Introduction

I ate my breakfast outside in the bright morning stillness of summer in Scotland, examining the fishing boats around me, which were perfectly reflected in the water of this cosy harbour. The engine of each pickup truck echoed off the rocks surrounding the harbour with precision as men arrived down to the boat ramp to start their working day. I rowed ashore from the small sailboat I lived on to wait for DJ.[1] He greeted me with some surprise, and warmth, and agreed to take me out on the small creel boat[2] he usually worked on by himself around the Applecross Peninsula. We had met ashore in a different harbour a few months before but I had delayed visiting his home port due to the constantly changeable weather and difficult harbour entrance.

It was a beautiful sunny day, the kind of day in which the world seemed to have opened right up. The air was clear enough to see 50 miles out to the peaks of Harris in the Western Isles. Around us on three sides every intimate fold of the treeless rocky hills was exposed from the sea straight up to the summits. The water was slick and the clouds were reflected in constant motion in the sea we passed through. Once we got beyond the harbour DJ took a moment to look around and smiled. 'Sometimes when I'm out here, I think, people pay me to do this?!'

We worked hauling up and re-setting DJ's creel fleets. He operated the hydraulic creel hauler, swung the creels onto the boat, took out the prawns[3] and re-baited the creels while I stacked them in the stern of the boat according to his careful instructions. I got a break when we re-set the creels back into the water by letting them fly out of a gate in the stern, and as he motored to the next fleet (Figure 2). During these breaks, and with his permission, I scribbled notes about our conversation in the small dirty notebook I kept in my pocket.

DJ pointed out his house and his children's school just a few miles away on the Applecross shore. We could see out to Harris in the Western Isles where his ancestors had lived. We worked near the small and barren Crowlin Islands his ancestors had moved to from Harris: 'things were that bleak in Harris that the Crowlins looked better. There were 20-odd people there. I don't know how they survived.' After a spell on the Crowlins they settled in nearby Applecross where his parents were born. To the south of us was the town of Kyle of Lochalsh where his parents had moved after their marriage and where he had grown up. 'It was hard times in

Figure 2 A freshly-baited creel flying off the back of a creel boat.

Applecross then', he explained, 'the old man told me to take French and go on and get out. There was no future here.'

Other ancestors came from Raasay, the island across the Sound from us where his wife now worked. We could see up to Brochel Castle at the north end of Raasay where people had once paid their taxes to the Norse rulers of the area. DJ told me how much he admired the Vikings, 'they brought new farming, new boats, they settled here, they integrated, and they left lots of names'. He had studied Scottish and Scandinavian history at Edinburgh University, 'but it was Thatcher's time, everyone was unemployed', so he moved back into the family house in Applecross. 'There was nothing to do so I took a chance and bought a boat', he said. He was pleased that he had been able to make a decent living from creel fishing for prawns but sad that most of the coast had become a 'prawn monoculture' without the herring and whitefish[4] fisheries that had once been so important. 'We've got ourselves into a hell of a mess', he said with regret. 'We should have some of the most productive fish grounds in the world here.'

On the Applecross side we could see right up the glen that cut the Applecross Peninsula in half, 'people used to live up the glen, but the MacKenzies cleared them out to right along the shore'. Landlords had made a similar attempt on the opposite shore at Braes on Skye. But in Braes the crofters had fought back and regained the grazing land that had been taken. DJ was related to the Nicholsons of Braes, who had been arrested and gaoled in Inverness for participating in the

now-celebrated Battle of Braes. On the coast just north of the glen was Sand, where a recent archaeological dig had found Mesolithic remains including large quantities of seafood. He explained that 'even when they lived in the glen, they probably always fished, even 10,000 years ago'.

We worked right up to the big yellow buoys which marked the edges of the British Underwater Testing and Evaluation Centre (BUTEC), but today there were no trials of submarines, sonar buoys or torpedoes.[5] We could see about eight other boats working around us on the water, boats from Kyle, Portree, Plockton, Applecross and Torridon, each one recognisable, familiar and distinct. I had been out fishing on some of those boats before.

Halfway through the day we had hauled and re-set four fleets of creels. DJ had ducked into the wheelhouse to move the boat to the next fleet, but then slowed the engine down and dashed back out again, exclaiming: 'Do you know, ever since you got on this boat, you have been talking about connections? Between one place and another, between people here and in Portree and in Raasay, all these names, and between different times, and that's what it's about, that's the most important thing!' I smiled, and scribbled. I felt the sea and air around me thickening with this mat of connections, a tangible tracing of history, stories and hardship, of work, and happiness and hope too.

This book is about connections and ruptures in lives lived and livelihoods earned at sea. I start with a focus on human–environment relations – how people worked in and named and changed the features of the sea they relied on. I build on anthropological landscape research to trace the mutually constitutive and productive connections between people and their environments at sea, as well as with the tools and machines that people have developed to work with and survive in these environments. I focus on people's labour as what ties environments, people and tools together as they work to make fishing grounds productive. I take a phenomenological approach that focuses on people's experience of their own labour, including the results of that labour, and the aspirations and hopes that they pour into it. As a result, this book challenges the popular conception of the sea as a hostile wilderness, a conception which 'has distorted the reality of life at sea by concentrating on the struggle of man and nature to the exclusion of other aspects of maritime life, notably the jarring confrontation of man against man [*sic*]' (Rediker 1989: 5). Instead, I explore the more complicated reasons why human–environment relations at sea are fraught with ruptures, tensions and contradictions, tragedy, unfulfilled hope, and even desperation. I met people who lost limbs and friends at sea. I put my examination of human–environment relations at sea in the context of broader market and class relations and show how people's contemporary experience of their own labour is structured by capitalist relations of production.

In this book, I trace the connections and ruptures in the experience of people, mostly men, mostly Scottish, as they work in the prawn and other fisheries on the west coast of Scotland. I trace the development of fishing grounds and other places at sea (Part I), people's use of tools and machines to extend their bodily senses and capabilities into the sea, and techniques for orienting themselves and navigating at

sea (Part II). I show how political economy structures these experiences and histories and has created a situation of unacknowledged structural violence for people working in the fishing industry (Part III).

'How are you going to write about this?'

The difficulty of writing about *both* connections and ruptures was put to me at two o'clock one Saturday morning at the house of Donald and Mairi as they hosted their nieces and boyfriends, including Donald's former crewman, Charlie. Drinks were poured. The atmosphere, as they say on Skye (usually with a smile and a wink), was '*very* social'. Donald had once owned a large trawler, but had sold up several years ago. Charlie was talkative and keen to tell me about his long history of fishing and the skilled heroics he had performed along the way. With Donald listening, he described a dramatic time they shared right before Christmas some years ago. The local bank manager had just shot and killed himself after lending out more money than was being returned:

> The bank manager was a good guy and he could see when people could and couldn't pay. After he shot himself, the bank sent someone else up to start getting the money back in that he had lent out. It was January when they called everyone in, one by one.
>
> Now, January is *not* the time to try to start getting money back from fishermen. Prices are always the lowest. They called Donald in and told him that he had six weeks to pay off his £40,000 overdraft, or he would lose the boat. That's £40,000 *after* wages and expenses.

Somehow, they had managed. They had hired another crewman and worked around the clock. 'We landed 240 boxes of fish the last day, in a howling storm. They couldn't believe it!' Charlie chuckled, proud of the memory, hugged Donald's niece and went to get himself another drink.

Donald looked at me silently, seriously. 'How are you going to write about this?' he challenged me:

> How can you?! It's too complicated. How can you explain that a bank manager shot himself and his dog? And what we had to do on a fishing boat in January, in six weeks, because of that? How can you explain this, here, what is happening now, my beautiful nieces here at two o'clock in the morning, and the craic,[6] and Charlie here too?
>
> No. What you are trying to do is impossible, impossible.

