

# The commercial use of *Undaria pinnatifida* – an exotic Asian seaweed

MAF Biosecurity New Zealand Information Paper No: 2010/02

ISBN 978-0-478-36333-3 (print)  
ISBN 978-0-478-36334-0 (online)

ISSN 1179-5875 (print)  
ISSN 1179-5883 (online)

May 2010



Requests for further information on harvesting or farming undaria should be directed to:

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Full information on undaria is available at: <http://www.biosecurity.govt.nz/pests/undaria>

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## Purpose

This information paper outlines a revised policy for managing the commercial use of *Undaria pinnatifida*, an exotic Asian seaweed. *Undaria* is an unwanted organism under the Biosecurity Act 1993 and is widespread in a number of New Zealand locations.

## Overview

In 2009/10 the government undertook a review of a 2004 policy that allowed limited commercial harvest of undaria.

From April 2010, a new policy will be progressively implemented allowing greater commercial use of undaria. The general scope of the new regime includes:

- **allowing** farming in selected heavily infested areas;
- **allowing** harvest when it is growing on artificial surfaces (e.g. marinas, marine farms);
- **allowing** harvest when it is cast ashore in selected areas that are not vulnerable or sensitive to commercial harvest processes; and
- **prohibiting** harvest when it is growing on natural surfaces, except when part of a programme specifically designed to control undaria.

A summary of how the new policy differs from the 2004 policy is outlined in Table 1.

Table 1: Situations where undaria can be commercially taken under the 2004 and 2010 policies

Activity	Under 2004 policy	Under 2010 policy
<b>Harvesting</b>		
• when part of an undaria control programme	√	√
• as a by-catch of another activity (e.g. mussel farming)	√	√
• from natural surfaces, if not part of a control programme or by-catch of another activity	X	X
• from artificial surfaces, if not part of a control programme or by-catch of another activity	X	√
• as beach cast undaria, if not part of a control programme or by-catch of another activity	X	√ <sup>a</sup>
<b>Farming</b>		
• in selected marine farming areas already heavily infested with undaria	X	√

<sup>a</sup> Limited to areas where the Fisheries Act allows harvest of other beach cast seaweed

Under the new policy, undaria will remain an unwanted organism under the Biosecurity Act and as such any use will require permission under the Biosecurity Act. This allows the Ministry of Agriculture and Forestry (MAF) to maintain national oversight over commercial use and to constrain activities to those included under the new policy.

MAF is able to implement the harvesting component of the new policy immediately.

Further work will be undertaken by MAF to establish the farming component of the policy over the next six months. Guidance for those interested in undaria farming will be posted on this website in due course.

For the purposes of managing undaria, commercial use is classified as either harvesting or farming and defined as:

- harvesting – the process of gathering undaria, for commercial purposes, from areas where it has naturally become:
  - established on natural or artificial surfaces; or
  - unattached (e.g. as a result of a storm) and cast ashore (beach cast seaweed);
- farming – the process of actively seeding and/or breeding undaria for commercial purposes.

## The rationale for the new policy

The primary reasons behind the final scope of the new policy for harvesting undaria are:

- harvesting from natural surfaces is generally **prohibited** because it could disturb or remove native canopy species leading to a proliferation of undaria;
- harvesting from natural surfaces when taken as part of a control programme is **allowed** as any risks associated with harvest will be outweighed by reduced undaria in localised areas;
- harvesting from artificial surfaces, such as wharves and marinas, is **allowed** because it is unlikely to result in the proliferation of undaria; and
- harvesting beach cast undaria, except in areas potentially ecologically sensitive or vulnerable to commercial harvest<sup>1</sup>, is **allowed** as it is unlikely to have a significant impact.

The reason for allowing farming in selected heavily infested areas is that minimal additional risk of spread is created as:

- undaria is already present in New Zealand's five main marine farming geographical areas;
- the undaria that is inadvertently growing on the marine farm structures in the above areas is already able to grow to maturity and release reproductive material back into the marine environment; and
- the movement of equipment and stock already occurs between these marine farming areas to support other types of marine farming operations.

In addition, only allowing farming in certain heavily infested areas, rather than all heavily infested areas, allows MAF to consider the following factors when identifying these areas:

- the high value areas in, or within close proximity to, the heavily infested areas; and
- local governments' controls and views on undaria farming within their jurisdiction.

Retaining undaria's unwanted organism status will support the proposed policy by:

- ensuring national oversight, which is important where regional neighbours may have differing objectives in relation to undaria; and
- constraining harvesting and farming to the scope of the proposed policy, which will ensure any activity does not significantly increase undaria's impact.

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<sup>1</sup> As identified in the Fisheries (Beach Cast Seaweed Prohibition) Notice 2002.

## The legal requirements of the new policy

Undaria will remain an unwanted organism under the Biosecurity Act and as such any use will require permission under the Biosecurity Act. MAF will not charge for issuing a permit.

To **harvest** undaria the legal requirements will remain unchanged from that under the 2004 policy. The primary requirement will be to seek permission from MAF under section 52 and/or 53 of the Biosecurity Act.

