted many processing companies to form strategic alliances with each other as a way of keeping their costs down. During the 1990s, numerous price disputes between harvesters and processors developed in the fishery. Indeed, crab fishers went on strike three times between 1992 and 1997 before finally reaching an agreement and frequently accused processors of working together to ensure that harvesters did not receive fair market value for their catches. While a provincial government task force on fish and crab pricing convened in 1998 suggested that problems with such things as marketing, quality control, the effectiveness of government regulations, and the lack of trust between harvesters and processors as being among the key reasons behind the lower prices paid to Newfoundland fishers relative to their counterparts in the Maritime provinces and Alaska, subsequent events proved that the allegations of harvesters had

<sup>67.</sup> Vardy, et al. "New Beginnings,"36.

<sup>68.</sup> Canadian Broadcasting Corporation, "N.L. Announces \$16B Hebron Oilfield Deal," CBC News, August 22, 2007, <a href="http://www.cbc.ca/canada/">http://www.cbc.ca/canada/</a> (25 August 2007).

<sup>69.</sup> Clarke, "The Professionalization of Inshore Fishers."

merit.<sup>70</sup> In 2002, investigators conducted a raid of several processing plants belonging to the largest crab buyers in Atlantic Canada, including The Barry Group, Inc., Quinlan Brothers, Ltd., Daley Brothers, Ltd, and Grand Atlantic Seafoods, Inc. Evidence collected in these raids revealed that these and other crab processors had been working as a "cartel" since as early as 1994 to ensure that they all received a secure supply of crab, while keeping the prices they paid fishers as low as possible.<sup>71</sup>

Several processors also set about forming side deals – "trust agreements" - with independent crab harvesters in the full-time and supplementary crab fleets, to obtain exclusive access to their catches. In so doing, processors ensured themselves of a secure supply of crab during the high season, thereby allowing them to avoid bidding wars in which they would be forced to overpay and risk not being able to recoup their expenditures. In the aftermath of the charges of price-fixing, this pattern became even more common, as processing companies were once again forced to compete with one another in order to get enough crab to satisfy their export markets. Trust agreements took a number of forms. In many cases, processors provided harvesters with the financing needed to upgrade to larger fibreglass boats, which were capable of travelling farther offshore to harvest crab and shrimp. These new boats were often expensive to buy and costly to operate, and few independent fishers could afford to pay for them on their own. For the most part, fishers had been unable to secure bank loans for this purpose because their fishing licences were not recognized as collateral. Thus, obtaining a loan from a processing company to put a down payment on a boat or to buy it outright was the only option available if they wanted to upgrade their fishing enterprises.

As prices for snow crab continued to rise during the 1990s, competition between processors intensified. Many of the fish harvesters interviewed recounted instances in which harvesters in the full-time and supplementary fleets had been paid annual signing bonuses of \$80,000 or more in cash, promised an extra dollar for each pound of crab sold or offered new Ford F150 pickup trucks, houses, and/or vacations in exchange for promising to sell their crab to a particular processor. Although government policy prevented processors from buying licences outright, trust agreements allowed them to gain control over crab licences via the back door and guarantee themselves of a steady supply of crab. Dan from Conception Bay explained that while the legality of these agreements was deemed questionable at first, court decisions increasingly favoured processors. As he put it:

There was a trust agreement that took place between a company and a fisherman that I know about. They never had all of the Is dotted and the Ts crossed legally, and the guy

<sup>70.</sup> Vardy, et al. "New Beginnings," 36.

<sup>71.</sup> A. McIntosh, "Investigators Raid Atlantic Crab Factories," *National Post*, 25 September 2002

<sup>72.</sup> Vardy, et al. "New Beginnings," 52.

walked away with a pretty big down payment on a boat as well as the licence that the company thought they had secured. They took him to court, but the fisherman won. That happened twice that I know of. But since then, the processors have not made the same mistakes and, when cases have gone to court, the judges have ruled in favour of the company.... Before they will give a fisherman money to make a down payment on a boat or buy him a licence or whatever, they will make him sign these agreements that the company drew up in advance with their lawyer. What the fishermen usually don't know is that if they default on the loan, the licence goes straight to the corporation. So, they have found a loop hole to get around the Owner-Operator Policy. DFO hasn't closed it yet, and I don't expect them to. The independent fishermen are lobbying to have it closed, but the boats that the companies own are lobbying and threatening the other way. Once the companies have control over enough enterprises, they can control the market again and pay whatever prices they want to. If the company owns 60 or 70 per cent of the resource, they don't need the independent fisherman anymore. They can manage just fine with the guys they have on their payroll. If the companies get enough people that are dependent on them, then before you know it, the independent fishermen are going to be in the minority. Guess who rules the day then? The union can come up with whatever policy they like, but the company can just call all of the skippers that work for them and tell them how it is going to be. You do it this way and you vote this way or else.73