Donald's warning has haunted me ever since, and he was not the only one. There were other men who also wanted to tell me their most troubling stories, usually late at night or in the pub. But at the same time as they wanted to tell me these stories, they usually insisted that I could not possibly understand them. I remember coming home, overwhelmed and weighed down, wondering what on earth I could do with all this. I could not describe the connections, the scenery and the sunshine, without also describing struggle, tragedy and death.

There was Angus (Chapter 6), who started telling me about the death of friends and workmates on cargo ships on the second day I knew him. I returned home to the boat, notes scrawled down in confusion: 'I don't know where to begin when you see someone breaking down in tears before you. What do you do? It is a heavy load to carry. I feel shaken, unsure of what to do with it.' With tears running down his face, he told me 'You don't want to know. I can't put this on you. I can't give someone else nightmares like this. It's not fair. I've seen things that no one should ever have to see, to even think about.'

There was Alasdair who, after a month of patiently answering questions about fishing and prawns and boats and weather, finally asked me why I hadn't yet asked him about deaths at sea. He told me that night about the sinking of his friend Findus' fishing boat, and returned to the story again and again over the next two years (Chapter 6). Later, he reflected that 'there is not a year goes by, I don't think, without somebody I know or know of killed at the job'.

There was John, in the pub the morning after an all-nighter, talking about the death of his friend Iain who worked on a fish farm after the new Norwegian owners and managers 'cut back the people'. Iain had ended up 'out in a tin boat by himself with a ton of feed. With a ton of feed! That's why he died!' And then, angrily, he said 'I shouldn't speak to you about this! How can you understand?! You don't understand!' He kept pushing me away, scoffing and mocking, but then always came back to speak to me again after finishing his cigarette.

The scepticism about my ability to understand the pain that people shared with me was manifest more generally in the scrutiny I was subject to, the reactions of those who felt themselves living in 'a state of siege' (Taussig 1992: 10). People Googled me to ensure the story I was telling them about myself was correct, and they let me know that. They wanted to know who was funding me and why. They knew what conferences I was presenting at and they wanted to read the papers I presented. Many assumed that my research agenda was to undermine their very existence. After one trawler skipper decided that he trusted me, he told me about another who didn't, who was 'nervous and suspicious about you and what you are doing'. He explained, 'If you are a trawlerman you think everyone is out to get you'. A young crewman, drunk in the pub one evening, accused me of being 'an ecologist here to destroy people's livelihoods' and warned me to 'be careful because it is people's lives! Think of the old guys that have been doing this all their lives, the children who are being supported!' When I was introduced as a researcher to a man who used to work on salmon farms, he introduced himself as 'one of those bad environment-destroying salmon farmers, out there polluting the lochs!' The state of siege in which people lived was manifest in their very stance towards me.

This tension and pain was not new. On my second day in Portree, Bodach pointed across the harbour to Scorr, an exposed and rocky ledge at the harbour entrance where his family had once lived (Figure 3). His great-granduncle had been born there and Bodach showed me a letter he had written back to the family in Skye after he immigrated to Australia in 1852. It started with a detailed report

Figure 3 Scorr, at the entrance to Portree harbour, where Bodach's family stayed 'starving and in slavery' after moving from Rona to Skye in the first part of the 1800s.

on the employment and wages he and other Skye families had been able to secure in Australia, and then continued with a report on the passage to Australia on the *Araminta*:[7]

> We was complaining for being so long on the passage. We were 16 weeks at sea … There was a great number of children died on this ship, but we did not lose one, and they stood well to the sea. All the children, that was on both sides of us was taken away, and our two was left, and another child that was aside us. There was ten families on both sides of us, and there was not a child left in the ten families but four. (MacKenzie n.d. [1852]: 73)

Despite this horrific experience, his great-granduncle reflected: 'It was the leading of the Almighty that encouraged me to come to this place, besides being at home starving and in slavery, as many one behind me is; and I would advise many to come if they choose to come' (MacKenzie n.d. [1852]: 74). Like DJ's family, Bodach's had moved and moved, from Raasay to Rona and then to different places around Skye, 'starving and in slavery', and then to Carolina and Australia, with members also leaving to find work in Glasgow and on board cargo ships travelling around the world.

I have taken up the challenges from Donald and the others though close attention to both happiness and pain, hope and fear, connections and ruptures, skill

and its breakdown: the reward and contradictions of human labour at sea. They challenged me to understand not only what was happening in the moment but also the history that went into building that moment. I have tried to deal fully and respectfully with a form of labour that is very much maligned: that of fishermen[8] who feel that 'everyone is out to get them'. First, I describe the lively ways in which people formed and inhabited grounds and places through the process of working in them and developing what they afford to those who make them productive (Chapters 2 and 3). Second, I examine the ways in which boats, winches, nets and other tools were enrolled into fishermen's skilled techniques and how tension was manipulated in feeling and sounding the sea and extending the senses of the body into its depths (Chapter 4). Third, I describe the skilled processes of orientation as movement in the land/seascape, and the role of electronic navigation devices in facilitating this movement (Chapter 5).

Despite these skilled and productive contributions, the painful reality for fishermen is that their extraordinary efforts are often not seen by others as productive, but as destructive. A crisis in many aspects of the ocean and planet's ecosystem (Angus 2016; Clausen and Clark 2008) has squeezed fishers between the limits of the environment they rely on, the demands of the market the sell to, and the concerns of environmentalists who usually see fishers as part of the problem too (Chapter 1). It is frequently overlooked that commercial fishing is a labour process dominated by market forces that shape what fishers must do to survive but which they cannot control (Campling *et al.* 2012) – instead fishers are simply labelled as greedy and destructive. The exploitation of the sea's resources and of the people at the sharp end of extracting them are driven by similar economic and political pressures: a market whose competitive dynamics mean that people often need to catch more and more fish just to stay even, and where the consequences of not being able to keep up can be deadly (Chapters 5 and 6). The context of political economy is crucial for a full understanding of how people experienced and practised their own labour at sea (Part III).

Capitalist relations in the labour process of fishing meant it was fraught with tensions and contradictions that shaped human–environment and human–machine relations. Who was able to fully exercise their skills and in what circumstances? When did boats and tools act as smooth and productive extensions of persons and when did they maim and kill? When, and for whom, was a fishing boat a fondly regarded companion or a 'shit-bucket'? What kinds of social relations did particular navigation techniques promote? Who decided what tools were available on a boat, and based on what priorities? Through a holistic Marxist analysis, I show how these seemingly disparate questions all connect to changes in political economy, class relations, fishing techniques and relations to the environment. With this approach, I have tried to capture the pleasure and pain, the frustration and reward, the giddiness and tragedy of work at sea under capitalist relations of production.

In writing this book I was lucky to have a vigorous critic in the form of the skipper of the trawler I worked on over the course of 18 months and who I kept in touch with. He read most of this book and returned pages of commentary and additional information, which we then discussed at length. We had a creative and productive tension: I knew that Alasdair would not agree with all of my analysis,

yet his feedback was always thought-provoking and useful. We both enjoyed it: as he wrote in a note attached to the front of his extensive written feedback on earlier versions of Chapters 4, 5 and 6: 'I doubt you've had the fun or enjoyment I've had reading this. More please if you think it worthwhile.' His feedback contributed significantly to my writing process. For example, in his comments on Chapter 2 he explained how the Decca (a now-obsolete navigation device) was used to find places at sea before the GPS (Global Positioning System). Our subsequent discussions about the history of navigation techniques led directly to my then-unwritten Chapter 4.

