

**UNITED KINGDOM  
PROTECTED ZONE SURVEYS  
FOR  
FORESTRY PESTS  
2004**

**Report on Surveys carried out for the purpose of  
the recognition of a Protected Zone  
(Reference: Commission Directive 92/70/EEC)**

**2.1 Member State:** United Kingdom.

**2.2 Specific harmful organism:**

(Protected Zones exist for the territories within the United Kingdom shown after each organism: B = Great Britain (England, Wales and Scotland), I = Isle of Man, N = Northern Ireland, J = Jersey and G = Guernsey.)

1. *Ips typographus* (Linnaeus) - Eight-toothed spruce bark beetle (B, I, N, J & G (UK)).
2. *Ips amitinus* (Eichoff) - Smaller eight-toothed bark beetle (B, I, N, J & G (UK)).
3. *Ips duplicatus* (Sahlberg) - Northern spruce bark beetle (B, I, N, J & G (UK)).
4. *Ips cembrae* (Heer) - Large larch bark beetle (I & N).
5. *Ips sexdentatus* (Börner) - Six-toothed pine bark beetle (I & N).
6. *Dendroctonus micans* (Kugelann) - Great European spruce bark beetle (B\*<sup>1</sup>, I, N, & J).
7. *Cephalcia lariciphila* (Wachtl) - Web spinning larch sawfly (I, N, & J).
8. *Gilpinia hercyniae* (Hartig) - European spruce sawfly (I, N, & J).
9. *Gremmeniella abietina* (Lagerberg) - Brunchorstia disease (N).
10. *Hypoxyton mammatum* (Wahlenberg) - Hypoxyton canker (N).
11. *Cryphonectria (Endothia) parasitica* (Murrill) Barr – Chestnut blight (B, N, J & G (UK)).

\* As defined in Commission Directive 2001/32/EC as last amended by Commission Directives 2004/522/EC and 2005/18/EC.

<sup>1</sup> Council Directive 2005/16/EC (OJ L57, 3.3.2005, p19) amends Council Directive 2000/29/EC and removes the protected zone status for *D. micans* in Great Britain but retains it in respect of Northern Ireland, the Isle of Man and Jersey. The changes take effect from 15<sup>th</sup> May 2005.

**2.3 Description of geographic boundaries:**

This report applies to Great Britain (England, Wales and Scotland), Northern Ireland, the Isle of Man, Jersey and Guernsey.

**2.4 Relevant national implementing legislation:**

1. The Plant Health (Forestry) (Great Britain) Order 1993.
2. The Plant Health Order 1999 (Isle of Man).
3. Plant Health Act (NI) (1967).
4. Plant Health (Wood and Bark) Order (NI) 1993.
5. The Plant Health Order (NI) 1993.
6. The Plant Health (Wood and Bark) (Amendment) Order (Northern Ireland) 1996,
7. The Import and Export of Trees, Wood and Bark (Health) Ordinance, 1982; for Guernsey.
8. The Tree Pests Ordinance, 1982; for Guernsey.  
And all amendments thereto.

### 3.1 **Detail of official action programme and the responsible bodies:**

The official action programme is based on prevention of introduction of exotic pest organisms through controls on host material introduced into the various territories. Movement of controlled material is monitored using a system of import inspections at the point of entry (in respect of material consigned from third countries) and a system of intelligence and liaison with those who are involved with trading in host material from all countries, or parts of countries, where the pests detailed above are known to occur. Plant Health Inspectors as part of their normal inspection duties undertake occasional monitoring of host material.

In addition, in Great Britain and Northern Ireland, pheromone traps are sited at strategic points of entry and selected sawmills to detect the presence of exotic pests. Forest Health days are also carried out from time to time, to detect the presence of any cause of loss of health and to educate those in the forest industry regarding plant health matters.

At present there is no trade in round timber to or from the Isle of Man.