Many of Dan's fears came to pass in 2003, when many of the same crab buyers again joined forces and refused to pay market value for crab from any fishers who had not entered into trust agreements with them. Most fishers interviewed believed that they made this decision because they had gotten into bidding wars with each other earlier in the season in their attempts to secure trust agreements with larger boats, prompting many to pay such high prices that they had trouble reselling the crab at a profit. Thus, they were trying to make up for this mistake by paying lower prices to inshore fishers who had less bargaining power. The standoff was eventually broken when a number of smaller processors took advantage of the opportunity and began paying higher prices to independent fishers to secure their business.

Since inshore crab fishers tended to have small quotas, it was less common for them to have been approached directly by processors. Most of those interviewed did, however, see trust agreements as one of the greatest threats to the future of the independent inshore fishery, mainly because they allowed companies to dictate prices by effectively turning individual quotas into individual transferable quotas. Many fishers were also worried that the self-rationalization program they had agreed to as a condition for their entry into the crabfishery could ultimately lead to the full-scale corporate takeover of the inshore fishery. Chris, who fishes in Bonavista Bay, explained:

Now, with them allowing us to buy each other out and buddy up licences, the inshore fleet becomes more attractive to the processor, because now they can get two or maybe eventually three licences on the one boat. If you combine three 20,000 pound crab quotas on one vessel, you're looking at 60,000 pounds of crab, and they can make money on that. So, the

<sup>73.</sup> Interview with "Dan," 18 November 2004, TS 26, 17; for similar accounts see interview with "Edgar," 22 November 2004, TS 28, page 11; Interview with "Gerome," 26 February 2004, TS 7, page 9.

small boats are becoming more and more appetizing to the processors. Once you get to three inshore licences aboard a single boat, Mr. Daley and Mr. Quinlan and Mr. Penney, and Mr. Barry are going to be really interested in buying in. What will happen is that one fisherman will start buying out other fishermen, but the company will give them the money to do it. That way the fisherman still owns the licence on paper, but the processor owns it in practice. So what you will find is that if the fishery goes down, you will have big corporations owning all of the fish stocks around Newfoundland.<sup>74</sup>

Dan, from Conception Bay, made a similar argument, and expressed deep concern that self-rationalization was a slippery slope toward even greater corporate encroachment into the inshore fishery. He furthermore believed that this trend was not being resisted by fisheries managers because it fit with their larger vision of transferring responsibility onto the private sector and downloading risk.

From DFO's point of view, it makes more sense to have the processors get everything passed to them. They have the boats, they have the quota, they hire the people, and when they decide that they want to use one 120 footer instead of four 65 footers, I get my pink slip and I have to go find another job. That way DFO can say to those processors: 'Here it is. You look after it. If you screw it up, that's your problem'.<sup>75</sup>

From Dan's point of view, allowing the crab fishery to fall into the hands of a few large players fit seamlessly with the new policy focus of the DFO, which was characterized by an implicit assumption that privately funded corporations were better equipped to withstand dramatic swings in the abundance of particular species with little or no government assistance. When asked if he saw any indication that this trend would be reversed, he stated:

I don't really see any way around it. The government isn't doing much to try to stop it. It works better for the fish companies this way and it works better for the government because they don't have to regulate as much. It works better for just about everybody. The fisherman who sells out is satisfied, because he got his money. The problem is that, at the end of the day, you're going to have a few companies owning the whole resource. Sure, the fishermen don't want that to happen. Everybody is afraid of the companies owning everything and everyone and smaller communities getting shut out for good, but the reason I don't see it changing is that I don't see a mechanism to change it. The companies are waiting to buy them up when they retire and, without enough young people coming up behind them who have core status and can afford to take over their enterprises, I think most are eventually going to sell out.<sup>76</sup>

A 2005 "Human Resources Sector Study" commissioned by the Canadian Council of Professional Fish Harvesters supported such concerns.<sup>77</sup> The study found that the continued viability of the inshore fleet on Canada's east coast

- 74. This quote is taken from an interview with a fisherman who will be referred to as "Chris," 28 February 2004, TS 8, page 7.
- 75. Interview with "Dan," 18 November 2004, TS 26, page 14.
- 76. Interview with "Dan," November 18, 2004, TS 26, page 14.
- 77. Praxis Research and Consulting, Setting a New Course: Phase II Human Resources Sector Study for the Fish Harvesting Industry in Canada (Ottawa 2005).

was severely threatened by a variety of factors, including increasing corporate encroachment; an aging labour force along with poor recruitment of young people into the industry; escalating license costs fuelled by private speculation; rising operating costs; and the failure of the federal government to take steps to keep the inshore fishery in the hands of small-scale independent harvesters.

