Does Professional Fishing Still Play a Role in Regional Communities?

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Abstract

Many coastal towns in NSW grew out of fishing communities and still identify with their professional fishing heritage. Over the last 30 to 40 years, however, professional fishing in NSW has been in decline, and its diminished role in local economies has led to arguments that other industries, such as recreational fishing and tourism, should be prioritised. Different levels of government, including Councils, often face calls to close areas to professional fishing in order to encourage greater tourism and/or recreational fishing. While these arguments largely centre on the idea that recreational fishing and tourism deliver greater benefits to local communities, there are currently few arm’s length criteria for objectively evaluating these claims. This paper will present the results of a two year study into the contributions that professional fishing makes to NSW coastal communities. It found that professional fishing has a highly interconnected and mutually beneficial relationship with both local tourism and recreational fishing. Locally caught seafood and bait are highly valued by both residents and tourists, and the ‘spectacle’ provided by fishing and active fishing ports are largely unrecognised tourism assets in many regional communities. Recreational fishers, in particular, showed significantly higher levels of interest than non-fishers in eating locally caught seafood and watching fishers at work when on holidays. This suggests that professional fishing still plays an important role in regional economies, not just through direct revenue and employment, but also through the support role it provides to other significant activities and industries. Arguments that pit recreational or tourism dollars against professional fishing dollars may, therefore, be counterproductive to the interests of all these groups and indicate a failure to recognise the complexity of factors that drive people to visit regional NSW. The study also identified a range of barriers currently limiting the further development of these relationships, which could be addressed in part through more formal links between Councils, tourism bodies and the local professional fishing industry.

Introduction

Professional fishing has been a feature of the NSW economy since the earliest days of colonisation. When the new colony was struggling to feed itself, trade of fish and other seafood with Aboriginal women in the Sydney area helped to sustain the white settlers and likely prevented starvation (Bennett, 2007; Goodall & Cadzow, 2009; NSW Office of Environment and Heritage, 2012). A more formal professional fishing industry also began to emerge around the Port Jackson area to service the Sydney market (Goodall & Cadzow, 2009). The industry played an important role in the expansion of the colony. As new settlements were established along the NSW coast based around timber getting, the fishing industry also expanded as a primary means of feeding these settlements. With improvements in transport and refrigeration technology in the late 1800s the industry was able to expand to include more distant fishing grounds and become an important industry in...
its own right, meeting Sydney’s growing seafood needs (Clarke, 2011; Wilkinson, 1997). Despite government led efforts in the 19th and early 20th centuries to expand and grow the industry to an industrial scale, a defining characteristic of the NSW professional fishing industry has always been the relatively large numbers of small, often family-run businesses working a variety of methods to catch a diversity of species (Leadbitter, 2011; Wilkinson, 1997). This is a direct response to the unique environmental conditions of NSW. NSW fisheries are not highly productive fisheries due to the state’s largely temperate waters with relatively low nutrient levels. These environmental restrictions have meant that there is limited opportunity for larger, industrial scale fishing operations such as those seen in more productive areas like New Zealand and Japan (Wilkinson, 1997). While industrial fishing operations tend to target a small number of species in large numbers, the NSW industry has historically focused on targeting a wide diversity of species in small numbers (Wilkinson, 1997).

After a sustained period of expansion in the industry throughout much of the 20th century, changes implemented since the late 1980s have resulted in a considerable decline in the number of fishers and the extent of their catch and effort in NSW. These changes have included a shift from open access to restricted fisheries, a freeze on new licenses, the introduction of share management (including quotas for lobster and abalone), and significant increases in license fees and charges (Schnierer & Egan, 2012; Stevens, Cartwright, & Neville, 2012; Wilkinson, 2013). The industry has also been subject to increased scrutiny of its operations by both Government and the wider public. In early 2002, for example, Environmental Impact Assessments (and an associated fishery management strategy) were prepared for each fishery in NSW (NSW Department of Primary Industries, 2012). In addition, there has been a substantial reduction in professional fishing access through the expansion of the marine park network across the state and the establishment of recreational fishing havens (where all professional fishing is banned) in 30 NSW estuaries. Today only 9 of the 24 most productive estuaries in NSW remain completely open to professional fishing (Stevens et al., 2012).