On Jersey, the official action programme is based on prevention and eradication which has been aided by an effective intelligence and monitoring system in conjunction with the Arboriculturalist of the Public Services Department. The Department of Agriculture maintains a high awareness of the appearance of forestry pests with the specialist sections of the Société Jersiaise and amongst persons engaged in forestry and it is stressed that any finding of suspect pests must be reported to the Plant Health Section of the Department of Agriculture.

On Guernsey, the official action programme is based on prevention and eradication, which is run by the Commerce and Health Department. At present there is no trade in round timber to or from Guernsey.

In order to comply with the requirements of Commission Directive 92/70/EEC, annual surveys under prescribed conditions have been carried out under the supervision of designated Plant Health Officers:

**Great Britain:** Mr N J Fielding, Entomologist, Forest Research (an executive agency of the Forestry Commission).

**Northern Ireland:** For insects: Dr A C Bell, Applied Plant Science Division, Department of Agriculture and Rural Development, Northern Ireland (DARDNI). For fungi: Ms F Forster, Practice Branch, Forest Service (an executive agency of the Department of Agriculture and Rural Development, Northern Ireland (DARDNI)).

**Isle of Man:** Mr R Pollard, Chief Forestry Officer, Department of Agriculture, Fisheries and Forestry, Isle of Man Government.

**Jersey:** Mr S Meadows, Entomologist, States of Jersey Department of Agriculture and Fisheries.

**Guernsey:** Mr N Clark, Plant Health and Seeds Inspector, Commerce and Health Department.

The responsible body in Great Britain is the Forestry Commission; in Northern Ireland, the Forest Service of the Department of Agriculture and Rural Development; in the Isle of Man, the Department of Agriculture, Fisheries and Forestry; in Jersey, the Department of Agriculture and in Guernsey, the States of Guernsey Committee for Horticulture.

### 3.2 **Persons entitled to act for the responsible body in monitoring the action programme:**

Plant Health Inspectors.

### 3.3 **Detail of the scientific and technical principles and methods of analysis upon which the survey has been based:**

Full details of the surveys for the specific harmful organisms numbered 1 to 10 in section 2.2 (above) have been given in previous reports; however, the recent inclusion of *Cryphonectria (Endothia) parasitica* (Murrill) Barr – Chestnut blight onto the list of specific harmful organisms against which we have Protected Zone Status has resulted in the requirement to undertake surveys for this organism. To date, in Britain, specific surveys have not been carried out; however, the annual Forest Condition survey and recent surveys looking for *Phytophthora* sp. undertaken by the Forestry Commission has indicated that it is not known to occur in this country.

In order to retain PZ status against this disease it is necessary to instigate surveys of *Castanea sativa* – Sweet Chestnut; throughout England and Wales. *C. sativa* is rare in Scotland and is not grown there on a commercial scale. As Chestnut blight is very rarely found in amenity plantings there will be no survey plots in Scotland. Unlike the existing surveys for conifer bark beetles

(undertaken in Britain), this survey will be mainly visual, but will require the taking of samples should symptoms of the disease be observed.

In early 2004 a request was sent to all Forestry Commission offices asking for help in locating suitable blocks of chestnut woodland, within their area of responsibility. Woodlands for inclusion in the survey needed to be more than two hectares in size with over fifty percent chestnut in the crop. Fifty-two sites were eventually located; these were mostly located in southern Britain, the main area for chestnut woodland. It is anticipated that surveys will be undertaken during the late summer and will concentrate on twenty-four trees within each selected woodland. It is, however, unlikely that all 52 potential sites will be utilised. Surveys will be undertaken in the same way as the visual survey used in the main Protected Zone Survey; details of this regime have already been given in previous reports. It is anticipated that the surveys will be undertaken by local Forestry Commission Forest Officers and any information gained will be able to be included in forest health returns required under UKWAS (the UK Woodland Assurance Scheme), as can information from the other PZ surveys for conifer bark beetles.