Crab buyers, for their part, have complained that federal efforts to use the industry to maximize employment in small coastal communities have created a fundamental problem in the marketing of Newfoundland crab. Since small harvesters cannot afford to wait to catch their crab quota when the prices are at their highest, processors have argued that they end up flooding the market with crab too early in the season, and this severely undermines their negotiating power in the market.<sup>78</sup> They have also had some success in pressuring the provincial government to accept this position, though not without resistance from harvesters. Prior to the commencement of the 2005 season, the government of Newfoundland and Labrador took steps to alleviate the intense competition between processing companies for crab which had driven prices to an all-time high the year before, arguing that the present situation denied them access to a secure supply of raw material and made it more difficult for them to satisfy market demand. In April of that year Trevor Taylor, provincial Fisheries minister, introduced a new system whereby each crab plant in the province would be allocated a fixed quota that it would be entitled to process each season, thereby eliminating the need for them to compete with one another.79

The policy outraged the FFAW, which presented it as a deliberate attempt to strip fish harvesters of their bargaining power in their negotiations with processors. On 29 March 2005, 84 per cent of the FFAW membership voted to go on strike once again, refusing to land any crab until the provincial government abolished the new approach.<sup>80</sup> This decision was followed by a series of highly symbolic protests across the province. On a cold and rainy 4 March 2005, close to 3000 fish harvesters gathered at the Confederation Building in St. John's to express their displeasure with the government. A CBC reporter noted that "the fishermen hung crab pots that resemble enormous mesh lampshades from the flag poles and perched one on top the head of a statue of the explorer John Cabot."<sup>81</sup> Later that day, a group of fishers filled the gallery of the

<sup>78.</sup> Interview with "Bob," a buyer and marketer for a crab processing company in Trinity Bay, 8 December 2010, TS 38, page 9.

<sup>79.</sup> The Canadian Press, "Crabbers Surround Portuguese Fishing Boat," *Globe and Mail*, 27 April 2005, <www.theglobeandmail.com> (29 April 2005).

<sup>80.</sup> Canadian Broadcasting Corporation, "Crab fishermen vote for strike," CBC News, 30 March 2005, <www.cbc.ca/regional> (8 April 2005).

<sup>81.</sup> S. Richer, "Crab Fishermen Turn Up the Heat in Newfoundland: Legislature, Nearby Government Buildings Forced to Close as 3,000 Rally at Protest," *Globe and Mail*, 5 March 2005.

Newfoundland House of Assembly and jeered the Minister of Fisheries until the legislature was shut down for the day. <sup>82</sup> The legislature was disrupted again nine times in the next two weeks before the gallery was formally closed to the public. <sup>83</sup> On 6 April, this tactic was extended to central Newfoundland, where more than 250 fish harvesters blocked the Trans-Canada Highway (TCH) at Grand Falls. <sup>84</sup> The TCH is the only way to drive across the island and is the vital artery for commercial transport trucks travelling between the Nova Scotia ferry service in Port aux Basques, on the southwestern tip of the island, and the much more heavily populated areas on the east coast. Thus, shutting it down at this central point for any length of time had the potential to be a significant blow to the provincial economy.

There were also repeated protests on the water. On 13 April, a flotilla of about 60 fishing boats blockaded the shipping lanes in Placentia Bay for two days. This brought an abrupt halt to oil tanker traffic to and from the oil refinery at Come By Chance and the oil transhipment facility at Whiffen Head, and it also affected European freight destined for the port at Argentia. Fishers also surrounded the pilot boats that guide tankers in and out of the bay. These actions were repeated again one week later. 85 Similar blockades targeted numerous other symbolically significant sites in the province. Between 24 April and 28 April, fishing boats repeatedly blocked commercial vessels from entering St. John's Harbour. St. John's is the other major shipping port in the province, receiving freighters from the Canadian mainland, numerous supply vessels used by the offshore petroleum industry, and occasional visits by cruise ships and yachts.86 Fishers present also made a point of surrounding a Portuguese fishing vessel in the harbour that had been twice cited for overfishing two years earlier, calling it a "citizens' arrest."87 These events led to the passing of a temporary court injunction "that bans the FFAW and its members from interfering with the users, clients, and employees of the Port