I was most nervous about Alasdair's reaction to an earlier version of Chapter 5, which contained a historical account and economic analysis of the fishing industry he had worked in for 30 years. In particular, I argue that the often lethal 'nature of the job' he described was not a 'natural' consequence of the environment of the sea, but was in a large part a result of the nakedly capitalist market pressures on those who work at sea. I was pleased that although he had plenty of criticism, my analysis also struck a chord. We sat in a pub near my flat in Glasgow, and he got quite emotional as he told me 'I don't keep track of the number of people I have lost. I guess I have been close to only a few of them'. He banged on the table, tears starting in his eyes. 'But why do we accept this?! Why do I accept it? Why does every other bastard accept it?' It was only a week later that he rang me, impatiently asking when my next chapter would be complete.

Anthropology at sea

In this book I pursue a labour-centred analysis of human and environmental connections and ruptures at sea, based in the holistic study of humans known as 'anthropology' and using its classic approach of participant observation, or 'ethnographic' research. My analysis is influenced by anthropologist Tim Ingold's understanding of the 'human condition', as being 'in an active, practical and perceptual engagement' with their environments (2000: 42). But the environment of commercial fishers is not just made up of sea, wind and land, but also markets, machines, crises, competition and experiences of tragedy and fear. It extends from the local and immediate through history and across countries.

Participant observation through living in an area allows researchers access to a depth and breadth of experience that cannot be captured in other ways. It includes everything from conversation to 'using one's body in the same way as others in the same environment' so that knowledge 'remains grounded in a field of practical activity' (Jackson 1989: 135). I shared a 'field of practical activity' by sharing a pier, living with and working under the supervision of fishermen and seafarers. From them, I learned not only how to predict tidal movements at a particular rock, but how to get the best price for your prawns in a global market. Phenomenological methods pay close attention to the feel, the smell and the sounds of people's experiences, but are sometimes criticised for being too narrow in their approach. In this book, I use a 'critical phenomenology' which aims to 'link modalities of sensation, perception, and subjectivity to pervasive political arrangements and forms of

economic production and consumption' (Desjarlais 1997: 25). This means going 'beyond phenomenological description to understand why things are this way' (Desjarlais 1997: 25). Asking people 'why things are this way' often resulted in some of the most insightful discussions I experienced during my research.

I aim to provide a contextualised and historical ethnography in this book that describes the connections and tensions that exist in place, and with other parts of the world and economy. This approach builds on Jane Nadel-Klein's book about the former fishing villages of north-east Scotland that demonstrates how 'capitalism can create and then dismiss a way of life' (2003: 1), and more broadly, on fisheries ethnographies by Gerald Sider in Newfoundland (2003) and Charles Menzies in France (2011). These connections are lived every day in almost every conversation: how else could I understand why DJ's ex-fishermen neighbours were now working on offshore oil platforms in Angola and Nigeria, or how another local man had been on the Piper Alpha oil platform when it exploded in the North Sea. Then there was the bucolic lake DJ showed me, surrounded by wetlands, with stairs and a boardwalk running down from the road to a small bird-watching hut, built by UK soldiers as practise in 'logistics and reconstruction' before they were sent to Iraq in 2003. In contrast, anthropologies of Scotland have tended to focus on rural areas (Rapport 2009: 49), often portrayed as traditional and left behind by modern society (MacDonald 1997: 8). As a result 'Scottish villages, crofters, or peasants come to be identified as backward and to stand for the Western version of the primitive' (Nadel-Klein 1991: 503). Yet, however remote these places may appear, they have been shaped by capitalism and political power for centuries.

My research centred on human–environment relations at sea, which made the best use of my own skills and experience as a professional seafarer, and provided a wealth of rich opportunities for participant observation. While many anthropological studies at sea have focused on particular uses of the sea, such as fishing, tourism or tenure rights, this book follows more broadly-conceived research into the human–environment relations of people living and working at sea (Hoeppe 2007; King and Robinson forthcoming 2017; Tyrrell 2006). Other anthropologists have examined the social and political aspects of fishers' lives, including the impact of state conservation and fisheries policies, the development of fishers' political representation, and how these articulate with other social and cultural formations such as religion and social organisation (Subramanian 2009; Walley 2004). This literature traces the connections that extend across seascapes and landscapes and challenges the popular conception of fishing communities as isolated societies and the sea as a hostile wilderness to be preserved from human influence.

The way in which social scientists have thought about the sea has changed markedly over the years. Many early anthropologists described the sea as a wholly natural 'other' that framed land-based culture and theory. The activities of fishers have been analysed as if they were foraging animals, and the sea has also been understood as an 'aquarium' that must be enclosed and controlled. A sharply different approach by contemporary social scientists has been to use the sea and water as a 'theory-machine', sometimes using metaphors based on the materiality of water which bear no resemblance to the experience of living and working at sea.

Narratives of 'oceanisation' emphasise regional oceanic connections and capitalist world systems – but sometimes 'flow' into easy but not-always-accurate metaphors about globalisation (Helmreich 2011). Stefan Helmreich notes the pervasiveness of the watery metaphor of 'immersion' for both understanding the sea and ethnographic methods (2007), but argues that it is 'a poor tool' that elides 'the question of the organisation of space, of medium, of milieu – whether of an ecosystem or a social order' (2007: 631). Likewise, he criticises authors such as Veronica Strang, Ben Orlove and Steve Caton who theorise about the materiality of water as if it is a historic and cultural given.

Anthropologists have a responsibility to thoroughly and ethnographically consider people's experience of working and living at sea, and not to be seduced by tidy metaphors of flow, fluidity and immersion that may easily arise in contemplating the physical presence of the sea. Such an understanding builds on the work of maritime anthropologists who have demonstrated that distinctive systems of meaning have arisen with human activity at sea. Such studies inevitably overflow the sea itself to follow lives, livelihoods, markets, and pressures far beyond it. The sea is only 'fluid' in appearance, as I discovered from the people I worked with who continually challenged me to include and understand the jarring and difficult disruptions, tensions and tragedies which punctuated their lives. Amidst the rising popularity of a 'new materialism' in anthropology that focuses on the qualities of materials (like water), the history of such theorising at sea offers a cautionary tale.

I worked as a professional seafarer before I began studying anthropology in 2004, and in 1997 obtained a 100-ton captain's licence from the US Merchant Navy. I worked on board various traditional fishing boats that were used for education programs in the United States, including as the skipper of a 26-meter sailing oyster dredger, which took students out on the Chesapeake Bay to learn about history and ecology. I also travelled by small sailboat through the North Atlantic: from the Chesapeake Bay up the US coast to the Gulf of Maine, and from Toronto to Newfoundland, Labrador, and across to Iceland, the Faroe Islands and Scotland.

I arrived in the Inner Sound to begin my field research in May 2006, sailing into Kyleakin harbour on a pleasant sunny afternoon. I had bought a small sailboat to live on and spent several months working to prepare it in a harbour further south (Figure 4). Friends helped me sail up the coast but the trip from Mallaig to Kyleakin was my first day sailing the boat alone – 15 miles up the coast and then through Kyle Rhea, the air crystal clear and the mountains rising massively and nakedly up from the narrow passage where the sea, propelled by the tide, raced between Skye and the mainland.

I called the harbourmaster to tell him I was arriving, and he came down to catch my dock lines. It took me some time to get everything organised and prepared for docking while the boat drifted in the harbour, and I became keenly aware of being watched. There were at least 20 yachts tied in rows along the pontoon, five fishing boats at the end, another five across the harbour, houses facing the pier all round (Figure 5). Finally, I was alongside, and the harbourmaster invited me to participate in the yacht race the next day: 'It will

Figure 4 *Suilven II*, 1977–2011. The author lived on this boat while carrying out research for this book.