Unlike for the harvest of other marine species, a fishing permit under the Fisheries Act 1996 will not be required to harvest undaria<sup>2</sup> because it is an unwanted organism under the Biosecurity Act. Additional permission under the Fisheries Act or Resource Management Act 1991 may be required if, among other things, the harvesting technique is out of the ordinary, the proposed harvesting areas are closed to fishing or the activity contravenes specific rules in a regional coastal plan. Securing any additional permission(s) under other statutes will be the responsibility of the applicant.

To **farm** undaria, permission under the Biosecurity Act will be required in addition to the generic requirements to farm any marine plant or animal under the Resource Management Act and Fisheries Act.

It is recommended that an applicant wishing to farm undaria secure the necessary Biosecurity Act permission from MAF *prior* to seeking approval to establish a farm under the Resource Management Act and Fisheries Act. Securing Resource Management Act and Fisheries Act permission to farm undaria will be the responsibility of the applicant.

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<sup>2</sup> Applicants could require a fishing permit under the Fisheries Act to harvest other species if these species are likely to be deliberately or inadvertently harvested for sale as a result of harvesting undaria.

# The application process

## HARVESTING UNDARIA

MAF has streamlined the process for applying for permission to harvest undaria. MAF will issue a permit, under section 52 and/or 53 of the Biosecurity Act, to any applicant seeking to harvest undaria so long as:

- i. the proposed activity is within the scope of activities allowed under the policy;
- ii. the applicant provides concise information, including:
  - name and contact details;
  - any potential biosecurity benefits;
  - proposed harvesting location;
  - method of harvest/equipment used;
  - location of any recognised high value areas within the vicinity of the proposed harvesting site e.g. marine reserves, customary fishing areas; and
  - proposed end use of the harvested undaria.
- iii. the proposed activity does not contravene a regional pest management strategy, regional coastal plan or other recognised biosecurity management activity;
- iv. the proposed activity is not considered high risk because of, among other things, its location in proximity to recognised high value areas, such as, marine reserves, taiapure and mataitai reserves.

Where (iii) or (iv) above applies, MAF will consider the application on a case-by-case basis in consultation with relevant individuals and organisations.

Any permission granted will include generic conditions, which may include, but not be limited to:

- how undaria is to be collected/harvested to reduce the biosecurity risk of the activity;
- how any equipment used in the harvesting or processing of the undaria is to be treated to prevent the inadvertent spread of undaria;
- how to transfer collected undaria to prevent the inadvertent transfer of undaria;
- how the undaria is to be disposed, processed or used to ensure that no viable undaria is returned to the marine environment; and
- that it is the applicant's responsibility to seek permission under any other relevant legislation.

Where the proposal is seeking permission to harvest undaria that has been cast ashore, the permission will include an additional condition that harvest only occurs in areas permitted by the most current version of the Fisheries (Beach Cast Seaweed Prohibition) Notice 2002. The Notice, and any amendments to the Notice, are Gazetted by the Minister of Fisheries pursuant to section 11(4)(b)(i) of the Fisheries Act 1996.

MAF is able to implement the harvesting component of the new policy immediately. Anyone wishing to harvest undaria within the scope of the new policy should refer to the 'Contact' section at the end of this information paper.

## FARMING UNDARIA

To the extent possible, MAF has streamlined the process for gaining permission to farm undaria under the Biosecurity Act. The process will consist of two elements:

- i. MAF will determine whether a farming application is within a heavily infested area that MAF has identified as appropriate for undaria farming; and
- ii. MAF will then assess the biosecurity risks and mitigation options of the proposed farming operation (a risk management plan) as put forward by the applicant.

The aim of the risk management plan is to enable MAF to assess the potential risks at each stage of the farming process and determine how the applicant proposes to mitigate these risks.

Similar to a harvesting permission, any permission issued to farm undaria will include generic conditions. These conditions may include, but not be limited to:

- where undaria is sourced and how it is transferred to the farm site to prevent inadvertent spread;
- how and where ropes are seeded to ensure that no viable undaria is returned to the marine environment;
- how undaria is to be collected/harvested from the farm to reduce the biosecurity risk of the activity;
- how any equipment (including vessels) used in the farming or processing of the undaria is to be treated to prevent the inadvertent spread of undaria;
- how to transfer collected undaria to prevent the inadvertent transfer of undaria;
- how the undaria is to be disposed of, processed or used to ensure that no viable undaria is returned to the marine environment; and
- that it is the applicant's responsibility to seek permission under any other relevant legislation.

MAF will need to complete some further work to establish the farming component of the new policy before it can be implemented. This work will consist of:

- MAF identifying selected heavily infested areas where it would be appropriate to allow farming by:
  - working with experts with knowledge of undaria's distribution around New Zealand to identify the location of areas heavily infested with undaria; and
  - identifying which of these heavily infested areas would be appropriate to consider undaria farming in based on the values in and around these areas and local government's controls and views on undaria farming within their jurisdiction.
- MAF developing a standardised risk management plan template to assist applicants with identifying potential biosecurity risks associated with their farming operation and how these risks might be mitigated.

Anyone wishing to farm undaria should contact MAF in the first instance.

## Contacts

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