- 82. T. Roberts, "Riot Police Called Out as Fish Protests Heat Up," St. John's Evening Telegram, 5 March 2005.
- 83. Canadian Broadcasting Corporation, "Nfld. Legislature Closes Gallery Over Crab Protests," CBC News, 27 April 2005, <www.cbc.ca/story/canada/national/> (30 April 2005).
- 84. Canadian Broadcasting Corporation, "Crab Protesters Block TCH at Grand Falls," CBC News, 6 April 2005, <a href="http://stjohns.cbc.ca/regional/">http://stjohns.cbc.ca/regional/</a>> (8 April 2005).
- 85. Canadian Broadcasting Corporation, "Crab Fishermen Revive Blockade," *CBC News*, 21 April 2005, <www.cbc.ca/canada/national> (21April 2005); Canadian Press, "Nfld. Crab Fishermen Block Oil Tanker Traffic to Pressure Province," *Canadian Press*, 21 April 2005, <www.canadaeast.com> (21April 2005).
- 86. Canadian Broadcasting Corporation, "Crab Boats Block Ships in St. John's," *CBC News*, 27 April 2005, <www.cbc.ca/story/canada/national> (28 April 2005).
- 87. The Canadian Press, "Crabbers Surround Portuguese Fishing Boat," *Canadian Press*, 27 April 2005, <www.theglobeandmail.com> (29 April 2005).

of St. John's."88 Another blockade on 26 April targeted the community of Bay Bulls, the hub for the iceberg and whale-watching tour boat industry, which is located about 30 kilometres south of St. John's.89 The standoff eventually ended when the provincial government agreed to establish an independent task force led by Richard Cashin, the former head of the FFAW, to author a report on the issue and develop a workable solution. Cashin's report ultimately concluded that the idea of processing plant quotas should be abandoned, but that the two groups should work together to broker an agreement that was satisfactory to both sides.

While Cashin's compromise brought a temporary reprieve on the issue of plant quotas in 2005, subsequent seasons would prove just as volatile. This was not caused by any single variable but by a reversal of some of the unforeseen ecological and economic forces that had benefited the industry in previous years, leading FFAW president Earl McCurdy to describe it as a "perfect storm." 90 Prior to the 2006 season, the DFO announced that it would cut the overall Newfoundland snow crab quota by seven per cent from the previous year. The bulk of this reduction would be concentrated in two fishing areas: 3K (on the northeast coast of the island, including Notre Dame Bay and White Bay) and 3PS (on the south coast of the island, including Placentia Bay and Fortune Bay). Both areas would sustain cuts of about 25 per cent from the previous year.<sup>91</sup> Snow crab stocks have long been known to be "notoriously episodic in terms of abundance," but the worsening state of the resource in these areas may also be partly attributable to overfishing. Area 3K has also been plagued in recent years by a high incidence of "soft-shell crab," which have high water content and are commercially worthless. This condition "is formed during the molting process when a crab releases its old shell and begins growing a new one. The meat in soft-shell is noted for being mushy because the crab pumps itself full of seawater to aid growth."92 Soft-shell crab had mysteriously been showing

- 88. Canadian Broadcasting Corporation, "Police Called to Control Crab Fishermen at Nfld." CBC News, 28 April 2005, <www.cbc.ca/story/canada/national> (29 April 2005).
- 89. A series of protests, which appeared to be modeled on those carried out in Newfoundland, broke out in Cape Breton, Nova Scotia later that summer to oppose a proposed cut to crab quotas in that area. Between 4–11 July, crab fishers blocked a tour boat, a shipping lane, and access to the Louisbourg National Historic Site, which is a major tourist attraction. See L.J. Grant, "Crab Fishers Block Shipping Lane," *Cape Breton Post*, 11 July 2005; C. Shannon, "Crab Fishers Block Fortress Traffic," *Cape Breton Post*, 4 July 2005; Canadian Press, "St. John's Blockaded for a Second Day," *Canadian Press*, 26 April 2005, <www.theglobeandmail.com> (28 April 2005).
- 90. Canadian Broadcasting Corporation, "'Perfect Storm' Whipping Fishery: McCurdy," CBC News, 1 November 2005, <www.cbc.ca/nl/story> (8 December 2005).
- 91. Canadian Broadcasting Corporation, "Population Figures Conflict in Eider Dispute," *CBC News*, 7 April 2005, <a href="http://www.cbc.ca/canada/">http://www.cbc.ca/canada/</a>> (19 April 2005); Canadian Press, "Cut in Crab Quota Disastrous for Rural Newfoundland, Liberal MP Says," *Canadian Press Atlantic Regional News*, 30 March 2006, <a href="http://canadaeast.com">http://canadaeast.com</a>> (31 March 2006).
- 92. Canadian Broadcasting Corporation, "Soft-shell Crab Turning Up on South Coast," CBC

up earlier in the season, leading to speculation that it might be a sign that the health of the crab stock might be in jeopardy and that future quota cuts might be needed. By 2010, conditions in this area had deteriorated to such an extent that fishers in the area had concerns about the state of the resource on the north coast and low catch rates. This led fishers in area 3K to leave seven million pounds of their quota uncaught. Some have also expressed concerns that signs that cod stocks may be recovering could spell disaster for the crab fishery in many areas, since cod is a known predator of juvenile crab.

