



Figure 2 and 3 –
brailing fish from net

Step 5- Killing of fish:

As beach seine species are smaller in size and catch numbers are usually higher than other catching methods it is preferable that the fish be initially placed into refrigerated seawater (RSW) or ice slurry to ensure most humane death, maximize product quality and to maximize the survival of non-target species until they can be returned to the water (Fig 5). Exposure to air should be reduced to a minimum.

Once the seine net is drawn, all captured fish should be removed from the net as quickly as possible. Targeted species are generally removed from the net and placed directly into refrigerated seawater or an ice slurry bin to reduce activity, reduce stress and induce stunning.

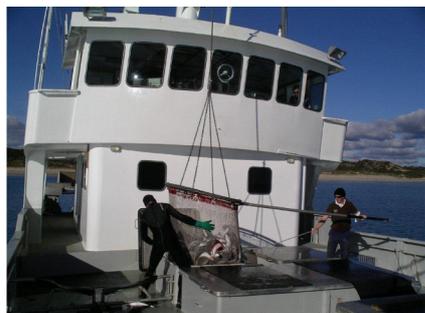


Figure 4 – placing fish
immediately into refrigerated
sea water

There is a trend in other commercial fish production industries (eg. aquaculture/line fisheries) to use killing methods that are designed to kill fish individually. Prolonging the overall pre-killing (capture) process to facilitate the killing of fish may increase the overall stress of the captured population as a whole in commercial beach seining operations however some local government regulations make this difficult when operating on public beaches.

With larger catches, spiking (ike jime) is inefficient and the time taken to spike large numbers of fish increases stress and reduces product quality.

DUTY OF CARE

While the goal of fishers should be to apply the principles in this Guideline if ever a situation arises where a decision needs to be made between following the principles outlined in this Guideline and ensuring worker safety then AT ALL TIMES worker safety must take precedence.

Workplace safety is of the upmost of importance and must not be compromised under any circumstances.

It is acknowledged that employers have a duty of care to provide individual fishers with a safe workplace and to adhere to all laws and standards to prevent unsafe practices.

Individual fishers have a duty of care to work in a safe manner and at all time to adhere to the work standards and levels of safety stipulated by the vessel owners and managers.

RESEARCH AND INFORMATION GATHERING

Beach seining is a method used to capture fish across a variety of target species. Beach seine fishers can capture many fish in one shot. There is limited information which identifies valid, robust and practically feasible indicators to evaluate the welfare of these species during the capture and slaughter process.

It may also compromise the safety of the crew and quality of the product.

Beach seine fishers should continue to actively pursue research and information gathering to assist in the evaluation of capture and killing techniques and continuously improve methods for capture and killing of the different targeted species. Fishers should communicate information on any new methods or information to other fishers through industry associations.

As effective, practical and cost-effective methods become available to kill captured fish, these methods should be adopted by industry to enhance fish welfare.

ATTACHMENT A

Aquatic Animal Welfare – Overarching Principles

In the context of Aquatic Sector of the Aquatic Animal Welfare Working Group under the Australian Animal Welfare Strategy (AAWS), only vertebrate finfish are considered Aquatic Animals; other aquatic vertebrates are considered under other Sectors of AAWS. **(Note 1)**

The approach taken with animal welfare to date within the Aquatic Animal sector has been to establish overarching Principles against which sub-sectors can build their specific best practice guidelines to achieve animal welfare. **(Note 2)**

The overall aim of the aquatic sector (fish that are farmed, being transported, kept in aquaria, captured from the wild both commercial and recreational, or in aquaria in restaurants) should be to minimise suffering within the constraint of practices inherent to that sub-sector. **(Note 3)**

Specific measures include:

1. For fish held in captivity, the key parameters (temperature, salinity, pH, dissolved oxygen, & metabolites) of the aquatic environment in which fish are maintained should be within the species' natural range of tolerance.
2. For fish held in captivity, the holding unit in which they are normally housed should provide
 - safety from predators,
 - refuge from environmental extremes beyond their natural range of tolerance,
 - appropriate space,
 - appropriate space and/or water flow to avoid chronic degradation of water quality parameters referred to in point 1 above. **(Note 4)**
3. For fish held in captivity the feed supplied should meet known nutritional requirements, and be distributed in a manner and frequency which avoids starvation for periods longer than the species natural range of tolerance.
4. For fish held in captivity, any visibly damaged or sick fish should be assessed and either treated appropriately or promptly removed for killing by humane means suitable for the species.
5. During any handling of live fish,
 - care should be taken to avoid any damage to the fish
 - for prolonged handling of fish out of water (e.g. health checks, vet treatment, artificial reproduction, etc), an anaesthetic appropriate for the species and frequent irrigation of skin and gills is essential
 - fish intended to remain alive should be returned to the water promptly.
6. Any fish selected for harvest should be killed as rapidly as possible, by humane means suitable for the species
7. For fish harvested from the wild timely handling from capture to death is essential to minimise suffering. **(Note 5)**
8. Capture methods should be designed to minimise the capture of unwanted fish.

EXPLANATORY NOTES

Note 1: The duty of care principles are couched within the Australian Animal Welfare Strategy under which these specific aquatic animal principles will be applied.

Note 2: As a code there is no legislative basis. Words such as 'must' hold no relevance. Animal Welfare legislation is the place for definitives and the code assists operators to meet those definitives through words such as 'should'.

Note 3: Suffering is inclusive of pain and other issues of animal welfare.

Note 4: This principle when read with principle 1 covers all aspects. The detail of parameters such as water flow, stocking density, behavioural aspects and space will be in the sub-sector code themselves depending on operational method and species.

Note 5: 'Capture' as defined in sub-sector codes.