The NSW fishing industry has contracted to less than a quarter of its size during its peak in the 1970s and 80s (Figure 1). It remains dominated by small, family-run businesses, often operating at low levels of profitability. These businesses usually involve relatively low catch volumes in multi-species, multi-method fishing, focusing largely on the more productive estuarine areas. These are also the most popular locations for other recreational pursuits, especially recreational fishing, and it has become increasingly common for members of the community to call for further closures of estuarine areas to professional fishing. Appropriate allocation of fisheries between the recreational and professional sectors has been a key flash point in debates in many coastal towns in NSW. Examples include local scale lobbying for additional recreational fishing havens in the Richmond and Clarence Rivers on the North Coast, Tuggerah Lakes and Hawkesbury River on the Central Coast and Lake Illawarra and Coila Lake on the South Coast. Similar campaigns have also been fought and won by recreational fishing groups in Queensland and Victoria (Queensland Government, 2015; Victoria State Government, 2015). It is common for these campaigns to reference the ‘value’ of recreational fishing or tourism to local communities, with the inference being that professional fishing in these areas is a constraint or hindrance to these sectors, or is undermining their economic potential. The debates also tend to paint recreational fishing, and associated tourism, as a more environmentally benign use of the resource (Collins, 2015). These debates polarise communities and undermine the relationships between the various groups with many professional fishers reporting incidences of abuse, vandalism and threats (Voyer et al., 2016).
Figure 1. Estimated fishing licence holders 1881-2016 (from Wilkinson, 2013, Wilkinson, 1997)

The analysis outlined in this paper was conducted as part of a broader examination of the role of the NSW professional fishing industry in contemporary coastal communities (Voyer et al., 2016). This broader study was guided by a ‘social wellbeing approach’ to examining the various contributions of the industry. Part of that approach was a specific examination of the relational dimensions of wellbeing – i.e. the interactions and relationships that help determine whether citizens are able to achieve what they value in life (Coulthard, Johnson, & McGregor, 2011; McGregor, Coulthard, & Camfield, 2015; Voyer et al., 2016). This aspect of the study included detailed examination of how professional fishing interacts with recreational fishing and tourism sectors in coastal communities.

Methods

The fieldwork commenced with a series of qualitative interviews which identified features of the relationships between professional fishing, recreational fishing and tourism that warranted closer examination. Further quantitative data was collected based on these key themes using economic and social questionnaires.

Fieldwork interviews

More than 160 interviews were conducted with people from across the state and included people involved in the professional fishing industry (as a licensed fisher, partner, or fish merchant/co-operative), representatives from government and tourism bodies and recreational fishers. Initial contact with interview participants was made in a variety of ways, including purposive sampling of industry bodies, cooperatives and community groups, opportunistic sampling (e.g. via advertising ‘drop in sessions’ through local media or industry channels) and ‘snowball’ sampling whereby people interviewed recommended additional people to contact. Interviews were audio recorded and transcribed in full. All the transcripts and interview notes were entered into NVivo 10 and coded to identify key themes (Bazeley & Jackson, 2013). As the analysis involved multiple coders, intercoder reliability was checked regularly to ensure consistency across the research team.
Economic valuation methods

Economic methods were used to address several economic valuation questions. This included:

- Gross Value of Production (GVP): indicates primary economic activity through direct revenue. Measured through analysis of NSW DPI catch records and Sydney Fish Market (the central fish market for NSW) fish prices.