Figure 5 Kyleakin harbour with Skye, the Skye bridge and Raasay in the background, and showing the Inner Sound stretching away to the North. The Crowlin Islands, the Applecross Peninsula, and the rest of the Scottish mainland are on the right. I spent a great deal of time living at the pontoon in the centre-left just in front of the houses. My boat is visible in the middle of the pontoon.

be fun!' Over the afternoon I met several other men ambling along the pier or working leisurely on their boats.

It turned out to be an excellent place to be an anthropologist: with a shop, a café and three pubs a short walk away, and two piers and a ramp that were in constant use by fishermen landing their catch and cleaning and repairing their fishing gear. There was a perpetual stream of tourists, and yachts owned locally and those from other countries regularly docked there. Each day I interacted with people on their way out to sea or on their way back in. I spent the majority of the next 16 months conducting ethnographic participant observation while living on my boat in Kyleakin, and in other harbours around the Sound. I explained to the people I met that I was a researcher interested in speaking to people who worked or spent time at sea, and that I wrote daily notes about the people I talked to and what I learned. People almost always had a story to share and were often curious about my project, what had brought me to the area, and what my own seafaring background was.

I got to know a few fishermen on the pier while they repaired their nets and creels. Three months into my research, the skipper-owner of a small trawler offered me paid work as relief crew when his regular crew needed time off. I worked on the boat with both the owner and the hired skipper for an average of about five days each month over the next year (Figure 6). This opportunity allowed me to become a skilled crew member, to develop long-term working relationships

Figure 6 The author at work on a small trawler.

with the skipper-owner and hired skipper-crew of that boat, and to interact with other fishing boat crew as they worked at sea and travelled from port to port. I also needed the money. My reliance on the uncertain income from fishing was also an important mode of participation.[9] This reliance increased when my (non-fisherman) partner became unemployed and also worked part-time on trawlers for about four months.

Living on a boat, participating in sailboat races and getting a respectable result, and making short trips around the area meant that other fishermen could see that I was competent on a boat, and I believe this made it easier for me to go out fishing with them. I also invited people onto my boat, for a cup of tea or to travel around the Sound: novices who could give me their first impressions about being at sea, but also fishermen and crews from cargo ships who could reflect on the enormous differences between the boats they worked on and mine. Staying on the boat meant I could be hospitable myself, but I also had control over my own space for writing fieldnotes and a retreat when fieldwork became too intense.

A body of water is usually shared by people from many different places on land. Living on a boat gave me the mobility and flexibility to follow these relationships, although I was constrained in significant ways by the weather and by the available harbour facilities. These constraints also provided productive opportunities for discussion with those who were familiar with the area's weather patterns and local harbours. Connections extended across harbours. For example, Bodach was from Portree but I met him during a yacht race in Kyle. He then smoothed over relations with the Portree harbourmaster and set about introducing me to fishermen and local historians when I arrived in Portree. I had met DJ, who took me out fishing that sunny morning in Applecross, at a meeting I had attended while visiting a loch further north along the coast.

I spent approximately 80 days actually travelling or working at sea on 13 boats, including four trawlers, four creel boats, a tour boat, sailboats, a lifeboat and a fish farm boat. Each boat provided a very different experience and perspective on being at sea: following different routes, for different purposes, at a different speed or elevation. The variety of experiences also provided an important reminder that the experience of 'being at sea' is much more accurately described as 'being on a boat', as it is the boat that most directly shapes one's experience of being at sea (Chapter 3).

In addition to the time I spent on and around boats, I was also a more general participant-observer in settings frequented by those working at sea, principally the pier and the pub. This gave me the opportunity to interact with people working on cargo ships, on ferries, in the offshore oil and gas industry, on fish farms, in marine weapons testing, and sailing on yachts. I conducted more formal semi-structured interviews with individuals in specific roles to whom I did not readily have access (for example, the manager of the BUTEC base, the fisheries protection officer, civil servants, the lifeboat coxswain, seafood buyers, several retired fishermen, and fishermen's partners and mothers). I also attended government consultations on fisheries, marine parks and marine energy, as well as the annual 'Fishing Expo' trade show in Glasgow.

My fieldwork was conducted entirely in English, but I took an introductory Gaelic course to assist me in understanding phrases and place names. The use of Gaelic was patchy in the area and it was only towards the end of my fieldwork that I met people who were fully bilingual.

I ended up with four kinds of fieldnotes: reflections and conversations recalled and typed directly into my laptop on the boat as soon as I was able to; jottings made in a small notebook which I carried in my pocket at all times; notes made in a large notebook during more formal interviews; and recordings of interviews. My research continued informally until 2010 as I kept my boat in the area and remained in contact with several people I worked with. I also conducted some targeted interviews between 2007 and 2010 as gaps in my research became apparent and the writing process generated new questions.

Constraints and opportunities in fieldwork

The approach that I took to my research significantly affected who I came to know, and who I didn't. I spent the most time with fishing boat skipper-owners like Alasdair, Ruaridh and James. All three had started fishing in the late 1960s and had owned their own boats since the 1970s. James was the only one who came from a fishing family. James' father lived in Orkney and worked in a boatyard but had fallen in love with a Skye woman who had travelled to work in an Orkney hotel. James' father married her and emigrated from Orkney to Skye, and then started fishing in the newly emerging prawn creel fishery. James, his brother and other family members now owned a number of fishing boats. Ruaridh had started his working life as a bricklayer in Lochalsh but switched to fishing because the money was better (Chapter 5). Alasdair was from the west coast island of Iona and had worked on local fishing boats in summers as a school student and then while studying natural philosophy at Glasgow University. His father was the island's postmaster. These skipper-owners had the experience and authority to speak about the fishing industry now and in the past, and they were exceedingly generous and helpful to me. They had an encyclopaedic knowledge of all aspects of the local and regional fishing industry for the past 40 years (and more). These skippers were thoroughly identified with their fishing boat – they were referred to as James 'the *Iris*' and Ruaridh 'the *Accord*'.

Younger hired fishing crew usually deferred to skippers when they were present, which, on the boat or the pier, was almost always. I spent more time speaking to crew in the pub, or in moments when skippers were busy elsewhere. They were mostly 20-something young men who had varied working lives, moving between jobs in fishing, the offshore oil and gas industry, fish farms, and forestry. A few had stable jobs on one boat, but many switched from job to job quite regularly. In social situations, these younger hired crew tended to keep their distance from me, perhaps because they knew that I spent a lot of time with their employers, or maybe because my incessant questions about fishing bored them. I was also a bit wary of the intensity of the local party scene that many participated in. I encountered hired Filipino crew a few times while their boats arrived or left the pier but

only once had the opportunity for a real conversation. We both glanced nervously over our shoulders, worried the boat owner would arrive and wonder what we were speaking about, and they refused my offer to meet up later (Chapter 5).

I got to know quite a number of hired skippers and a few older and more experienced hired crew like 'Buckie' John, Graeme and Charlie. They tended to have quite varied life experiences and strong opinions about the different sectors of the industry they had worked in. These men had worked in different fishing fleets all over Scotland and England, and other jobs as well. 'Buckie' John was from a Buckie family who had fished for many generations, but the rest of the family now lived in North Shields, England, and the family did not own a fishing boat. Through this group of men and in the cafés and pubs around the harbours I also met other skippers, crew, ex-fishermen, fish farm workers, offshore oil workers, fish processing workers, and some family members and partners.

I met only a few fishing boat owners who owned multiple fishing boats and did not work on them, mainly through fishermen's associations (which primarily represented boat owners), at formal government consultations, and at presentations and meetings held at the annual Fishing Expo trade show in Glasgow. They were obviously keen to ensure that their political and economic interests were represented in such forums. They were generally friendly and helpful, and clearly wanted to ensure that I represented their industry in a positive light. 'Ah well the last social anthropologist who came to speak to me ended up working for me so I'm sure I'll see you again', one told me with some arrogance. Conversely, they also reacted with highly-coordinated fury to ensure that I was not able to work for any industry body they had influence with after I publicly criticised the employment conditions of the migrant crew that many hired (Chapter 5).

