Health protocol for the movement of live freshwater crayfish and prawns

Aquaculture Protocol FAMPR006
Version 1
June 2011

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Introduction

In Queensland, there are three species of freshwater crayfish and two species of freshwater prawn that are being cultured commercially:

- Redclaw *Cherax quadricarinatus*
- Yabby *Cherax destructor*
- Yabby *Cherax depressus*
- Giant freshwater prawn *Macrobrachium rosenbergii*
- Freshwater prawn *Macrobrachium australiense*

Diseases of concern for freshwater crayfish and prawns

Major concern

Freshwater Crayfish

The disease of major concern on Queensland's Declared Disease List for all freshwater crayfish is:

- Crayfish Plague (*Aphanomyces astaci*)

Freshwater Prawns

The disease of concern on Queensland's Declared Disease List for all freshwater prawns is:

- White spot syndrome virus

The disease of concern on Australia's National List of Reportable Diseases of Aquatic Animals is:

- White Tail Disease (*Macrobrachium rosenbergii* nodavirus (MrNV) and extra small virus (XSV)

Potential concern

Other diseases and disease agents of potential concern are listed in the Appendix. Should health testing identify any of the other diseases of concern, this may result in action being taken that may include, but not be limited to:

- banning the import
- approving the import conditional on effective treatment prior to the movement

Conditions for the movement of freshwater crayfish and prawns

These are the relevant development approval conditions for the movement of live aquatic animals into Queensland. For movement of live aquatic animals out of Queensland the producer should seek advice from the veterinary/fisheries authority in the destination jurisdiction.

Health certification

The species approved under this authority must not be brought into Queensland for rearing without a health certificate or pathology report issued by the exporting state or territory's fisheries or veterinary authority certifying the animal's health, which must include a statement that the specimens originate from:

a. a hatchery, farm, aquaculture premises or region that is recognised as free from infection by the diseases on the Queensland Declared Disease List based on the requirements listed in

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the OIE Manual of Diagnostic Tests for Aquatic Animals, current edition (Fourth Edition 2003 or later) for recognition as free from infection; or

b. a hatchery, farm, aquaculture premises or region in which an appropriate targeted surveillance scheme over two years has been undertaken under the supervision of state or territory fisheries agencies or fisheries-approved veterinary authorities, and where the requirements for recognition as free from infection by diseases of concern for that species on the OIE Manual of Diagnostic Tests for Aquatic Animals1, current edition (Fourth Edition 2003 or later) have been met; or
c. a single batch of gametes, larvae, post-larvae, or early juvenile or adult of a species of freshwater crustaceans, isolated from open waters, which has been tested using suitable techniques to provide evidence that the batch is free from infection by diseases of concern on the Queensland Declared Disease List for that species.

Notification of intent to translocate

The species approved under this authority must not be brought into Queensland for rearing unless an "Application to allow the Translocation of Live Aquatic Animals into and within Queensland" form (FDU1398) and health certificate or pathology report has been completed and the Aquaculture Manager, Department of Agriculture, Fisheries and Forestry (DAFF), has provided written acknowledgement and approval of the "Details of translocation form" and the certificate or report.

The "Application to allow the Translocation of Live Aquatic Animals into and within Queensland form" and a signed copy of the pathology report (as detailed above) must be given to the Aquaculture Manager, DAFF, a minimum of three (3) working days prior to all shipments into Queensland. It is a requirement that the pathology report/health certificate is dated no more than 14 days before shipment date.

Post Arrival Mortality

After arrival, any unusual clinical signs or mortalities in the stock must be reported immediately to the district officer of the nearest Queensland Boating and Fisheries Patrol office. If directed by a DAFF officer, the specimens must be forwarded to a veterinary laboratory as directed by the officer.

Relevant legislation

Refer to the Queensland legislation website for the most current version www.legislation.qld.gov.au

Condition of approval
Fisheries Act 1994
Section 79A 'Contravening a condition of an authority'

Disease
Fisheries Act 1994
Part 5, Section 100 'Notice to be given about diseased fisheries resources or habitat'
Part 5, Section 104 'Offence to communicate disease to live fisheries resources or fish habitat'
Part 5, Section 105 'Offence to sell diseased fisheries resources and products'
Part 5, Section 106 'Offence to leave diseased fisheries resources and products in a place'
Part 5, Section 107 'Offence to bring diseased fisheries resources and products into Queensland'

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Contacts

Submitting samples
Contact the Duty Pathologist before sending samples.

Submit **routine aquatic animal samples** for testing to:

Biosecurity Sciences Laboratory
Health and Food Sciences Precinct
Specimen receipt (Loading Dock 12)
39 Kessels Road, Coopers Plains Qld 4108
Phone: 07 3276 6062 (Aquatic Pathologist – submission enquiries)
Fax: 07 3216 6620

In **northern Queensland**, for complex cases or where input is required to prepare samples, contact the Aquatic Veterinary Officer in Townsville **before** sending samples:

Tropical and Aquatic Animal Health Laboratory
Department of Agriculture, Fisheries and Forestry
18 Darter Street, Oonoonba Qld 4810
Phone: 07 4760 1592 or 07 4760 1510 (Aquatic Veterinary Officer – submission enquiries)
Fax: 07 4778 4307

If you need further assistance, please contact the Customer Service Centre on 13 25 23.

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- Aquatic Animal Health Code (2007)

http://www.oie.int/eng/normes/fcode/en_sommaire.htm

- Manual for Diagnostic Tests for Aquatic Animal diseases 4th edition 2003. Office International Des Epizooties, Paris.
  - Crayfish Plague

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Appendix

Other diseases of concern

This is a list of other diseases and disease agents of potential concern for freshwater crayfish and prawns.

Freshwater crayfish

Viral

- Parvo-like virus
- *Cherax quadricarinatus* bacilliform virus (CqBV)
- *Cherax* Giardia-like virus (CGV)
- *Astacus* bacilliform virus (AaBV)
- picorna-like virus infection in *A. astacus*
- *Pacifastacus leniusculus* bacilliform (PlBV) virus
- *Cherax destructor* bacilliform virus (CdBV)
- *Cherax destructor* systemic parvo-like virus (CdSPV)

Bacterial

- *Vibrio mimicus*
- Rickettsia like organisms
  - Hepatopancreatic rickettsia
  - Systemic rickettsia

Parasites

- Temnocephalid worms
- Protozoan parasites
- *Epistylis* sp.
- *Tetrahymena pyriformis*
- *Psorospermium* sp.
- *Thelohania* sp
- *Pleistophora*-like spp.,
- *Ameson* sp.
- *Vavraia parastacida*

Fungus

- *Fusarium*

Freshwater prawns

Viral

- Hepatopancreatic parvo-like virus

Bacterial

- *Lactococcus garvieae*

Fungus

- *Torulopsis*

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