- Profitability of fishing businesses: measured using an economic questionnaire posted to all licenced fishers in NSW. This survey elicited 57 responses, or 5.8% of the 989 registered NSW fishing businesses to whom the questionnaire was posted. This response rate was lower than expected and was directly impacted by an ongoing Government reform process underway at the same time the research project. Industry confusion and distrust about the inter-relationships between the two concurrent processes (which were in fact independent of each other) resulted in many fishers choosing not to participate in this aspect of the research project.

- Secondary economic impacts (or multipliers) to regional economies through relationships with service industries providing inputs for professional fishing: input-output (IO) modelling. The economic information from the operational and financial data, collected from the economic questionnaires distributed to all professional fishing operators, was used to generate regional expenditure estimates. The expenditure estimates were then used to model the economic impacts of professional fishing on regional coastal economies and at the NSW State level. Modelling was undertaken for the financial year 2012/13.

- Catch sector relationships with the post-harvest sector. There are no accurate data available for either the quantities or prices in the secondary sector. The study made estimates of the possible regional economic contribution of secondary seafood sector state-wide by using the wild-catch regional results and information from previous site specific regional economic studies.

Social questionnaires

Three questionnaires were conducted to explore key ideas which had emerged from the qualitative interviews. This included more detailed exploration of the links between professional fishing and the recreational fishing and tourism sectors.

- General public: A total of 1423 interviews were completed via computer assisted telephone interview (CATI). This survey included a sample of both landline (65%) and mobile phones (35%) and had an overall response rate of 24%. The survey focused on coastal residents in the 8 study regions of NSW. The data was weighted so the sample matches ABS census data to ensure data was representative according to age and gender on a state level. Thirty-five per cent of respondents indicated that they were recreational fishers.

- Fish merchants and co-operatives: A total of 77 interviews were completed via CATI. The sample was obtained partly from pre-existing contacts, especially the fishing cooperatives, and partly from a random selection from public phone records.
• Tourism and hospitality providers: An online questionnaire of the tourism and hospitality industry. The survey was distributed through a range of channels including regional and local tourism bodies and industry groups in coastal NSW. The online questionnaire resulted in 40 completed responses. This included responses across a broad cross section of the industry and throughout the state.

Results

The following provides an overview of the results relevant to the relationships between the professional fishing, recreational fishing and tourism sectors. The full account of project findings can be found in Voyer et al (2016).

Fieldwork interviews

The link between the local fishing industry and tourism was frequently mentioned in our fieldwork interviews. These discussions fell into two main categories. The first involved discussion of the contribution of the industry to tourism through the provision of sought-after seafood meals for visiting tourists. The second contribution discussed was the provision of an experience for visitors wishing to watch fishing practices or a working harbour. These two contributions were seen as supporting the other. For example, hospitality businesses indicated that the presence of fishing boats in a harbour is seen as giving authenticity to the local seafood experience. Advertising that promotes product as fresh and local alongside the spectacle of fishing boats offloading a catch provides a point of differentiation from suburban fish shops or restaurants.

People come here to be able to have their lunch and watch the fishing boats come in, and fishermen unloading the catch, and just knowing it’s a wholesale site gives a perception that the fish is fresher... it’s so important to the authenticity of the site.  
Sydney Fish Market representative (250315_1)

Interview participants often noted the number of people that like to come and watch boats unload, or witness the annual beach haul fishery catching Mullet. Closely related to this were discussions about the many wharves and jetties associated with the professional industry, the majority of which are open to the public and are popular locations for people to walk along and look at the boats. Recreational fishers also use these jetties and wharves as safe, accessible fishing platforms.