Prohibitions against women going on board Scottish fishing boats are well documented (Knipe 1984). I did not expect to be able to find work on fishing boats or even to go on board them. I never met another woman working on a fishing boat (I was told of a few). I found that while everyone was aware of these prohibitions, virtually everyone claimed it was other fishermen, not them, who held such beliefs. I had never worked on a real fishing boat and had no prior local connections. I am grateful that, despite some wariness I described earlier, I was welcomed by fishing boat owners, skippers and crew with openness, warmth and curiosity, and was flattered by the respect I was offered. I had characterised my own skill and experience at sea in an early draft of Chapter 5 as 'a competent sailor but novice fisher completely unfamiliar with the area'. I received the following written feedback from my skipper, Alasdair:

> You demean your own ability. Take sentence 'a competent sailor etc.,' and delete. You can not include that in your argument unless you are much more honest regarding your ability. It distorts the point you make by being basically untrue. Sorry but you can't do that …
>
> You, however, describe yourself as a novice, completely unfamiliar with the area. No novice. 20+ year small boat experience. Tickets [professional captain's and mate's licences] to what degree? Command experience and responsibility by the gallon, very fast learner, highly safety conscious, excellent skills of judgement,

> totally in step with the boat's (skipper's) two rules: 1. If in doubt, shout, 2. Don't panic, it turns a hiccup into a fuck-up.
>
> To hide these facts as you do is insulting to you, yourself, and the skipper whose judgment of you put you there and who wrote the above. Sort this out please.

When discussing the chapter later, the skipper insisted that by the end of my year crewing, he would have been comfortable having me skipper his trawler.

The unexpected consequence of this acceptance by fishermen was that I became limited to predominantly male spaces. Focusing only on male aspects of fishing has been rightly criticised by feminist political economists for limiting the role that women, households and broader political economy play in analysis of fisheries (Neis *et al.* 2005). I was conscious of this potential problem and tried to overcome it by making every effort to meet fishermen's families, and also by ensuring that broader questions of political economy were included in my research. However, it soon became clear that my initial entry point through mostly male seagoing working spaces also limited my access to other areas. I did get to know the young female partner of a hired skipper, but got to see her much less after their relationship ended. Far from seeing herself as a member of a fishing household, she ran her own small cleaning business and was sometimes critical of her partner's occupation. I also developed a relationship with the mother of an ex-fisherman who worked in the oil and gas industry, whose (now deceased) husband had been a prominent local fisherman. Her insights and experience were very useful but were of course historical. With only a few exceptions, the households and families that I came to know were those of older single fishermen, or those who were retired. It seemed that many women saw me as firmly belonging to the local male seagoing working spaces (and their associated pubs) and wanted to keep me there, and out of their family lives. Although my partner came to visit several times during my research, it is also likely that most men were not keen on advertising to their partners the existence of a young, inquisitive and (apparently) single woman down on the docks.

My acceptance into male seagoing spaces was not universal. I participated in local yacht races, and in the process realised that there was a quite distinct social division between seagoing workers and fishermen, and the 'respectable' local yacht owners. These yacht owners were (sometimes retired) local managers, skilled engineers, small business owners, local elected councillors and navy officers. I had never seen them in the pub before – they went only in the afternoon after the yacht races and almost always dispersed before evening. I realised that although these pubs were busy and pleasant and seemed perfectly safe to me, they were not places where everyone would hang out. Pubs were marked as spaces for the mostly young, mostly single, mostly male persons working in manual jobs. Families and partners did not go there (except for the few that had an adjoining restaurant). Pubs were avoided by people of all genders who felt themselves of a certain (higher) local status. I believe I unknowingly ruffled a few feathers by participating in local yacht races with a pub-going local fishing skipper. We won a few races on my sailboat, and it was interpreted as significant by other locals that no one clapped when our first victory was announced.

I was surprised by the local classification of myself as part of the male manual working world, and the exclusions from family life that I experienced were precisely the opposite of what I expected. Yet being accepted into this male working environment also seemed to highlight my female-ness. On virtually every fishing boat I went out on, I was subject to playful speculation about whether I would be a 'Jonah', bringing bad luck. The one notable exception was hired skipper Graeme. When I inquired, Graeme told me that his luck was already so bad I couldn't possibly make it any worse (Chapter 3). As a woman dressed in oilskins and work clothes, I was subject to many puzzled glances and other fishermen were usually quite curious about who I was and how I had come to be there. 'Are you out making cups of tea?' they would ask to try and determine what my role was on board. I would explain that I took watches and tows, and if the skipper was around he would usually take great delight in saying that that he had spent the whole afternoon asleep in his bunk while I was catching prawns. I was regularly told 'you must be hardy!' The merits of having more women in the fishing industry and the particular skills which women might bring to it were regular topics of conversation that my presence provoked. Twice, during the day, wearing full fishing gear, on a boat tied up to a pier, I had a conversation that to me was completely surreal: 'Do you have any children?' I was asked by another 30-something crewman. 'No', I replied, to which he matter-of-factly responded 'Well if you ever want to have any, let me know'.

I found myself in a strangely contradictory situation: on one hand, marked as a (dangerously female) part of male working spaces and therefore excluded from most family and domestic spaces, and on the other hand, mainly accepted into those male spaces while being seen as remarkably female. Anthropologist Kirsten Hastrup observed that in 'parallel-cultural' situations (for her Denmark/Iceland, for me Scotland/Canada): 'the sex of the anthropologist, elsewhere so inconspicuous in relation to other and much more marked differences, becomes a primary element in the local classification of the ethnographer' (1987: 96). This contrasts with what Hastrup describes as 'an old notion in anthropology' that female ethnographers become honorary males in research situations (1987: 95). The local classification and implications of my gender appeared to differ markedly by class, with the local 'respectables' viewing me as part of (what they saw as) the unrespectable male manual working world, while local fishermen viewed me as an odd and remarkably female part of that world – although the niggling suspicion remained that as an academic and outsider I had an unknown potential to cause damage to their livelihoods.

The attention I received during my research was almost always to my advantage: people were interested in speaking to me and I was frequently the subject of their questioning, rather than the other way around. One consequence of my peculiar position was that people seemed very willing to share with me their stories of grief and trauma that were part of their working experience at sea. A sympathetic understanding of this is, I believe, a worthwhile contribution. However, the price I paid for this trust and insight was an exclusion from most family and domestic situations. That work is still to be done.

Histories of the present

History is an important aspect of any critical phenomenology that seeks to understand 'why things are this way'. Phenomenological approaches to place 'tend to analyze experiences of place as culturally given: that is, as points of departure that are only *then* situated in history'. Instead, experience should be understood 'as a historical product constrained and recreated by fields of power' (Gordillo 2004: 265 n.5). Anthropologists Susana Narotzky and Gavin Smith propose 'histories of the present' as a way of showing how 'capitalism … becomes a lived part of the present' (2006: 17, 12). In the remainder of this section I sketch some of these histories in the Inner Sound, the west coast and the fishing industry. I hope this gives some important context to the situation I found in 2006–2007 and that I describe in the rest of this book.

Histories of the Inner Sound

Subsistence eating of seafood, especially shellfish growing on rocks along the shoreline, has been taking place on the Inner Sound for at least 7,000 years (Hardy and Wickham-Jones 2002). However, it is important to remember that the coastline is harsh, the weather adverse for most of the year, and that people were often very poor. Fishing year-round required large, safe boats that most could not afford. Once fish and seafood markets developed, they were located hundreds of miles away through difficult terrain with poor transport infrastructure. Thus, while there is a very long history of people fishing as one part of their livelihoods, the emergence of commercial fishing as a full-time occupation and 'fishermen' as an identifiable group of people on the west coast is quite recent and is bound up with the emergence and spread of capitalism and its associated cash economy, regional and global markets, and infrastructure (Nadel-Klein 2003).