**3.4 Detail of the permanent survey regime:**

In Great Britain 40 permanent study plots have been set up (supported by a programme of 139 pheromone traps located at major ports and sawmills around the country and surveys carried out in a pest-free area for *D. micans*, *Ips cembrae* and *Ips sexdentatus* in west Scotland). Northern Ireland has set up 80 plots (50 forest compartments, 11 log traps, 3 *H. mammatum* plots and 14 *G. abietina* plots). The Isle of Man has 3 permanent study plots, Jersey has 11 permanent study plots and Guernsey has 3 permanent study plots.

**3.5 Detail of the system of keeping records of the results of a survey:**

Report forms have been completed for each survey point; they record all information relevant to the site. The report forms, once complete, are returned to the survey co-ordinators who retain the forms and produce reports as necessary.

**3.6 Designation and qualifications of persons carrying out a survey:**

In Great Britain all surveys are carried out under the authority of the Forestry Commission's Plant Health Service. All surveyors have appropriate qualifications and experience. Forest Research Entomologists carry out beetle identification. In Northern Ireland staff of the Applied Plant Science Division and the Forest Service, Department of Agriculture and Rural Development (DARDNI) carry out surveys. On the Isle of Man Forestry Division staff from the Department of Agriculture, Fisheries and Forestry carry out surveys. On Jersey and Guernsey, official Plant Health Inspectors and scientists all of whom have appropriate qualifications and experience carry out surveys.

**3.7 Date of notification of survey methodology and conduct to the Commission:**

February 1994

**3.8 Detail of Protected Zone Surveys:**

**3.8.1 Great Britain:**

Full details of the 40 survey plots have been given in previous reports.

**3.8.2 Northern Ireland:**

Eighty survey plots were examined; details have been given in previous reports.

**3.8.3 Isle of Man:**

Surveys were undertaken at three locations, details have been given in previous reports.

**3.8.4 Jersey:**

Eleven sites were examined during August and October 2004; details have been given in previous reports.

**3.8.5 Guernsey:**

Conifer trees at three locations were examined during September 2004; details have been given in previous reports.

**3.9 Detail of any further measures taken as part of the official action programme:**

Import inspections were carried out as necessary during the year, about 80% of which concern material which is potential host material for the pests against which we have Protected Zone status. Not all import inspections involve timber consignments. Dunnage and wood packaging material is regarded as presenting a greater risk of accidental pest introduction and many consignments of non-regulated goods, e.g. steel, are targeted for inspection. Pheromone traps are sited at ports and selected inland points.

In Northern Ireland, Forest Service staff undertake continuous monitoring for pest and disease symptoms during day to day operations.

The Isle of Man authorities make the UK information leaflet on import controls available to HM Customs and Excise for reference in the event of any trade in roundwood. At the present time no such trade in roundwood takes place.

The Island of Jersey has increased public awareness by communication and information with the Société Jersaise, the Island's natural history society.

### 3.10 Outcome of surveys to date:

*Dendroctonus micans* was detected in Great Britain, in Kent, during autumn 1996 (see previous report). This area and the Forestry Commission's action plan were inspected during 1997 by FVO inspectors. Since then, further outbreaks were detected in North-west and South-west England and a full review of our protected zone status against this pest was carried out. An economic appraisal of possible control options was prepared and formed part of a public consultation exercise. The economic appraisal was published on the Forestry Commissions website and can be viewed at:

[http://www.forestry.gov.uk/pdf/EconomicappraisalJune 04.pdf/\\$FILE/EconomicappraisalJune 04.pdf](http://www.forestry.gov.uk/pdf/EconomicappraisalJune 04.pdf/$FILE/EconomicappraisalJune 04.pdf).

The outcome of the public consultation was that representations were made to the EU Standing Committee on Plant Health seeking an amendment to the area of the UK designated as a protected zone against this pest, to limit it to Northern Ireland, the Isle of Man and Jersey. The amendment was adopted and published in Council Directive 2005/18/EC, which came into effect on 15<sup>th</sup> May 2005.