We know that licenced jetty, we can fence it off... but we insist on leaving it open to the public because it’s just making people realise where their fish come from... we’re finding in December, January when there’s a lot of tourists here, there’d be 20, 30 of them, people down on the jetties watching the boats unload, taking photos with their kids with tunas and stuff like that. We encourage it. We know that it’s a fine line between OH&S too but we’ve just got to make sure that they’re safe. We encourage it.  
Co-operative Manager (060515_1) South Coast

Despite recognising that tourists are looking for seafood product and seafood experiences when on holidays, many of interviews with people involved in the tourism industry highlighted that this was an area which has to date received little attention.
There is a lot of people who wouldn't see that, particularly if you're from the larger city area... If you live in the country, those things are pretty normal to you. You see them everyday. But there is also lots of people who don't see them every day and don't realise what exactly happens and how that process works. I think absolutely it would be something that would be a marketable tourism experience. Council tourism and marketing manager (031114_2) Mid North Coast

Another important relationship highlighted through the interviews was the relationship between the recreational and professional sectors. Both sectors were considered to make important economic contributions to local communities and these contributions were often seen as interdependent. One of the most significant contributions to recreational fishers highlighted in the interviews is in through the provision of bait. The importance of this market has led many professional fishers to specialize in this area only, with some commenting that they receive a higher price for their product as bait than they do if it is sold for human consumption. A number commented on the high expectations of Australian recreational fishers in relation to the quality of the bait they purchase.

If you don't sell human consumption [standard] for bait you will not last, you will go broke. They do because they try to think oh well that stuff there if we can get it cheap we'd be able to put it in bait bags, but when people go in the shop for their bait they want top quality. Wholesaler (040515_2) South coast

Many of the professional fishers we interviewed also discussed how they would on occasion share some of their knowledge of fish and fishing with recreational fishers as a gesture of goodwill. Others discussed being ‘followed' by recreational fishers who understood that professional fishers would likely have an intimate knowledge of the best fishing spots at any given time and seek to piggy back on that knowledge to maximize their own catches.

Yeah, people are definitely interested in what you do... If you share some data with them, they love it. That's priceless, because they'll come back the next day and they'll say you were right, thanks, I caught a big flathead over there just like you said or yeah, there was plenty of whiting there just like you said, thank you very much and they, in turn, become your agents of goodwill and they tell other people that no, he's not a jerk, he's actually alright this bloke. Fisher (180914_1) Hunter-Great Lakes

The professional fishers we interviewed were frequently involved in search and rescue operations in local waterways, with recreational fishers one of the primary beneficiaries of these services. Of the fishers interviewed, 62% discussed their first-hand experiences of towing in vessels or vehicles that had run in to trouble, being involved in rescues of people they had come across by chance, or taking part in more coordinated search and rescue operations.

I pulled four souls out of the water last year from an overturned boat; towed many, many more broken-down boats back to the ramp. Because of our presence on the water and because fish tend to run better in very, very bad weather, we tend to be out there and we tend to be the first responders when there is something goes wrong. Fisher (180914_1) Great Lakes – Hunter

Finally, our interviews revealed the active role the NSW industry plays in advocating for improved water quality and catchment management across the state. This is a primary concern for the industry given the direct relationship between environmental health and fish stocks. This is another area of common interest with recreational fishers. Of the professional fishers we interviewed nearly half (48%) discussed having been actively involved in
environmental or fisheries management committees either currently or in the past. For example, many of the local government authorities we interviewed involved professional fishers in their estuary or catchment management committees as a means of tapping into their knowledge of local waterways. Other examples included a recreational fishing group who had enlisted the help of a few knowledgeable professional fishers to gain their insight and advice on a project to rehabilitate a degraded wetland system, and professional fishers acting as advocates to reduce pollution and contamination issues in a South Coast estuary.

It's probably something the public don't realise - is that stewardship and advocacy that they do on the public's behalf which is often unrecognised... the public don't often make that link about their role as the stewards and eyes and ears. Council Natural Resources Manager (041214_1a) Central Coast - Hawkesbury

**Economic valuation methods**

Data on fisher expenditure from the economic questionnaires and catch and price data was used to estimate the economic contributions of the professional fishing industry to the NSW economy (Table 1). It found that at the NSW State level, professional fishing generated approximately $436m-$501m in revenue, $215m-$248m added value, $117m-$137m in household income. In addition, the sector employs a total of between 3,291 and 3,857 full time jobs across NSW, which would translate into many more part time and casual jobs across the fishing and secondary industries.

