Diversity in Australia’s fishing industry workforce

About this information sheet
The Australian Bureau of Agricultural and Resources Economics and Sciences (ABARES) has developed this information sheet to inform policy and decision makers about the diverse people and communities that contribute to the Australian fishing industry.

Unless otherwise specified, this information sheet uses data from the 2006 and 2011 Australian Bureau of Statistics’ Census of Population and Housing. For further information, or for assistance interpreting these statistics, please contact the ABARES Social Sciences Section.

Who are Australia’s fishing employees?
This information sheet defines the fishing industry as:
- wild catch commercial fishing
- off-shore and land based aquaculture
- seafood processing and wholesale.

While the industry also includes fisheries support services, this category is not captured separately by the ABS Census data and is therefore not represented here.

Between 2006 and 2011, the number of people directly employed in the fishing industry fell by nine per cent to 12,120 people. This may be related to the declining annual output of several Australian wild catch fisheries (Skirtun et al. 2011).

Statistics of interest
In 2011:
- Approximately three per cent of people directly employed in the fishing industry (353 people) identified as Indigenous. This is higher than their representation in the general Australian workforce.
- Approximately 17 per cent of fishing industry workers (2,170 people) were from culturally and linguistically diverse backgrounds.
- Women represented 27 per cent of employees in the fishing industry (3,368 people) – lower than their participation in the general Australian workforce.
- Young people accounted for 19 per cent of fishing industry employees (2,376 people).

1 Industry categories are classified by Australian Bureau of Statistics (ABS) using the Australian New Zealand Standard Industrial Classification (ANZIC) 2006, Revision 1.
The majority of fishing industry employees live in New South Wales, Queensland and Tasmania (Map 1).

MAP 1 Place of usual residence of all fishing industry employees, 2011

The largest proportion of fishing employees is aged between 45 – 49 years (Figure 1). The median age of fishing industry employees is 43 years, which is slightly older than the median age of the general Australian workforce (40 years).

FIGURE 1 Age distribution of fishing industry employees and the general Australian workforce, 2011

The fish and seafood wholesaling sector employs the largest proportion of fishing industry employees (Figure 2). Across the entire fishing industry, most employees are:

- Labourers (39 per cent; 4 673 people)
- Managers (26 per cent; 3 109 people)

FIGURE 2 Employment in fishing sub-industries, 2011

Income and work status

More than half (58 per cent) of fishing industry employees earn less than $800 a week, compared with 45 per cent of employees in the general workforce. Many fishing vessel crews in wild catch fishing are not paid regular wages, but instead receive a proportion of the value of the catch (Primary Industries Skills Council 2013).

Twenty nine per cent of fishing industry employees worked on a part-time basis (less than 35 hours a week), which may be related to the seasonal nature of many wild catch fisheries. Seafood processing has a large number of casual staff who process fish and seafood in the mornings for daily delivery to shops and restaurants (Primary Industries Skills Council 2013).

Education

Fishing industry employees tend to have lower levels of formal education than the general Australian workforce (Table 1). In 2011, 40 a cent of fishing industry employees had completed year 12 or equivalent, and 39 a cent held a post-school qualification.

The maritime skills used in the fishing industry can be transferred to employment on a range of vessels, including charter boats, passenger liners and oil tankers (Primary Industries Skills Council 2013).
Diversity in Australia’s fishing industry workforce

TABLE 1
Comparison of completed formal qualifications of fishing industry employees and the general Australian workforce, 2011

<table>
<thead>
<tr>
<th>Completed qualification</th>
<th>% of fishing employees</th>
<th>% of Australian workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 12 or equivalent</td>
<td>40</td>
<td>59</td>
</tr>
<tr>
<td>Certificate</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Diploma/advanced diploma</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Graduate diploma/graduate certificate</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Achieving year 12 or equivalent does not preclude other qualifications.
Source: ABS Census of Population and Housing

The term ‘Indigenous’ refers to both Aboriginal and Torres Strait Islanders. An Indigenous person is someone who (ABS 2010):
• is of Aboriginal or Torres Strait Islander descent
• identifies as being of Aboriginal or Torres Strait Islander origin, and
• is accepted as such by the Indigenous community with which the person associates.