Pheromone traps, (see section 3.1) located at strategic points of entry into Great Britain and selected sawmills; baited with lures for *Ips typographus*, caught 19 adult beetles during 2004 compared with 21 during 2003.

The insect species that have been located at the survey points are detailed below:

#### 3.10.1 Great Britain:

None of the standing trees in the permanent study plots showed signs of *I. typographus*, *I. amitinus*, *I. duplicatus* or *Dendroctonus micans*. None of the trap logs had been attacked by any of the target insect species.

The following beetles were found associated with the trap logs. All the beetles listed below are commonly associated with timber and bark that are starting to rot in a forest situation; none give any cause for concern.

Beetle	Trap number
<i>Dryocoetes autographus</i>	11, 12, 17, 18, 19, 21, 27, 30, 31, 33, 37, 40, 41, 42, 43, 44, 45, 46 and 51.
<i>Hylurgops palliatus</i>	6, 11, 12, 17, 18, 19, 21, 22, 27, 30, 31, 33, 37, 40, 41, 42, 43, 44, 45, 46, 51 and 54.
<i>Cerambycidae</i> spp.	6, 11, 40, 43 and 44.
<i>Hylobius abietis</i>	6, 19, 20, 24, 25, 40, 43, 44, 46, 49 and 54.
<i>Rhizophagus</i> spp.	12.
<i>Pissides</i> spp.	7.
<i>Ips sexdentatus</i>	27.

#### 3.10.2 Northern Ireland:

None of the target insects/organisms were located at any of the permanent study plots.

The following insects were found during the survey:

<i>Hylobius abietis</i>	<i>Hylastes cunicularius</i>
<i>Hylastes brunneus</i>	<i>Hylurgops palliatus</i>
<i>Dryocoetes autographus</i>	<i>Strophosomus melanogrammus</i>
<i>Otiorhynchus singularis</i>	<i>Tomicus piniperda</i>
<i>Pissodes pini</i>	<i>Rhizophagus</i> spp.

*Pityophagus ferrugineus*  
*Elatobium abietinum*

*Urocerus gigas*  
*Cinara pilicornis*

### **3.10.3 Isle of Man:**

None of the target insects/organisms were located at any of the permanent study plots. However, the following beetles were found in the traps at each survey point:

Insect	Site
<i>Coloboferus fossor</i>	Ballagh

### **3.10.4 Jersey:**

The following insects were found either in the traps or during visual assessments of standing trees, at each survey point:

*Dolichomitus terebrans*  
*Tomicus piniperda*  
*Pissodes castaneus*  
*Hylurgops palliatus*  
*Lymantria dispar*

### **3.10.5 Guernsey:**

None of the target insects/organisms were located at any of the permanent study plots.

### **3.11 Details of standing written instructions relating to the implementation of the official action programme:**

Various standing instructions, maps and advisory information have been published; details were given in previous submissions.

### **Report prepared by:**

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**June 2005**

### **Incorporating details from reports produced:**

Northern Ireland:	Insects: Dr A C Bell (alan.c.bell@dardni.gov.uk)
	Fungi: Ms F Forster (Fay.Forster@dardni.gov.uk)
Isle of Man:	Mr R Pollard (Robin.Pollard@daff.gov.im)
Jersey:	Mr S Meadows (S.Meadows@gov.je)
Guernsey:	Mr N Clark (nigel.clark@commerce.gov.gg)