**Table 1. The regional primary catching sector with retail and processing estimates (low and high).**

<table>
<thead>
<tr>
<th>All NSW</th>
<th>Output ($m)</th>
<th>Added Value ($m)</th>
<th>Income ($m)</th>
<th>Employment (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catching sector</td>
<td>219.10</td>
<td>104.50</td>
<td>50.90</td>
<td>1,402.90</td>
</tr>
<tr>
<td>Retail and processing (est.) low</td>
<td>217.03</td>
<td>110.60</td>
<td>66.50</td>
<td>1,887.90</td>
</tr>
<tr>
<td>Total (est.) low</td>
<td>436.13</td>
<td>215.06</td>
<td>117.40</td>
<td>3,290.80</td>
</tr>
<tr>
<td>Retail and processing (est.) high</td>
<td>282.14</td>
<td>143.73</td>
<td>86.45</td>
<td>2,454.24</td>
</tr>
<tr>
<td>Total (est.) high</td>
<td>501.24</td>
<td>248.23</td>
<td>137.35</td>
<td>3,857.14</td>
</tr>
</tbody>
</table>

A 2013 survey of recreational fishing in NSW estimated saltwater fishers spend $39 million/year on bait and burley (McIlgorm & Pepperell, 2013). An analysis of NSW catch and price data indicated that bait species such as School prawns and Sardines (Pilchards) caught by the NSW wild-catch industry are likely to account for up to a quarter of this product. In particular packaging of Sardines/Sprats and School prawns often occurs in regional areas rather than through the central market, and therefore directly contributes to regional economies.
Social questionnaires

The social questionnaires were used to explore key ideas highlighted in the qualitative fieldwork. The two aspects of ‘seafood tourism’ (seafood as a tourism product and the industry as a tourism attraction or experience) were explored through the general public and tourism operator questionnaires. The general public questionnaire indicated that 89% of respondents expect to eat local seafood when they visit the NSW coast and 76% felt that eating local seafood was an important part of their coastal holiday experience. In addition, 64% of respondents indicated they would be interested in watching professional fishers at work while on holidays (Table 2). Recreational fishers were significantly more interested in seafood being a part of their holiday experience and in watching professional fishers at work while on holidays.

Table 2. Attitudes towards seafood and the tourism potential of the professional fishing industry by NSW general public, including recreational fishers and non-fishers (with statistically significant differences highlighted <0.05)

<table>
<thead>
<tr>
<th>Agreement (i.e. agree or strongly agree) with the following statements (%)</th>
<th>All</th>
<th>Rec’l fisher</th>
<th>Non-fisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>I expect to eat local fish or seafood from the local region when I visit the NSW coast</td>
<td>89%</td>
<td>92%</td>
<td>87%</td>
</tr>
<tr>
<td>Eating seafood caught or grown in the local region is an important part of my coastal holiday experience</td>
<td>76%</td>
<td>85%</td>
<td>70%</td>
</tr>
<tr>
<td>I would be interested in watching professional fishers at work when on a coastal holiday (e.g. unloading their catch)</td>
<td>64%</td>
<td>74%</td>
<td>58%</td>
</tr>
<tr>
<td>Seeing professional fishers at work detracts from my enjoyment of the coastal environment when on holiday</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
</tbody>
</table>

These results were supported by the opinions of the tourism operators surveyed. This found that 100% of the tourism operators who responded to the questionnaire felt that visitors and tourists expect to eat local seafood when they visit the NSW coast, and 98% believed that eating seafood was an important part of their customer’s holiday experience. They also strongly agreed that the history of the industry (83%) and the spectacle of watching fishers at work (75%) were important aspects of the tourism experience in their area. Of the businesses surveyed 84% said they are ‘often’ or ‘always’ asked to provide advice to tourists on where to access local seafood.

