

DPI Primefact

NSW Prawn Farms: Enhanced biosecurity measures

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White spot is a highly contagious disease of decapod crustaceans, known to cause significant mortality on farmed prawn populations. In early 2023, NSW DPI initiated a response to a white spot disease outbreak in prawn ponds in northern NSW aquaculture premises.

NSW prawn farms are required to implement several measures to minimise the risk of future white spot infection following all disease response actions being completed on-farm. In addition, farms may wish to take additional actions to further reduce the risk of white spot or other prawn disease introduction.

Biosecurity requirements to minimise the risk of introduction and spread of white spot disease

These measures relate to prawns, crabs, lobsters, yabbies (decapod crustaceans) and beach (polychaete) worms

Prawn related requirements

Suspected disease incursion

- If a NSW prawn farm suspects white spot disease on the premises, they must notify NSW DPI immediately via the 24-hour EAD Hotline 1800 675 888.
- The farmer must also take necessary steps to shut off all water exchange from and within the entire farm.

Bringing prawns on to the farm

- Prawns – both broodstock and post larvae (young prawns) can only be introduced into farm production areas if they have met testing requirements according to NSW Translocation Health Protocols. This testing will ensure the prawns are free of white spot and other diseases of concern before post larvae (PL) are stocked into prawn ponds.
- Cooked prawns are of low risk for white spot disease and may be brought onto the farm e.g., for human consumption

Prawn feed and beach worms

- No uncooked, untreated, or untested beach worms are to be moved onto prawn farms for any purpose, including for prawn feed.
- Prawn farms may only use feed that is suitable for prawn farming. This includes commercially sourced prawn feed that meets Commonwealth treatment requirements, or certified disease-free beach worms from a reliable source.

Dead prawn disposal

- Dead prawns that are removed during routine production from ponds or tanks must be disposed of away from the waterway and in a way that ensures scavenging animals cannot access them.

Water

- Tidal water exchange must be minimised through appropriate measures between the production areas and the Clarence River (or natural watercourses).
- Discharge water must be screened at ponds, tanks, and discharge points to minimise the risk of stock escaping from farm areas.
- Discharge water must be able to be completely and securely shut off from both ponds and the entire premise if there is suspicion or occurrence of a notifiable disease on the farm.
- After each production season, aquaculture premises must maintain the pond edges, walls, and drainage channels to ensure there is no leakage from the premise.

Movement of vehicles, vessels, and equipment

- Vehicles, vessels, and equipment (including all fittings) cannot be moved onto a NSW prawn farm unless they have been suitably cleaned of all visible debris and organic material.
- Cleaning of equipment moved onto NSW prawn farms for use in production areas must be cleaned and disinfected according to [Australian Pest and Veterinary Medicines Authority Permit number PER91179](#).

Directions for general disinfectant to kill microorganisms within prawn aquaculture facilities:

Situation	Rate
Clean hard surfaces	Minimum of 30 mg/L available chlorine.
Water (low organic load)	Minimum of 30 mg/L available chlorine. Allow for a minimum of 24 hours contact time. Maintain a minimum of 5 mg/L residual available chlorine.
Absorbent materials such as dip nets, clothing, ropes, or absorbent surfaces	Minimum of 200 mg/L available chlorine. Allow for a minimum 2 minutes of contact time. Rinse thoroughly with fresh water prior to use.
Floors and walls in aquaculture facilities	Minimum of 1500 mg/L available chlorine. Allow for a minimum 2 hours of contact time. Rinse thoroughly with freshwater prior to use.
Tanks	Fill with freshwater and dose with a minimum of 200 mg/L available chlorine. Allow for a minimum 24 hours of contact time.

Staff and visitors

- Entry into production areas of NSW prawn farms must be carefully monitored and records kept for future tracing needs. Note: this measure does not require records to be kept for 'clean' areas such as residential homes that may be on premises.

- Disposable coveralls or clean clothing and clean footwear must be worn if entering production areas on a NSW prawn farm. At the end of the day/visit, footwear must be cleaned, clothes must be laundered, and coveralls disposed of to landfill



Figure 1 Prawns showing white spot lesions

Record keeping

- Records of all critical movements of staff, equipment, feed, prawn stock and production related vehicles and vessels must be kept for 12 months. These records may become important in investigations for any future responses.

Optional measures for NSW prawn farms

In addition to mandatory measures farms must implement under the Biosecurity (white spot disease) [Control Order No. 2 2023](#), DPI recommends that NSW prawn farms keep their biosecurity plans up-to-date and relevant.

NSW DPI recommends farm operators consider the following additional measures to further reduce the risk of white spot and other diseases entering and spreading through a prawn farm.

- Use of separate or clean (decontaminated) equipment between different production areas.
- Treating inflow water: whilst additional biosecurity treatment or management of inflow is not a legal requirement, until NSW DPI finish surveillance in the Clarence River region to prove freedom from white spot the risk of infection through water and host animals is unknown. Treating inflow water may provide additional protection by restricting entry of white spot carriers onto the farm.
- Keeping wild animals such as birds and crabs out of farm ponds by fencing and bird netting also reduces the risk of wild animals introducing white spot and other diseases to the farm.

General Biosecurity Duty

On 1 July 2017 the [NSW Biosecurity Act 2015 \(the Act\)](#) commenced changing the way government, industry and the community manage biosecurity in NSW. The Act provides a framework for sharing of the responsibility for biosecurity risks and establishes a number of 'biosecurity duties' including:

- a general biosecurity duty,
- duties relating to Prohibited Matter (which includes white spot disease of crustaceans), and
- a duty to notify biosecurity events.

Found in [Part 3](#) of the Act the general biosecurity duty supports shared responsibility through its broad scope. Specifically, section 22 of the Act provides:

Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing

has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated, or minimised.

The general biosecurity duty applies to everyone, including NSW prawn farmers, their staff and any other person or entity that deals with the prawns produced in NSW, who ought to reasonably understand the risks associated with biosecurity matter (including living things, parts of living things, diseases, contaminants, and disease agents).

As an example, prawn farms in NSW can discharge their general biosecurity duty by implementing the requirements of the Control Order as well as the biosecurity measures outlined in this factsheet.

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