PRIMARY INDUSTRIES AND RESOURCES SA

FACT SHEET

FS

Fish Health

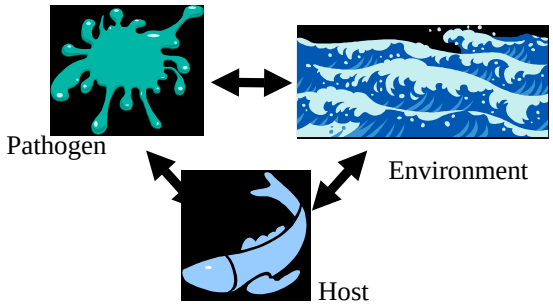
Aquaculture SA

Introduction

The health of aquatic animals must be considered as a state of physical well-being. Disease is not caused simply by the presence of a pathogenic disease organism but more by a complex interaction between the aquatic animal, the environmental conditions and the disease organism (pathogen).

Fish Health

There is an interaction between host environment and pathogen.



Health management programs

Health management programs are being used in aquaculture industries throughout the world to maximise the health of the farmed fish stock and ensure that a healthy clean product is reared in optimum environmental conditions.

- Health management programs can provide a number of benefits to the industry and individual producers. Some of the potential benefits programs are:
- to minimise risks from disease;
- to demonstrate to potential markets, investors and insurers that a quality assurance program is in place
- to allow certification of broodstock, seed and/or growout stock as free of specific diseases allowing improved access to local and external markets;
- to satisfy reporting requirements to commonwealth and international agencies that depend on this data to allow continued access to interstate and international markets;
- to alert industry to the introduction of new and exotic diseases and prevent the spread of any exotic or endemic diseases; and
- further enhance the public perception of the industry as being proactive in the area of environmental awareness.

FS
ISSN 1323-0409
Revised June 2000

The Fish Health Program is developing health management programs for aquaculture industry groups and individual growers. If you are interested in developing fish health management programs for your industry group or individual enterprise contact the Fisheries and Aquaculture Group at the address listed below.

Diagnostic testing

Veterinary Pathology Services (VPS) is the only veterinary diagnostic laboratory situated in South Australia offering comprehensive diagnostic services to the aquaculture, fishing and aquarium industries.

VPS contact details are:
PO Box 445
Glenside
SA 5065
Telephone (08) 8372 3700
Facsimile (08) 8372 3777

Aquatic animal movements

Historically the translocation of aquatic animals has resulted in significant economic benefits and in certain cases significant environmental damage.

The Australian Atlantic salmon, *Salmo salar*, aquaculture industry is based exclusively on a species originally translocated from the northern hemisphere. The industry brought in income of over $60 million to Australia in 1997-98, much of it export income. There have been no significant environmental consequences resulting from the introduction of Atlantic salmon to Australia.

There are however instances in which introduction of non-native species has resulted in severe impacts on the local ecology without providing any significant economic benefit. The European carp, *Cyprinus carpio*, is one such example. From a disease perspective, carp are believed to be the source of introduction of the anchor worm, *Lernaea cyprinacea*. The parasite can infect native fish in large numbers and in severe cases can be fatal.

A formal protocol for the translocation of barramundi*, Lates calcarifer*, into South Australia has been principally developed in response to the threat of introduction of the barrmundi nodavirus with imported barramundi.

A formal protocol for the translocation of Pacific oysters, *Crassostrea gigas*, from Tasmania is in the final processes of development. The protocol was developed in consultation with the South Australian Oyster Growers Association as a reaction to the threat of several diseases and fouling organisms found in Tasmanian oysters that are exotic to South Australian waters.

Fish kills and emergency disease incidents

The Fish Health program is developing emergency disease management plans for the fishing and aquaculture industry. If you want to know more about these plans please contact the Aquaculture SA at the address listed below.

If you suspect a fish kill has occurred contact the Fishwatch freecall number 1800 065 522, 24 hours a day

If you suspect an exotic or notifiable disease in wild or cultured fish stocks contact the Disease Watch Hotline.

Fish health policy review

We are currently in the process of review fish health policy so that we can strategically plan future directions for fish health in South Australia.

Links

Commonwealth government aquatic animal health related sites

- Australian Quarantine and Inspection Service http://www.aqis.gov.au/
- Office of the Chief Veterinary Officer: Aquatic Animal Health Unit http://www.affa.gov.au/ocvo/fhu.html
- Centre for Research on Introduced Marine Pests http://www.marine.csiro.au/CRIMP/
- National Registration Authority for Agricultural and Veterinary Chemicals http://www.dpie.gov.au/nra/welcome.html

State fisheries with aquatic animal health information

- Western Australia http://www.wa.gov.au/westfish/sf/index.html
- Queensland http://www.dpi.qld.gov.au/fishweb/Welcome.html

International aquatic animal health organisations

- Office International des Epizooties http://www.oie.int/
- European association of Fish Pathologists http://www.ifremer.fr/eafp/
- American Fisheries Society: Fish Health Section http://www.fisheries.org/fhs/
- Centre for Environment, Fisheries and Aquaculture Science (UK) http://www.cefas.co.uk/

Other aquatic animal health related sites

- Aquaculture Health Page http://www.geocities.com/CapeCanaveral/Lab/7490/index.html
- Synopsis of Infectious Diseases and Parasites of Commercially Exploited Shellfish http://www.pac.dfo-mpo.gc.ca/sci/sealane/aquac/pages/title.htm
- Atlantic Fish Health (Canada) http://www.upei.ca/~afhi/

Further Information

PIRSA Aquaculture SA
GPO Box 1625
ADEALIDE SA 5001
Ph: 08 8226 0314
Fax: 08 8226 0330