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Hypoxylon mammatum</i>
<b>Country</b>	UK (Northern Ireland)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
<i>Populus</i> spp.	Northern Ireland	Throughout the year	FOP	3	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>Number inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Gremmeniella abietina</i>
<b>Country</b>	UK (Northern Ireland)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
Coniferales	Northern Ireland	Throughout the year	FOP	14	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>Number inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Ips typographus</i>
<b>Country</b>	UK (All parts)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
Coniferales	Northern Ireland	Throughout the year	FOP	150	None
Coniferales	Isle of Man	July and October 2004	FOP	3	None
Coniferales	Jersey	August and October 2004	FOP	11	None
Coniferales	Guernsey	September 2004	FOP	3	None
Coniferales	Great Britain	April to September 2004	FOP	40	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Ips sexdentatus</i>
<b>Country</b>	UK (Northern Ireland and Isle of Man)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
Coniferales	Northern Ireland	Throughout the year	FOP	150	None
Coniferales	Isle of Man	July and October 2004	FOP	3	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Ips duplicatus</i>
<b>Country</b>	UK (All parts)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
Coniferales	Northern Ireland	Throughout the year	FOP	150	None
Coniferales	Isle of Man	July and October 2004	FOP	3	None
Coniferales	Jersey	August and October 2004	FOP	11	None
Coniferales	Guernsey	September 2004	FOP	3	None
Coniferales	Great Britain	April to September 2004	FOP	40	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>Number inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Ips cembrae</i>
<b>Country</b>	UK (Northern Ireland and Isle of Man)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
Coniferales	Northern Ireland	Throughout the year	FOP	150	None
Coniferales	Isle of Man	July and October 2004	FOP	3	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Ips amitinus</i>
<b>Country</b>	UK (All parts)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
Coniferales	Northern Ireland	Throughout the year	FOP	150	None
Coniferales	Isle of Man	July and October 2004	FOP	3	None
Coniferales	Jersey	August and October 2004	FOP	11	None
Coniferales	Guernsey	September 2004	FOP	3	None
Coniferales	Great Britain	April to September 2004	FOP	40	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Gilpinia hercyniae</i>
<b>Country</b>	UK (Northern Ireland, Isle of Man and Jersey)
<b>Region</b>	
<b>Period of Report</b>	2004

<b>Visual Inspections</b>					
<b>Host</b>	<b>Location</b>	<b>Timing</b>	<b>Unit of inspection</b>	<b>Number inspected</b>	<b>Positives</b>
<i>Picea</i> spp.	Northern Ireland	Throughout the year	FOP	50	None
<i>Picea</i> spp.	Isle of Man	Throughout the year	FOP	3	None
<i>Picea</i> spp.	Jersey	August and October 2004	FOP	4	None

<b>Laboratory Inspections</b>		
<b>Unit of Inspection</b>	<b>inspected</b>	<b>Positives</b>

<b>Outbreaks</b>			
<b>Total found during period of report</b>	<b>Total number eradicated</b>	<b>Total number remaining in PZ</b>	<b>Total number &gt; 2 years old</b>
None	None	None	None

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Dendroctonus micans</i>
<b>Country</b>	Northern Ireland and Jersey
<b>Region</b>	
<b>Period of Report</b>	2004

Visual Inspections					
Host	Location	Timing	Unit of inspection	Number inspected	Positives
Coniferales	Northern Ireland	Throughout the year	FOP	115	None
Coniferales	Jersey	August and October 2002	FOP	2	None

Laboratory Inspections		
Unit of Inspection	inspected	Positives

Outbreaks			
Total found during period of report	Total number eradicated	Total number remaining in PZ	Total number > 2 years old

### Results of survey of a Protected Zone

<b>Pest</b>	<i>Cephalcia lariciphila</i>
<b>Country</b>	UK (Northern Ireland, Isle of Man and Jersey)
<b>Region</b>	
<b>Period of Report</b>	2004

Visual Inspections					
Host	Location	Timing	Unit of inspection	Number inspected	Positives
<i>Larix</i> spp.	Northern Ireland	Throughout the year	FOP	50	None
<i>Larix</i> spp.	Isle of Man	July and September 2004	FOP	3	None
<i>Larix</i> spp.	Jersey	August and October 2004	FOP	2	None

Laboratory Inspections		
Unit of Inspection	inspected	Positives

Outbreaks			
Total found during period of report	Total number eradicated	Total number remaining in PZ	Total number > 2 years old
None	None	None	None