In sixteenth-century east coast Scotland, fishers were generally serfs who gave landlords a portion of their catch (and sometimes labour or money) in exchange for the use of a boat, land and house – a kind of sharecropping that straddled land and sea (Coull 1996). It was with the profitable exports to Germany and the Baltic states in the eighteenth century that 'fishing became an organized industry', promoted by the British Fisheries Society and lairds of coastal estates who built specialised fishing villages along the coast according to the 'Improving' ethic of the Scottish Enlightenment (Nadel-Klein 2003; Smout 1970). Marx analysed this process as capitalist 'primitive accumulation' by dispossession, describing how in the early nineteenth century 15,000 people living in Sutherland were forcibly removed from 794,000 acres of land and re-settled on only 6,000 acres along the shore to become fishers (1976 [1890]: 892), for 'people with no land would fish and fish hard' (Nadel-Klein 2003: 34). In these Clearances, landlords replaced partly subsistence tenant farmers (known as crofters) with more profitable sheep farms, and then employed some of the newly landless 'rural proletariat' as fishermen (Cregeen 1970; Smout 1970). Strong memories of this dispossession remain. For example, the proposal to create a Coastal and Marine National Park during my

field research was widely referred to as the second Clearances, due to people's fear it would remove a working human presence from the sea in a similar way that they felt it had been removed from the land.

Through these Clearances, the sea became a route through which a given area of land could be made more profitable, and through which people were forced to become occupational specialists (fishers) and participate in a cash economy. Although this process took place earlier and more completely on the east coast of Scotland, Calum MacLeod writes in his memoirs about people being forced from the west coast island of Raasay on to rocky and barren Rona (both next to Skye), and recounts that 'the people would have starved if they could not turn to the sea' (2007: 15, 57; see also Grigor 2000). These measures are remembered as having a profound effect on people's lives. For example, Bodach's family was one of those moved from Raasay to Rona to several places in Skye 'starving and in slavery' and then to Australia through the end of the eighteenth and early nineteeth centuries. Some of the people caught up in this process stayed and became full-time fishers, but most found other work or emigrated.

Through the nineteenth century, fishing merchants increasingly took on the role of providing fishing capital (such as boats and nets) previously secured from landlords. Fishers in specialised east coast fishing villages like Buckie, Fraserburgh and Peterhead paid boat-rents to merchants (Coull 1996; Nadel-Klein 2003). Most east coast fishers no longer had any access to land, but those extended families who were more successful started to buy shares in their boats, some eventually purchasing entire boats (Coull 1996). Today, ownership of Scottish fishing vessels is still registered with the government in 1/64ths, an indication of the minuscule ownership shares that some fishermen held.

East coast boat owners and herring merchants developed and dominated the herring industry. Today, almost all fisheries infrastructure is located on the east coast: faster rail transportation links to London and Europe, big ports, the main fish curers, processors, exporters and sources of finance, and the national fisheries research laboratory. Landlords and merchants never made the same level of capital investment in fisheries or related infrastructure on the west coast (Nadel-Klein 2003). Only a few specialised fishing villages were built and none was particularly successful (Smout 1970). On the west coast the Stromeferry to Dingwall railway line opened in 1870 and the Mallaig to Glasgow line opened in 1901, which meant it became possible to sell fresh lobsters and herring directly to markets in Glasgow, London and elsewhere (Figure 1). However, transport to seafood markets from the west coast still took much longer, making it harder to keep seafood fresh. Uneven development in east and west fisheries continues today, with west coast fishers tending to have fewer, smaller and lower powered boats than east coast fishers. As one west coast skipper-owner explained: 'They [the east coast] were always steps ahead of us – they had the money and the share ownership to buy big boats and equipment. We [on the west coast] were always well behind.'

'Fishing' on the west coast came to refer to two very different activities: local subsistence fishing from small open row-boats with some market selling, and the migration of west coast men and women to work in the much larger scale east

coast and Irish fisheries (Nadel-Klein 2003). In the lead-up to the First World War, thousands of west coast men and women were employed by east coast herring-curers to catch and gut herring while following the fish all around the UK in a 'proletarianized, and increasingly class-conscious division of labor' (Nadel-Klein 2003: 70). Many of the thousands of migrant fishing labourers from tiny west coast villages participated in mass meetings supporting the burgeoning 1880s land reform movement while working in distant herring industry ports, evidence that their participation as migrant labourers in the herring fishery was related to their lack of access to land (Grigor 2000). In the early 1880s, Land League campaigner John MacPherson spoke to a meeting of 2,000 Highlanders working in Fraserburgh in the summer fishing, and in Shetland 'hundreds' of people from the distant west coast of Scotland working in the herring fishery 'met to demand land reform' (Grigor 2000: 63, 90, 92).

For at least 200 years Scotland has been thoroughly integrated into the global capitalist system. Scots have played important global roles as soldiers and fur traders, as settlers in distant colonies and part of a global supply of indentured labour (Wolf 1997). Scots were also wealthy parliamentarians and merchants throughout the colonies, and influential Scots Adam Smith and David Hume were philosophers of a newly emergent capitalist economy and a new Enlightenment (Patterson 2009: 22; Wolf 1997: 257). The vast majority of people living on the west coast today have an intimate and varied experience of waged labour and the capitalist organisation of work, and a long history of using waged labour to complement (or to replace) what they were able to cultivate on land or catch at sea. Since the eighteenth century, Highland men have worked on cargo ships all over the world, work that historian Marcus Rediker has argued 'foreshadowed' that of the factory worker (1989: 206). As they 'entered new relationships both to capital – as one of the first generations of free waged labourers – and to each other – as collective labourers', seafarers were 'indispensable to the rise and growth of North Atlantic capitalism' (Rediker 1989: 290). Until the 1970s there were enough Skye men working on cargo ships that they would sometimes meet for the first time in Canadian or Australian ports – 'no one had a car!' one man explained, laughing, so how would they have met each other in Skye?

Many Highlanders ended up in direct contact with emerging capitalists: in the nineteenth century many wealthy industrialists bought large sailing yachts and employed men from Skye, Lochalsh and Wester Ross to work as crew:[10] the grandfather of one Skye man I met during fieldwork worked on the Coats[11] family yacht. Some families I met had ancestors who had worked in American plantations shortly after the abolition of slavery, returning to Scotland with horrific tales of the working conditions they had endured. The building of the Caledonian Canal across Scotland, completed in 1822, employed approximately 3,000 Highlanders.

There is a long history of Highlanders from Skye and the Western Isles working in Glasgow, one of the UK's largest industrial centres (Parman 1990: 175). Even celebrated icons of the 1880s Highland land movement like Mairi Mhor spent long periods of their lives working for wages in Inverness and Glasgow. As I wrote after watching a play in Skye celebrating her life, 'to live away is part of the experience

of being from here'. To this day the Park Bar and the Islay Inn in Finneston in Glasgow's west end are known as places to congregate and meet other Highlanders from back home.

The 1970s North Sea oil boom opened new opportunities for work. Although the new industry was based mainly in Aberdeen, hundreds of Skye residents took the bus or train to work on North Sea offshore drilling rigs, oil platforms or supply boats. The oil boom arrived abruptly on Skye's doorstep in the late 1970s with the construction of the massive Ninian Central oil platform in Kishorn on the south side of the Applecross Peninsula. This project employed 3,000 workers at its height and after its closure quite a few stayed in the area. Many local men and some women continued to work offshore, in the North Sea and further afield in Norway, Algeria and Nigeria. BUTEC, a torpedo and submarine testing range, was established in the 1970s in Kyle of Lochalsh, with the result that fishing was banned in some of the area. Now it is operated by the private company Qinetiq, along with many other weapons testing facilities. I was told that Qinetiq was the largest employer in the Highlands after the local government.