In addition to these ecological concerns, in 2006 the price paid for crab plunged to a fourteen-year low of only 92 cents per pound. 93 That is less than half of the average price paid in 2004 and less than one quarter of the highest prices paid that year. There are a number of probable reasons for this dramatic fall in price. The first is the modest recovery of stocks of Alaskan snow crab and of the more highly valued king crab. In 2006, Alaskan landings of snow crab alone more than doubled the amount landed the year previous.<sup>94</sup> The timing of this recovery could not have been worse from the perspective of Newfoundland fishers and processors because it coincided with a meteoric rise in the value of the Canadian dollar relative to the US dollar, making it much harder for all Canadian seafood exports to compete in the American market. While further downturns in Alaskan landings since 2006 have once again created opportunities for Newfoundland crab dealers in both in the US and the Japanese markets, prices have remained fairly low (between \$1 and \$1.50 per pound) due to depressed overall demand for "luxury" food items in the recent global economic recession. The recent difficulties crab harvesters, processors, and exporters have faced have been compounded by high oil and gas prices, for any rise in the price of these things increases the cost of travelling to and from fishing grounds and transporting seafood to market. These circumstances have created massive problems for vessel owners, many of whom carry significant debt loads.95

IV

While it is impossible to separate the evolution of the Newfoundland snow crab fishery from the history of the cod fishery in the region, the former was nevertheless guided by a different set of circumstances, which necessitated that it be studied as a separate entity. The cod fishery persisted for hundreds of years and has frequently been influenced by political movements on the part

News, 24 May 2005, <a href="http://st.johns.cbc.ca/regional">http://st.johns.cbc.ca/regional</a> (26 May 2005).

<sup>93.</sup> Canadian Broadcasting Corporation, "Crab Prices Dropping, Analyst Warns," CBC News, 8 March 2006, <www.cbc.ca/nl> (8 March 2006).

<sup>94.</sup> L. Welch, "Snow Crab Catches Double: Prices Creeping Upward," *sitnews*, 11 March 2006, <www.sitnews.us/LaineWelch> (14 March 2006).

<sup>95.</sup> Clarke, "The Professionalization of Inshore Fishers."

of people living in coastal communities when policies have threatened their customary rights and access to fishery resources. As several critical scholars have shown, however, the industrialization and "modernization" at the centre of post-World War II planning not only signalled an assault on small scale fishers' common property rights, but also ultimately led to overfishing and to the collapse of the species on which these people so heavily depended.

The crab fishery, by contrast, was born out of these same modernization efforts, but had no pre-existing history that might have formed a basis for resistance to state policies in the early years. From the outset, it was intended to be a quintessentially "modern" fishery and was the brainchild of federal government planners who were intent on creating a more stable and prosperous capitalist society through central planning. Nonetheless, as this case shows, bureaucrats' dreams of a modern crab fishery could not be completely divorced from the legacy of social inequality and conflict that had long characterized fisheries for cod and other historically important species. When cod stocks finally collapsed after decades of overexploitation, inshore fishers who had been previously excluded from the crab fishery began to mobilize politically and demand access to the crab resource as a way to sustain themselves and their communities. Access to snow crab, which boomed biologically and economically at this time, was initially viewed as a stop-gap measure, but it has subsequently emerged as a critical source of income for independent fishers across Newfoundland and Labrador. It is now widely recognized as a lynchpin of the rural economy. The management of the crab fishery has become highly politicized and is at the centre of heated debates about what the fishery of the future should look like. Such debates have often pitted inshore and midshore fishers seeking to preserve the independence of fish harvesters against processing companies and some owners of larger fishing operations, many of whom have argued that policies like the Fleet Separation and Owner-Operator policies are responsible for keeping too many people employed in the industry and are ultimately sacrificing economic prosperity in the name of social justice. While it is unclear what the outcome of recent political struggles will be, it appears likely that worsening ecological and market conditions along with an increasingly neoliberalized policy environment will continue to pose a significant threat to the long-term sustainability of the inshore crab fishery and the many communities that continue to depend upon it.

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