

Oyster Theft Prevention

December 2014

Since oyster farming commenced in NSW so did the temptation to illegally remove stock from oyster leases for either personal consumption or for profit. Each year oyster theft costs oyster farmers many thousands of dollars, both in lost stock, lost cultivation equipment and in some instances damage to lease infrastructure.

The consumption of stolen oysters also poses a serious public health risk as the oysters may be taken in contravention of statutory harvest closure initiated under the NSW Shellfish Program. The illegal sale of oysters is a serious offence under the *NSW Food Act 2003* with penalties of up to \$275,000 and/or imprisonment.

All theft and deliberate damage to lease infrastructure is also treated as a serious crime by Fisheries Officers and Police. Theft may be large scale, perpetrated by organised criminals to take product for black market sales; it may be perpetrated by other oyster farmers; or it may be small scale opportunistic theft by people on the water.

By taking preventative steps and making it harder for would-be thieves, the instance of theft on oyster leases can be reduced.

Preventative Measures

To effectively deter theft you firstly need to know what is going on around your oyster lease and land base areas. Work together with fellow oyster farmers in your estuary and keep an eye on each other's leases and facilities.

Pay attention to people in boats and canoes near or entering leased areas, particularly late in the afternoon or early evening as they may be waiting for an opportunity to remove oysters. They may also be noting where stock is located, how to gain access to a lease, or when the lease is unattended.

A simple deterrent is to take note of boat registration numbers and make the occupants of the boat aware that you are doing so.

Check your stock regularly (Fig.1) so that you can identify theft as early as possible. Stolen stock can be quickly disposed of, or relocated, and the local

Fisheries Officers, NSW Food Authority and Police will have a better chance of tracking it down if the theft is recent. If a lessee suspects another oyster farmer is involved their suspicions should be conveyed to the local Fisheries Office and/or NSW Police.

Figure 1. Check your oyster stock regularly and be aware of what is going on around your oyster lease.



Image: NSW DPI

People living in the vicinity of leases should be encouraged to report suspicious activity. Cultivate the cooperation of neighbours and make sure they have the names and phone numbers of people they can contact. If your leases are in an estuary where commercial fishing is undertaken you should ask the commercial fishers to keep an eye out for and report suspicious activity in or around leases. These commercial fishers are regularly on the water during the night and early morning particularly during the warmer months, when oysters are most highly sought after and theft is most prevalent.

Access and theft may be discouraged by placing lengths of floating 90 mm plastic stormwater pipe (covered so it's black to meet OISAS visual amenity guidelines) across the space between racks within the lease area. Fences to prevent wind and boat wash can also help to impede and slow access to valuable stock but must be approved by NSW DPI prior to construction.

It is also good common sense not to place valuable harvestable stock on the outer rack or long-line of a lease area that will be easily

accessible for either large scale or opportunistic theft.

Obviously, don't leave valuable stock where it is highly visible and easily assessable either at your land base site or on punts. If the land base site is visible from the road, make sure it is fenced, has lockable gates and is well lit at night. Lock up your sheds and land base site when you leave for the day (Fig.2) and where possible have an alarm system fitted. You may also want to consider the installation of security surveillance cameras (see below).

Figure 2. Lock your sheds when you leave for the day.



Image: NSW DPI

Use the media in the lead up to and during the Christmas and Easter holidays to alert people to the risks they take and the penalties they may incur if they steal, buy or consume oysters which have been illegally taken. Stories in local newspapers and on television news may also help to elicit information on thefts if they occur.

Surveillance Cameras

The cost of weatherproof surveillance cameras capable of taking high resolution photographs and/or video footage (Fig.3) has dropped significantly in recent years. The recent development of "black flash" technology is now a standard option with many of these systems. This flash technology does not alert a thief to the camera when images are taken at night. A number of these systems also have a wireless option that enables multiple cameras to transmit images to a small weatherproof battery operated "black box" storage device located in the vicinity.