Indigenous fishing employees

Indigenous people provided most of the labour for Australia’s early commercial fishing ventures, often working for minimal pay as deck hands or divers in dangerous conditions (Durette 2007).

In 2011, 353 Indigenous people were directly employed in the Australian fishing industry, making up 2.9 per cent of the industry’s workforce. This is higher than Indigenous people’s representation in the general Australian workforce (1.6 per cent).

For many Indigenous people fishing plays an important role in their cultural lifestyle as well as providing an important source of food and nutrition (ABS 2004). In many cases, Indigenous people have acquired fishing skills based on traditional fishing methods such as the use of particular nets, lures, traps and other methods.

One in four Indigenous people working in the industry were women. This is higher than Indigenous women’s representation in the forestry industry (13 per cent) and about the same as Indigenous women’s representation in agricultural industries (22 per cent).

Indigenous employees tended to be younger than other fishing industry workers. In 2011, the median age of Indigenous employees was 38 years, compared with 43 years for the entire industry median age.

Location of employees

The largest proportion of Indigenous employees in the fishing industry live in Tasmania, Queensland and New South Wales (Table 2). This reflects the general distribution of all fishing industry employees.

TABLE 2
Indigenous fishing industry employment by State and Territory, 2011

<table>
<thead>
<tr>
<th>State</th>
<th>% of Indigenous fishing employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasmania</td>
<td>41</td>
</tr>
<tr>
<td>Queensland</td>
<td>18</td>
</tr>
<tr>
<td>New South Wales</td>
<td>18</td>
</tr>
<tr>
<td>South Australia</td>
<td>10</td>
</tr>
<tr>
<td>Western Australia</td>
<td>9</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>3</td>
</tr>
<tr>
<td>Victoria</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: There are no reported Indigenous persons employed in the fishing industry and living in the Australian Capital Territory.
Source: ABS Census of Population and Housing

Sub-industry and occupation

The largest proportion of Indigenous workers (35 per cent) is employed in aquaculture. Aquaculture ventures are suited to remote regions and several successful aquaculture farms have been established in Indigenous communities for species including pearl oysters, mud crabs and trochus (Durette 2007; Tedesco & Szakiel 2006).

Most Indigenous people working in the fishing industry are (Figure 3):
• Labourers (57 per cent; 202 people)
• Managers (17 per cent; 63 people)

The proportion of Indigenous employees working as managers remained constant between 2006 and 2011.

FIGURE 3: Occupation of Indigenous fishing industry employees, 2011

Source: ABS Census of Population and Housing
Education

Indigenous employees tend to have lower levels of formal education than the entire fishing industry. In 2011, approximately 25 per cent of Indigenous fishing workers indicated they had completed Year 12 or equivalent. Twenty-nine per cent of Indigenous workers had completed a form of post-school education, with most of these workers holding certificate level qualifications (Figure 4). Low levels of formal education may explain why Indigenous people hold fewer management level positions in the fishing industry (Prime Minister’s Report 2012).

FIGURE 4 Educational attainment of Indigenous fishing industry employees, 2011

No post-school qualification: 71.2%
Certificate: 24.5%
Diploma and advanced diploma: 3.3%
Bachelor degree: 0.9%

Source: ABS Census of Population and Housing

Indigenous cultural values

“Our connection to our land does not stop at the water’s edge. To us, the land and sea are one...We have sacred sites and dreaming tracks in and under the sea, just like we do on land”

Galarrwuy Yunupingu – National Press Club 1999
(Department of the Environment and Water Resources 2007).

Many Indigenous people have a strong cultural connection to the sea and participate in customary fishing, which is connected to the traditional responsibilities of land management and kinship. It occurs in accordance with Indigenous laws and customs, and enables indigenous people to engage and maintain cultural practices (Ridge Partners 2010). Indigenous fishing rights have been formally recognised by many state and territory governments, and it is estimated that 186 200 Indigenous people participated in customary fishing in 2000 (Henry and Lyle, 2003 in Skirtun et al. 2011).

