## CHAPTER 4.4.

# FALLOWING IN AQUACULTURE

Article 4.4.1.

## Introduction

Gaps in *aquaculture* production at the same location are commonly recognised to be of value in resting or restoring the local environment. As part of this strategy, *fallowing* can break re-*infection* cycles by removing loci of a *disease* from a farm. Consequently, *fallowing* is often carried out as a regular *disease* management measure in *aquaculture*, especially prior to the introduction of new populations of *aquatic animals* into a previously used site. In order to promote improved health in *aquaculture*, the *Competent Authority* responsible for *aquatic animal* health in a country may encourage the use of *fallowing* as a routine management strategy for many *diseases*. Account should be taken of the likely beneficial effects of *fallowing* in proportion to the economic costs involved. The *Competent Authority* should also consider such factors as the level of *risk* to the local and national *aquaculture* operations, previous knowledge of the severity of a *disease(s)*, the *infective period* and distribution of the *disease agent(s)*, the socioeconomic conditions, and benefits pertaining to the general aquatic resources. When the *infective period* is not known, the farm may be fallowed for a period, the length of which should be based on a *risk assesment*.

However, where an official *stamping-out policy* is being carried out for a *disease* of concern, the *Competent Authority* should require that an infected *aquaculture establishment*, and all other *aquaculture establishments* in an officially established *infected zone*, be subjected to a required period of *fallow ing*, if necessary synchronised.

Article 4.4.2.

## Legal powers

In cases where *fallowing* may be a compulsory measure, for instance in the establishment or restoration of a *disease free zone*, countries should establish a legal framework for the implementation of *fallowing* procedures in *aquaculture establishments*. Legal provisions could include:

- 1. defining the *disease* circumstances when *fallowing* or synchronised *fallowing* is required;
- 2. defining mechanisms based on *risk assessment* where individual *dise ase*-specific measures may be determined, including *disinfection* and the length of the *fallowing* period prior to the re-introduction of *susc eptible species*;
- 3. following permission by the *Competent Authority* to restock with *susceptible species*, defining a period of *surveillance* and *diagnosis* to verify freedom from the specified *disease*.

#### Article 4.4.3.

## Technical parameters for the implementation of a statutory fallowing plan

*Fallow ing* of a farm should start immediately after:

- 1. removal of all susceptible species of aquatic animals for the disease of concern; and
- 2. removal of all species capable of acting as carriers of the *disease* of concern; and
- 3. if appropriate, removal of other species; and
- 4. removal of water in which infected stocks have been held, where feasible; and
- 5. equipment and other materials contaminated or otherwise capable of harbouring *infection* have either been removed or subjected to *disinfection* to standards approved by the *Competent* Authority.

The length of the statutory *fallowing* period should be based on scientific evidence of the likelihood of a *dise ase agent* remaining infective outside its aquaculture host(s) in the local environment, at a level likely to cause an unacceptable risk of re-*infection* of the *aquaculture establishment*. Account should be taken of the extent of the *disease outbreak*, local availability of alternative hosts, the survival and infectivity characteristics of the *disease agent* and the local climatological, geographical and hydrographical factors. In addition, the level of *risk* to the local *aquaculture* industry and wider aquatic resources may be included. A scientifically based *risk assessment* approach should be used to determine the length of the *fallowing* period.

Article 4.4.4.

## Instructions

Countries establishing *fallowing* procedures should develop a detailed set of instructions for *disinfection* of *aquaculture establishments* prior to *fallowing*. For this purpose, the instructions set out in Chapter 4.2. of the *Aquatic Code* and Chapter 1.1.3. of the *Aquatic Manual* should be used as guidelines, taking into account current scientific knowledge on the efficacy of the treatments for the *disease agent* of concern.

Article 4.4.5.

## Restocking

No *aquaculture establishment* that has been under compulsory *fallowing* should be restocked until the *fallowing* period has been completed and permission from the *Competent Authority* has been received. When restocking, care should be taken not to use stocks of *aquatic animals* that would compromise the objectives of the *fallowing* procedure.

To increase confidence in the effectiveness of the *fallow ing* procedures, all farms subjected to compulsory *fallow ing* should have a period of high level official *surveillance* after *susceptible species* have been restocked. The duration and intensity of the *surveillance* should be appropriate for the *disease* of concern and local conditions.