Despite this only half (50%) of the tourism operators we surveyed had previously undertaken some form of promotional activity that featured the seafood industry and 58% said they participate in cross-promotional activity with seafood outlets. So, while recognising that tourists are looking for seafood product and seafood experiences when on holidays, this is an area with untapped potential.

Over a third (35%) of the respondents to the general public questionnaire identified as recreational fishers and they showed high levels of interest and engagement with the professional fishing industry and the products it supplies. In most cases there were no significant differences between fisher and non-fisher attitudes towards a range of questions relating to industry value, sustainability or seafood provenance (Table 3). Recreational fishers were, however, significantly more likely to indicate that they were ‘extremely interested’ in knowing where their seafood comes from. They also were significantly more likely to indicate that they ‘often’ chose local seafood product when purchasing seafood and were more likely to make these purchases from their local co-operative. Finally, NSW recreational fishers surveyed showed strong support for the use of local bait.
Table 3. Comparison of fisher versus non fisher response from the general public questionnaire relating to the NSW professional fishing industry and seafood purchasing (with statistically significant differences highlighted <0.05)

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Rec’l fisher</th>
<th>Non-fisher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes towards sustainability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can rely on the local commercial fishing industry to act in ways that will sustain fish populations for future generations</td>
<td>67%</td>
<td>74%</td>
<td>69%</td>
</tr>
<tr>
<td>The NSW commercial fishing industry should not be allowed to continue, because its environmental costs outweigh its social and economic benefits</td>
<td>12%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Attitudes towards value of the industry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The commercial fishing industry provides important employment opportunities in many NSW coastal towns</td>
<td>91%</td>
<td>92%</td>
<td>90%</td>
</tr>
<tr>
<td>I believe it is important we produce our own seafood in NSW and reduce our reliance on food imports</td>
<td>94%</td>
<td>94%</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Interest in seafood provenance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer local fish or seafood even if it costs more</td>
<td>89%</td>
<td>91%</td>
<td>88%</td>
</tr>
<tr>
<td>I prefer local fish or seafood because it is better for the local community</td>
<td>96%</td>
<td>97%</td>
<td>95%</td>
</tr>
<tr>
<td>Prefer to purchase from local fishermen's co-op or SFM</td>
<td>40%</td>
<td>47%</td>
<td>36%</td>
</tr>
<tr>
<td>Often purchase local seafood</td>
<td>40%</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>Extremely interested in knowing source of seafood</td>
<td>37%</td>
<td>44%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Interest in provenance of bait products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is better for my local community to purchase local bait than bait sourced from other countries</td>
<td>n/a</td>
<td>90%</td>
<td>n/a</td>
</tr>
<tr>
<td>I prefer to use local bait even if it is more expensive</td>
<td></td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>It is better for the marine environment to purchase local bait for recreational fishing than bait sourced from other countries</td>
<td>79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can catch more fish when I purchase local bait than bait sourced from other countries</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

One of the most significant findings of this two year project, which examined a diverse set of industry contributions to coastal communities, was the highly complementary and interdependent social and economic relationships that currently exist between the NSW wild-catch professional fishing sector and both regional tourism and recreational fishing. These relationships are under-studied and relatively unrecognised in the popular discourse that tends to portray professional fishing as being in conflict with recreational fishing and tourism. Both sets of relationships also offer significant potential for growth, with many opportunities to develop new and innovative approaches to tapping into consumer interest in the fishing industry and demand for the products it supplies.

The high level of interest in eating local seafood and watching professional fishers at work while on holidays indicates the significant potential to grow ‘seafood’ tourism in NSW. This was especially strong amongst recreational fishers, suggesting that efforts to market the seafood industry as a tourism product may benefit from targeted campaigns amongst the recreational fishing community. The interviews revealed some local examples of tourism and hospitality operators tapping into the ‘seafood tourism’ market potential. Presently, however,
relationships between the two industries are largely informal, and there is the potential for this to be built further for mutual benefit. Local connections between the tourism and fishing industries would facilitate improved supply chains between fishers and hospitality businesses, as well as assisting to improve social licence concerns and attract additional tourism dollars. Regional and state government agencies seeking to foster regional development may also benefit from closer working relationships between the tourism and the professional fishing sectors, as well as the agencies that manage them.