Salmon farms were established in lochs along the Scottish coast in the 1980s, in what many hoped would provide stable jobs for years to come. Yet although the production of salmon increased rapidly, automation and rapid corporate concentration meant that employment actually declined: one ex-fish-farm worker estimated that whereas 40 people worked on one fish farm on the west coast of Skye in the 1980s, a total of 20 permanent fish-farm jobs existed in the whole Isle of Skye in 2007. Seasonal employment on fish farms increased, with people hired onto mobile teams employed in the annual 'jagging', or inoculating, of thousands of fish per day at farms located throughout Scotland and Norway.

The result of these multiple economic and industrial transformations is that people from west coast fishing families or villages also have friends, neighbours or family members working in offshore oil and gas, salmon farms, cargo shipping or other jobs. I met fishermen who had previously worked as chefs, electrical engineers, supermarket workers, fish-farm workers, loggers, bricklayers, as fisheries inspectors, as welders, in car factories, in hotels, renovating houses, as farm hands and in seafood processing. Several had university degrees: in physics, history or agricultural economics. Contrary to the perception that fishing is a family skill handed from generation to generation, many had no previous family history of full-time commercial fishing. Fathers of fishing skippers had been employed as postmasters, joiners, policemen and factory workers. Thus most people experienced and understood fishing as work, in the sense of a generic type of waged labour, and as a way to pay their bills. In the present-day west coast, fishermen are not a separate occupational group. Young men might work in a seafood processing factory before starting work as crew of a fishing boat, and then leave for the summer 'to make good money' 'jagging' salmon on Norwegian fish farms. When the fishing got poor, young men might take training courses in order to work in the global offshore oil and gas industry, and for the next few years would closely

compare their income and opportunities with friends who had decided to stay 'at the fishing'. Men working in offshore oil might fill in as crew on fishing boats between contracts, or might retire from fishing to work on a fish farm so they could sleep in their own bed at night. Those who owned their own boats had a much more permanent connection to fishing, but they were only a minority of those working on fishing boats, and they had to constantly try to recruit crew from other kinds of waged labour. People's experience of fishing was not isolated, but linked to and understood in comparison with all of these other industries, and connected with broader capitalist relations of production through its many transformations on the west coast of Scotland.

Fishing today

The research in this book took place primarily in the commercial fishing industry, which has changed continuously throughout its history. The once-enormous commercial cod and herring fisheries have shrunk from their dominant position to make up only a combined 7 per cent of the value of Scottish fisheries in 2009. The inshore fisheries that occupy most of the fishing boats in the small harbours around the coast of Scotland are for shellfish (mainly prawns), which made up one-third of fishing industry value in 2009. Most fishing boats and fishermen I met were in the prawn fishery. These Scottish 'prawns' are more like a small elongated lobster and are also known to the fisheries markets as 'langoustines' or 'scampi', and to fisheries managers and scientists as *Nephrops norveigicus* or 'Norway lobster' (Figure 7). The Nephrops stocks in the areas around Skye covered in this book are considered to be 'exploited sustainably' in the assessments by the International Council for the Exploration of the Sea (ICES) (Ungfors *et al.* 2013: 260, 285).[12] Despite the health of the prawn stocks, other fish stocks like herring, mackerel, cod and whiting collapsed dramatically earlier in the twentieth century, and are now only fished commercially in other parts of Scotland.

The prawn fishery, which is often presented as 'traditional', only began in 1954 (Mason 1987) but grew rapidly to a first-sale value of £77 million in 2009. There were approximately 1,842 vessels fishing for shellfish in 2009, almost all of which are quite small (under 15m in length) and are dispersed around the entire coast of Scotland, especially the smaller west coast harbours. The prawn fishery has much lower levels of capitalisation than the other main demersal (or whitefish[13]) and pelagic (mainly mackerel) fleets, which make up the other two-thirds of the value of fisheries. There were 307 quite large vessels in the demersal fleet and only 25 (very large and very expensive) vessels in the pelagic fleet in the same year – in sharp contrast to the thousands of boats that once fished for pelagic herring around the coast. Most of these 330 large vessels are based in the north-east ports of Fraserburgh and Peterhead which account for 42 per cent by value of Scotland's entire landings (all fisheries statistics from Scottish Government Statistician Group 2010).

The prawn fleet is divided between trawl and creel sectors. Almost all creel vessels are based on the west coast and are under 10m in length. They fish using a

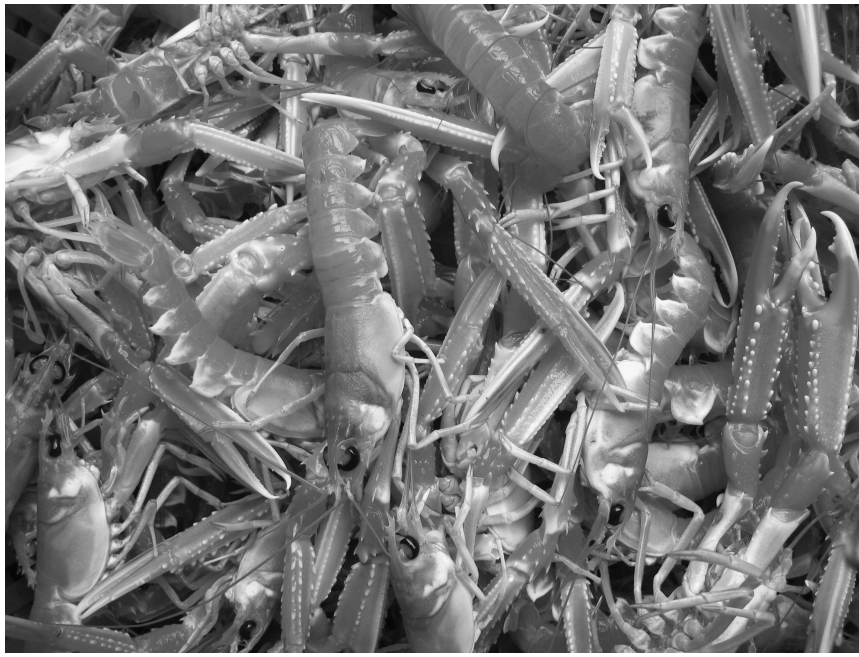

Figure 7 Prawns, also known as langoustines, Nephrops and Norway lobster. These ones were caught by a trawler for the 'fresh' market.

baited trap left on the seafloor for days at a time and produce large whole prawn for live export to Spain, France and Italy. Product is sold to packing and export companies based in Scotland or directly to Spanish companies that send trucks north to Scotland each week (KPMG and Sea Fish Industry Authority 2004). There were three local processing companies in Skye and Lochalsh in 2007, at least two with direct links to Spanish seafood importers. The 275-vessel prawn trawler fleet produces prawn 'tails' (with head and body removed) or whole 'fresh' (neither frozen nor live) prawns sold directly to processors based in north-east Scotland, whose trucks collect landings from west coast fishing piers daily. The processors sell whole fresh prawns, frozen prawn tails, or tails processed into scampi to UK, Spanish, French and Italian markets. The UK is the largest exporter of Nephrops prawns in the world and Scotland produces about 80 per cent of the UK catch (KPMG and Sea Fish Industry Authority 2004). The research for this book was primarily with the west coast under-10m prawn trawler fleet, and to a lesser extent the under-10m creel fleet.

