## Canadian Wildlife Service Policy for the Issuance of Scare Permits for the Aquaculture<sup>1</sup> Industry

(Policy Effective September 1,2000)

## Background

Aquaculture operations often result in interactions with migratory birds that are generally viewed by the industry as negative. Most concerns relate to depredation or removal of aquaculture stock from gear, and to the resources required to minimize such effects. These often represent an additional cost to aquaculture operations.

The Canadian Wildlife Service (CWS), managers of migratory birds in Canada, consider many aquaculture operations to have negative impacts on migratory birds. These include loss of, or increased human activity in, key habitats used by migratory birds. Specific issues include:

- exclusion of birds from former key habitats by existing aquaculture activity or increased negative interactions,
- increased pressure anticipated from future industry, including:
  - loss of breeding habitat and disturbance of breeding birds;
  - changes in bird distributions, abundance and fitness due to changes in food availability from aquaculture operations; and
  - pollution of substrates below and in close proximity to aquaculture structures that change food availability and habitat quality for birds.

There is therefore a need for increased cooperation among the managers of migratory birds (CWS), the aquaculture industry and other regulators of the environment used for aquaculture to minimize these negative interactions. Nonetheless, increased growth of the aquaculture industry will result in increased demand for scare permits issued by CWS. Since CWS's mandate and the Migratory Birds Regulations' main function is to conserve and protect migratory birds, which includes minimizing disturbance, a policy is needed for the issuance of these permits.

Consultation with CWS as to proposed aquaculture sites and activities at sites should result in reducing potential interactions between aquaculture and migratory birds and the need for scare permits. Inevitably, however, aquaculture will result in changes in coastal and inshore ecosytems that will affect migratory birds. CWS will use the best available science to provide guidance in siting and deterrents to minimize negative impacts on migratory birds and aquaculture operations. In some situations, additional research and monitoring will be required. In such cases, CWS will provide advice to industry and government regulators concerning the collection of required information <sup>2</sup>.

## General Policy

CWS has established this policy on the issuance of scare permits to minimize impacts on migratory birds while protecting aquaculture operations against depredation of their crop. Decisions concerning siting, size and activities of aquaculture operations must be undertaken in an ecosystem context that reflects broad concerns for coastal and freshwater integrity and sustainable development. Therefore a general premise of this policy is that aquaculture operations should be located in areas that are known <u>not</u> to support Species of Concern<sup>3</sup> or large numbers of waterbirds during any part of their life cycle.

## **Specific Scare Permit Policy**

- 1) CWS will not issue kill permits for the purpose of protecting aquaculture operations.
- 2) CWS will issue scare permits only under the following conditions:
  - (a) For sites established on or after January 1, 2001, if

potential interactions with migratory birds at the aquaculture site were considered during project planning and CWS is satisfied that adequate avoidance strategies were incorporated into siting and operational planning; <u>and</u>

at the time of request for a scare permit, the aquaculture operator is operating within the approved siting and operational design; and

at the time of request for a scare permit the aquaculture operator demonstrates to CWS that effective depredation technology<sup>4</sup> is being used or is soon to be used in the operations; and

scare permits can be issued within the restrictions respecting provincial and municipal laws regarding the discharge of firearms. Permits will require the use of non-toxic shot or "bangers".

b) For sites established prior to January 1, 2001, if

at the time of request for a scare permit the aquaculture operator demonstrates to CWS that effective depredation technology<sup>4</sup> is being used or is soon to be used in the operations; and

scare permits can be issued within the restrictions respecting provincial and municipal laws regarding the discharge of firearms. Permits will require the use of non-toxic shot or "bangers".

Note: Although technically scare permits are not required for techniques that involve hazing or do not involve firearms or aircraft (for example noise makers such as propane canons), aquaculture operators are strongly encouraged to consult CWS before conducting any scare operations.

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<sup>&</sup>lt;sup>1</sup> For the purposes of this policy aquaculture refers to both mareculture in the marine or estuarine environment or freshwater aquaculture, including fish farms/trout ponds.

<sup>&</sup>lt;sup>2</sup> For long-term, large-scale planning the following information may be important: several years of monitoring, proper experimental design (e.g., controls, appropriate sample sizes, clear hypotheses to test) broad enough area, population counts and estimates, behavioural studies (e.g., how do different species and age/sex class ratios react to operations and scaring, how are activity budgets affected, changes in feeding locations), etc.

<sup>&</sup>lt;sup>3</sup> Species of Concern are those species that have low population numbers, declining population trends, have areas of concentration, restricted ranges, or any other reasons that would make their conservation a high priority

<sup>&</sup>lt;sup>4</sup> At the time of drafting this policy, depredation technology includes but is not limited to using special gear such as double-socking material being tested in mussel culture, using concentrated early grow-out areas until aquaculture stock reach less vulnerable sizes, and timing activities to avoid interactions with birds.