People from CALD backgrounds in the fishing industry

A person from a Culturally and Linguistically Diverse (CALD) background is someone who identifies ‘...as having a cultural or linguistic affiliation by virtue of their place of birth, ancestry, ethnic origin, religion, preferred language(s) spoken at home, or because of their parents’ identification on a similar basis’.

Victorian Multicultural Strategy Unit, 2002 in (The Australian Psychological Society Ltd 2008)

It is a personal judgement whether people identify themselves as being from CALD backgrounds. This information sheet uses ‘language spoken at home’ as an indicator of a CALD background. This method captures both first and second generation Australians.

Fishing employees from CALD backgrounds

Migrants arriving in Australia after World War II played a significant role establishing Australia’s commercial fisheries. These pioneers hailed predominantly from Greece, Italy, Croatia and Portugal (Marine Education Society of Australasia nd). Several fisheries in New South Wales and South Australia were developed by CALD people, and many of the family fishing businesses they established are managed by their descendents.

Based on the number of employees who speak a language other than English at home, CALD people represented approximately 18 per cent (2 170 people) of fishing industry employees in 2011. Women represented 36 per cent of CALD fishing employees.

The official statistics do not fully capture the contribution of temporary workers from overseas and seasonal workers. The statistics may also underestimate CALD workers’ representation because language and literacy barriers can prevent CALD workers from completing data collection forms (Kancans, Steneles & Benedictos 2010).

While people from across the globe work in the Australian fishing industry, the majority of CALD employees were born in Asia and Oceania (Figure 5). In the future, more seasonal workers from the Pacific Islands may contribute to the industry, facilitated by the Australian Government’s Seasonal Worker Program, launched in 2012 (DEEW R 2012).

---

2 Based on the 2011 Census question ‘Does the person speak a language other than English at home?’ The analysis excludes English and Indigenous Australian languages (for Indigenous peoples participation in the fishing industry, see Indigenous fishing employees.)

3 ABS classifies Oceania as including Australia, New Zealand, Melanesia, Micronesia and Polynesia.
Diversity in Australia’s fishing industry workforce

FIGURE 5 Place of birth of CALD employees in the Australian fishing industry, 2011

<table>
<thead>
<tr>
<th>Place of Birth</th>
<th>% of CALD Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-East Asia</td>
<td>23.2</td>
</tr>
<tr>
<td>Oceania</td>
<td>12.2</td>
</tr>
<tr>
<td>North-East Asia</td>
<td>12.2</td>
</tr>
<tr>
<td>Southern and Eastern Europe</td>
<td>6.3</td>
</tr>
<tr>
<td>Southern and Central Asia</td>
<td>3.5</td>
</tr>
<tr>
<td>North-West Europe</td>
<td>1.6</td>
</tr>
<tr>
<td>Americas</td>
<td>1.6</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>1.5</td>
</tr>
<tr>
<td>North Africa and the Middle East</td>
<td>1.3</td>
</tr>
<tr>
<td>Not stated</td>
<td>0.0</td>
</tr>
</tbody>
</table>


English proficiency

In 2011, 359 fishing industry employees (16 per cent) indicated that they were not proficient in spoken English. Proficiency in English can influence a person’s workforce participation rate, employment and income levels. CALD workers in the fishing industry may not be literate in their native language or English, which can affect their ability to access information about the fishing industry and employment opportunities.

FIGURE 6 Proficiency in spoken English by CALD fishing industry employees, 2011

<table>
<thead>
<tr>
<th>Proficiency</th>
<th>% of CALD Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaks English very well</td>
<td>48.6</td>
</tr>
<tr>
<td>Speaks English well</td>
<td>34.7</td>
</tr>
<tr>
<td>Does not speak English well</td>
<td>15.7</td>
</tr>
<tr>
<td>English not spoken</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Women in the fishing industry

Fishing has been recorded as being largely dominated by male workers and little literature exists about the contributions women make to the industry. In 2011, women made up 46 per cent of the general Australian workforce but their representation in the fishing industry was 28 per cent (3 368 women). This ratio is similar to that in 2006. Approximately nine per cent of the 3 368 female employees in the Australian fishing industry indicated that they contributed to family fishing businesses. Women employees were slightly older than the general fishing industry, with a median age of 45 years.