Cameras are in use in a number of estuaries and have been successful in reducing the occurrences of theft. Just the obvious presence of a camera will often deter most thieves.

In some instances where oyster farmers have placed imitation cameras on leases they have noted a marked drop in the occurrences of theft in these areas.

Figure 3. Surveillance cameras are a deterrent.



Image: NSW DPI

A word of caution, where these imitation cameras are used it is good practice to have at least one or more real camera which you can move between areas.

Remote Surveillance Access

The ability to access security systems remotely is now also a common feature of many computer enabled security systems. These systems can be accessed remotely from a Smartphone, Tablet device or another web-enabled computer. These systems enable you to check your security and alarm systems, arm or disarm them and view security camera feeds. However these systems are reliant on the availability of landline or mobile phone coverage.

Stand-alone solar powered motion activated security cameras that operate on the 3G mobile phone network are also available. However these systems tend to be expensive.

Hydrophones

In one instance an oyster farmer has installed a hydrophone (underwater listening device) on the bed of the bay where his leases are located. The hydrophone is connected by cable to a computer at the land base and monitors boating traffic in the bay twenty four hours a day.

This method is suited to areas where the leases are located in close proximity to the land base and where there is generally little boating activity around lease areas particularly at night.

Noises from boats and motors can be picked up from a considerable distance and increase in pitch as the boat moves closer to the location of the hydrophone. The system is also able to detect if a boat has slowed, is idling or if the motor has been turned off. Other sounds such as loading of gear into a boat and interference with lease infrastructure may also be detected.

Infrastructure Branding and Stock Marking

The ability to obtain a conviction for theft is dependent on proof that the stock or infrastructure (baskets or trays) in question is the property of the victim. Heat branding plastic trays and baskets is one simple way that this can be achieved. A simple branding device can be made by welding together a unique set of alphanumeric metal punches available from most hardware stores to form a branding iron. The details of the brand and its location on your infrastructure should be provided to your local Fisheries Office.

Some farmers have resorted to the use of secreted microchips to identify their infrastructure.

Where there are suspicions as to the identity of a thief, other covert measures can be used in cooperation with local Fisheries Officers to identify oysters and infrastructure that will assist in a successful conviction.

The use of spray on DataDot technology can also be used to mark valuable outboard motors, tools and other equipment that is stored at the land base site. DataDots are minute coded dots that uniquely identify the owner of the property which are very difficult to detect and can only be read using specialised equipment. DataDots are available in a spray can and uniquely match the code number of the can.

Lighting and Signage

The installation of either solar powered or hard wired motion activated flood lighting at land base sites will deter most thieves, particularly where camera surveillance is suspected.

In some instances farmers have resorted to the use of low powered solar powered lights on leases. These lights can be fitted with a timing device which will allow them to come on at irregular intervals giving the appearance that there is someone on the lease. They may also give the impression that a commercial fisher is working the area. These devices should not be used where they can result in navigation confusion.

The placing of signs (Fig.4) which indicate the penalties for oyster theft on lease boundaries along with signs indicating the lease is under constant video surveillance should deter most would be thieves. Signs indicating the dangers of eating oysters that have not been harvested under the rules of the NSW Shellfish Program may also act as a deterrent.

Figure 4. Signs are a deterrent.



Image: NSW DPI

Operation Trident

Operation Trident is an on-going operation involving officers from NSW DPI, NSW Food Authority and NSW Police, that targets the theft and illegal sale of oysters in NSW. This multi-agency operation allows these agencies to share resources, intelligence and information that will better enable those responsible for the theft and illegal sale of oysters to be caught.

Members of the public and oyster farmers who have information regarding the theft or illegal sale of oysters are encouraged to call Crime Stoppers on 1800 333 000.

More information

Contact the Fisheries Office in your local area or NSW DPI Aquaculture Management on (02) 4982 1232.

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