In 2006, when I began my research, good prices fed optimism and prosperity in the prawn fleet. A new law required seafood buyers and sellers to officially register to prevent the sale of under-the-table 'blackfish' for low prices, and there was ample prawn fishing quota.[14] However, simmering in the background were tensions caused by the ongoing marketisation of licenses (required to fish)

and quota (governing the amount of fish that could be caught) and the concentration of the fleet into larger vessels in larger ports. Fishing licences were tradable and had acquired a substantial value separate from the vessel.[15] Meanwhile, the government paid to decommission (or destroy) many large whitefish boats to reduce fishing capacity; some fishermen on smaller vessels complained that well-connected industry leaders had 'made out like bandits' with money from these decommissionings, some of which was invested into smaller shellfish boats. The herring fishery, which until the 1970s had been based in ports all around the coast (including Applecross, Kyleakin and Kyle of Lochalsh), was now entirely operated out of Peterhead on the east coast by about 25 large boats, each worth millions of pounds, that owned all the quota. The crab fishery was concentrating in large vivier crab potters that worked farther offshore and stored crabs live in tanks. Their efficiency drove low crab prices down even further. As a result of these dynamics, more and more fishermen turned to chasing prawns, increasing the tensions between them. For example, creel fishermen set more creels to physically stake claim to their fishing grounds, which upset trawler crew who felt they were losing access to grounds they had historically fished. I was told of many instances of trawlers towing through fleets of creels while they lay on the seafloor and creel fishermen deliberately setting obstacles for trawl nets (such as old cars and caravans). The resulting damage (or loss) of valuable fishing gear meant that these conflicts occasionally spilled into violence ashore.

Fishermen also felt under pressure from conservationists who wanted to restrict their activities. A new Coastal and Marine National Park was proposed by the Scottish government in 2006, with the Inner Sound as one potential site, but after widespread opposition and a change in the Scottish government, it was 'kicked into the long grass' in 2008. However, from 2009 the UK and Scottish governments began designating many EU-mandated Marine Protected Areas through the UK and Scottish Marine Acts.

Tension between creel and trawl fishermen and burgeoning environmental concern about the seas came together in the Torridon Project, which resulted in trawlers being banned from an area around Loch Torridon (and creel fishing from an adjacent area) in exchange for the creel fishermen making voluntary restrictions on the number of creels they set, days they worked, and the gear they used (Nightingale 2011). That fishery was one of the first in the world to be certified by the Marine Stewardship Council's eco-labelling scheme, which was renewed in 2007.[16] It became government strategy to encourage Marine Stewardship Council (MSC) certification, and by 2009, many fisheries around Scotland, including herring fisheries and prawn trawl fisheries, had applied for, and received, this label.

One reason for the rapid spread of the MSC scheme is because of a growing mistrust of conventional fisheries management mechanisms. Another manifestation of this mistrust was the government initiative to develop Inshore Fisheries Groups, ostensibly to provide more 'community management' of fisheries. The initiation of these groups around the coast of Scotland was exceedingly lengthy and fraught because established fishing industry organisations fought to make sure

that they would control these new organisations, and small-scale fishermen who felt unrepresented by existing fishing industry organisations also fought to have their voice heard (Nightingale 2011).

By 2010, the mood of boat owners and fisherman had substantially deteriorated. Fuel prices increased sharply through 2007 and 2008 (Brown 2009). As soon as they declined, the global recession hit and prices and demand dropped. Then prawn quotas were cut. To cope with these pressures, prawn trawl owners began to employ Eastern European and then Filipino crew on low wages, instead of share fishermen from Scotland, even on very small owner-operated vessels (Chapter 5). One prawn trawl skipper described a de facto policy of 'decommissioning by bankruptcy' with market pressures on fishermen increasing to an extent that forced many to sell up or go bankrupt. At the same time, more profitable prawn trawler owners launched a stream of new multi-million pound, highly efficient boats. EU Multi-Annual Guidance Programmes designed to reduce fleet size facilitated concentration: the owner of a large new boat could buy and merge the licences of two smaller boats, but the reverse was not possible. Across all sections of the industry, the numbers of boats and fishermen have decreased since 1999, but the remaining vessels have more engine (and therefore more catching) power (Scottish Government Statistician Group 2010). As an example of the pressure that this presented for small owner-operators, in 2010 the skipper and owner of the prawn trawler that I had worked on began to talk for the first time about selling up and getting out of an industry he had worked in since the 1970s.

This book reflects only a small portion of the time and generosity extended to me by so many people on the west coast of Scotland. It attempts to describe, with interest and respect, the considerable skills and warmth of a group of people who feel that they are consistently maligned and stigmatised, and the difficult pressures and situations they must cope with. I do not offer a rosy view and do not shy away from some of the more unpleasant realities I found. This book reflects a particular view and analysis which some may find challenging, but which I hope will at least provide some opportunity for reflection, for discussion and dialogue, and for a creative tension we all can learn from.

Notes

1 Not his real name. Most names have been changed to protect the privacy of the people who spoke with me. I have not changed the names of a few people who were very familiar with my research and who wanted to be identified.
2 A creel boat is a type of fishing boat that uses pots or traps to catch prawns. The creels have a metal frame and are covered in netting. They are left attached to each other in 'fleets' on the seafloor and marked with a buoy at the surface.
3 Those working in the fishery universally refer to their catch as 'prawns', and the boats they work on as 'prawn trawlers' or 'prawn creel boats'. These shellfish are *Nephrops norveigicus*, which have two claws and look like a small elongated lobster (Figure 7). Regulatory agencies and government refer to these shellfish as nephrops. They are also called Norway lobster and marketed as 'langoustines' or 'scampi'.
4 'Whitefish' are bottom-dwelling fish, including cod, haddock, whiting and monkfish.

5 The British Underwater Testing and Evaluation Centre was established off the coast of Raasay in the 1970s by the Ministry of Defence as the UK's only torpedo testing facility. It is adjacent to an older submarine testing range and now run by the company Qinetiq.
6 'Craic' is a Scots word referring to good entertaining conversation.
7 The *Araminta* sailed from Liverpool to Geelong with 394 people on board, 191 of them from the Skye MacDonald estates. The Skye Emigration Society, formed by 'men of influence' on Skye, arranged and supported the passage of adults and families, with the requirement that they 'must, in all respects be capable of labour, and going out to work for wages' (Clarke n.d.).
8 I did not meet any women while fishing, although I was told of a few. I have used the indigenous term fisherman/men when talking about fishers in Scotland, and the gender-neutral term 'fishers' when talking about global fisheries.
9 I did check to ensure that I was not taking, or perceived to be taking, someone else's job as trawler crew. Trawlers generally found it quite difficult to find crew (see Chapter 5).
10 I was told that Portree harbour would be full of these yachts during the Highland Games and 'the Season', when the landed gentry would tour the Highlands holding parties at each other's mansions.
11 The Coats family established a textile mill in Paisley near Glasgow in 1826. The company now says that it operates in 70 countries with over 20,000 employees.
12 Fish and nephrops stocks are assessed in Divisions. This research took place within Division VIa (West of Scotland), Functional Unit 11 (North Minch) and Functional Unit 12 (South Minch). Landings of nephrops prawns by fishing boats in these areas have generally been less than the maximum landings advised by scientists (ICES 2015a, 2015b).
13 Scottish whitefish catches in 2009 were mainly of haddock and monkfish, instead of the historically dominant cod.
14 Annual EU negotiations set the total species quotas and divide them by country and fisheries management area. During my 2006–2008 fieldwork there was generally more prawn quota available than there were prawns to catch.
15 For a 10m fishing boat, a licence could range from £10,000 to £30,000.
16 MSC certification for the Torridon prawn creel fishery was suspended in January 2011.