Sub-industry and occupation

The distribution of roles in the fishing industry is strongly gender biased. While most vessel crew are male, it is often female employees who manage the land-based operations of the fishing enterprise, such as organising the sale of catch and ordering supplies (Lambeth et al. 2002).

Women are most strongly represented in shore-based fishing activities, such as seafood processing, where they make up 42 per cent of workers (Figure 8). There may be fewer women employed in off-shore activities because these roles require extended periods away from home that is incompatible with the family and household responsibilities of many women (Lambeth et al. 2002).
Department of Agriculture

FIGURE 8 Gender representation in fishing sub-industries, 2011

<table>
<thead>
<tr>
<th>Sub-industry</th>
<th>% Male</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing</td>
<td>80.5%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>76.7%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Fish and seafood wholesaling</td>
<td>68.4%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Seafood processing</td>
<td>58.5%</td>
<td>41.5%</td>
</tr>
</tbody>
</table>

Source: ABS Census of Population and Housing

The majority of women in the fishing industry were employed as:
- Labourers (35 per cent; 1 162 people)
- Clerical and administrative workers (34 per cent; 1 143 people)

Twenty one per cent of women in the fishing industry were owner-managers of the enterprise they worked in.

Education

In 2011, 36 per cent of female employees in the fishing industry had completed a post-school qualification. Of these women, most held a certificate level qualification (15 per cent) or a Bachelor’s degree (11 per cent).

FIGURE 9 Educational attainment of women working in the fishing industry, 2011

Young people in the fishing industry

In this information sheet young people are defined as those aged between 15 and 29 years.

Young people in the fishing industry

In 2011, young people represented 19 per cent of fishing industry employees (2 376 people), lower than their representation in the general Australian workforce (26 per cent). Young people’s representation in the fishing industry has decreased by five percentage points since 2006 (in 2006 young people represented 24 per cent of the fishing industry).

In 2011, 22 per cent of the young people employed in the fishing industry were female.

Sub-industry and occupation

Young people are most strongly represented in aquaculture and seafood wholesaling, where they make up 25 per cent and 21 per cent of employees, respectively (Figure 10).

FIGURE 10 Young employees in fishing sub-industries, 2011

<table>
<thead>
<tr>
<th>Sub-industry</th>
<th>% ≥30 years old</th>
<th>% &lt;30 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing</td>
<td>85.3%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Fish and seafood wholesaling</td>
<td>81.6%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Seafood processing</td>
<td>79.4%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>75.1%</td>
<td>24.9%</td>
</tr>
</tbody>
</table>

Source: ABS Census of Population and Housing

Most young people work as:
- Labourers (49 per cent; 1 154 people)
- Managers (18 per cent; 439 people)

In 2011, 6 per cent of young fishing industry employees indicated that they were owner-managers of a business. Just over 2 per cent of young workers were contributing to their family business.

Education

In 2011, 40 per cent of young fishing industry workers (892 people) had completed a post-school qualification. Most of these employees held a certificate level qualification (23 per cent) and 11 per cent had completed a bachelor degree.

Source: ABS Census of Population and Housing
Diversity in Australia’s fishing industry workforce

**FIGURE 11** Educational attainment of young people working in the fishing industry, 2011

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No post-school qualification</td>
<td>59.8%</td>
</tr>
<tr>
<td>Certificate</td>
<td>22.4%</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>10.9%</td>
</tr>
<tr>
<td>Diploma and advanced diploma</td>
<td>5.5%</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Source: ABS Census of Population and Housing

**Sources**


The Australian Psychological Society Ltd 2008, ’What’s the difference between NESB and CALD?,’ APS Interest Group on Psychology and Cultures Newsletter.