BIOSECURITY: PROTECTING FARMED FISH

NATIONAL AQUATIC ANIMAL HEALTH PROGRAM

FACT SHEET

What is Biosecurity?

Biosecurity is the process of taking precautions to minimize the risk of introduction and spread of infectious organisms into or between populations.

Why is Biosecurity so important?

Biosecurity is very important to aquaculture because it prevents or limits the introduction and spread of disease within or between aquatic animal production facilities and sites. Since very few effective treatments are available for most aquatic animal diseases, effective biosecurity is the key to preventing these diseases.

How are infectious organisms transmitted?

Disease agents that infect aquatic animals are frequently spread between aquatic organisms in the environment, or equipment used to transfer animals from one holding unit or site to another. Some diseases can also be spread directly through the water by animals releasing the infectious agent or by sick animals dying. Known sources of aquatic animal infections include contaminated feed, equipment, untreated wastewater, fish bearing source waters, and pests such as birds or rodents.

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What can I do to reduce the risk of disease introduction or spread?

- Enforce strict sanitary measures for personnel, feed suppliers, veterinarians, harvesters and visitors:
  - Provide disinfected protective clothing
  - Provide hand and footwear disinfection stations at each entrance and exit

- Routinely disinfect equipment and water with recommended disinfectants. Ensure that the disinfectant can be applied safely and poses no toxic risk to humans, aquatic animals or the environment.

- Restrict vehicle, boat and equipment contact with culture and holding units.

- Maintain a log of all visitors coming in contact with your aquatic animals.

- Plan the flow of personnel movement through the facility and require that personnel undertake disinfection procedures between holding units and/or buildings.

- Contain and/or treat effluent and organic waste at origin and prohibit it from re-entering production areas. For open water facilities, dispose of organic waste on land at a site that has measures to prohibit escape of breakdown products into surrounding waters.

- Use pest management protocols to keep out birds, vermin and/or predators.

- Use signage at the facility to inform visitors and personnel that there are biosecurity requirements in place such as controlled access, footbaths, video surveillance, etc.

How do I keep the aquatic animals in my facility healthy?

- Choose your facility/site location carefully with biosecurity in mind; considering, for example: hydrographical characteristics, accessibility for stock in – stock out movements, and health status of surrounding farmed or wild aquatic animals.

- Choose a safe water source for land-based facilities such as well water or spring water. Where such water sources are not available, use a disinfection and/or filtration system(s).

- Stock only with certified disease-free eggs and/or aquatic animals.

- Schedule routine disease monitoring with a veterinarian and implement an aquatic animal health management plan.

- Remove mortalities and moribund animals routinely. When disease is suspected, contact your veterinarian.

- Use caution prior to moving aquatic animals between holding units or farms. Aquatic animals showing signs of disease should not be sold or transferred to other facilities.

- Minimize handling wherever possible to reduce stress that can predispose aquatic animals to infectious diseases.

Where can I get more information?

Canadian Food Inspection Agency:
http://www.inspection.gc.ca/english/anima/aqua/aquae.shtml

Fisheries and Oceans Canada:
http://www.dfo-mpo.gc.ca/science/aquaculture/aah_e.htm