One of the most significant barriers to supporting and nurturing profitable and professional fishing sectors in regional communities is the resource conflict that occurs with recreational fishers. This conflict often manifests itself in campaigns to further restrict professional fishing, especially in productive estuarine areas. These campaigns contend that recreational fishing is ‘worth’ more than professional fishing and therefore should be given preferential (often exclusive) resource access. Economic comparisons between the recreational and professional wild-catch sector are problematic, however, for a number of methodological and ethical reasons. Perhaps most significant is the failure of comparisons of this nature to recognise the high degree of economic interdependency that exists between the two sectors. The wild-catch industry and the recreational fishing sector are economically interdependent through the provision of bait products, especially Sardines (Pilchards) and School prawns. These two high-value and high-volume bait products are largely traded outside the SFM system, ensuring the profits from secondary value adding benefit regional areas. Our investigation quantifies the extent to which the NSW wild-catch industry contributes to recreational bait sales, with analysis of catch data indicating that it may account for up to a quarter of the $39 million spent on bait and burley by recreational fishers in NSW each year (McIlgorm & Pepperell, 2013, Voyer et al., 2016).

Despite recreational fishing group spokespeople often fanning conflict and calling for the removal of professional fishing from popular fishing grounds, this mixed methods study showed that recreational fishers gain many benefits from professional fishing, and would feel a net negative impact if professional fishing were to cease to exist in the areas they visit. This project revealed that recreational fishers are much more engaged in questions around seafood quality and provenance than non-fishers and therefore are more likely to support their local industry, especially their local co-operatives, when purchasing seafood products. This suggests that arguments that pit recreational against professional in the fight for the tourism dollar are likely to be counterproductive to the interests of both groups. It also indicates a failure to recognise the complexity of factors that drive tourists to visit regional NSW communities. Recreational fishers are rarely likely to be ‘purely’ recreational fishing tourists. Recreational fishing is one of range of activities that visitors might undertake when on holidays and for a large proportion of them these activities are also likely to include eating local seafood at restaurants and takeaway food shops or purchasing prawns or other seafood products from the local co-operative or fish retailer.

Our study made a number of recommendations that are immediately relevant to addressing key blockages and barriers to enhancing cross-sectoral collaboration and growth. These include:

- Develop strategies to enhance linking social capital between professional fishers and all layers of government and other sectoral groups. Consideration should be given to organising industry representation through regional economic networks, rather than only through fishing industry associations. These should include enhancing industry networks with environmental, regional development and tourism authorities to facilitate the development of mutually beneficial relationships aimed at improving environmental health of waterways and the growth of ‘seafood’ tourism. This tourism should include promoting seafood industry experiences as well as meals, for
example, experiencing a Mullet haul or watching vessels unload at commercial wharves.

- Develop a communication and engagement plan to address concerns around social licence, including providing targeted information to recreational fishers highlighting the areas of mutual interest that exist between the professional and recreational sectors. In addition, develop general information about inshore fishing methods, statistics on environmental performance (including levels of bycatch), the value of the fishing industry to local communities and stories about local professional fishing people. Communication pieces should target coastal residents, especially those residing in areas where fishing is a visible presence.

- Research and collate the environmental and social history of professional fishing in NSW with special focus on the environmental knowledge and oral histories of current and past members of the industry.

- Conduct market research into value chains and interactions with the post-harvest sector, outlining the alternative marketing options available to fishers and tourism operators, and including advice on accessing local markets and building connections with the tourism and hospitality industry.

Addressing these recommendations will go a long way towards growing the shared benefits of a sustainable, viable and healthy local professional fishing industry.

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