

16 Indigenous Vegetation and Fauna

Introduction

Areas of indigenous vegetation and habitats of indigenous fauna in the City have been, and may continue to be, incrementally depleted through land use practices that involve, for example, vegetation clearance, burning or modification. While individually these remaining areas of indigenous vegetation may not appear to warrant consideration, collectively they are important for the purpose of retaining biological diversity, ecosystem integrity, natural character and amenity values. The purpose of the Resource Management Act 1991 is to promote the sustainable management of natural and physical resources, which requires that the potential of all natural and physical resources be sustained in order to meet the reasonably foreseeable needs of future generations and that the life-supporting capacity of ecosystems be safeguarded. In achieving the purpose of the Act, the Council is required to have particular regard to the intrinsic values of ecosystems, the maintenance and enhancement of amenity values and the quality of the environment, and any finite characteristics of natural and physical resources.

The Act also requires, as a matter of national importance, that the Council recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Areas of significant indigenous vegetation and significant habitats of indigenous fauna are natural resources that are valued for a range of reasons, but are distinctive in that they are ecosystems characterised by a high level of intrinsic value.

The City covers a large geographic area which stretches from the east coast of the South Island to the block-faulted mountains of the Rock and Pillar Range in the west. As a consequence, the types of significant indigenous vegetation and significant habitats of indigenous fauna which occur in the City cover a broad range, from the yellow-eyed penguin breeding sites on Otago Peninsula to the tussock grasslands found on the Rock and Pillar Range. In fact, seven distinctly different ecological districts can be identified in the City, namely Waikouaiti, Dunedin, Tokomairiro, Waipori, Macraes, Maniototo and Rock and Pillar. Each district is a land unit which is ecologically homogeneous, or possesses a simple or repeating sequence of ecosystems.

Like indigenous vegetation and habitats of indigenous fauna in general, the extent of areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City has been greatly reduced over time by the effects of land use activities. A significant proportion of these resources is now formally protected and managed under legislation such as the Conservation Act 1987.

16.1 Significant Resource Management Issues

Issue 16.1.1

The incremental modification and loss of areas of indigenous vegetation and habitats of indigenous fauna through land use practices is resulting in a reduction of the biological diversity, ecosystem integrity, natural character and amenity values of the City.

Objective: 16.2.1

Policy: 16.3.1

Explanation

Indigenous vegetation and habitats of indigenous fauna are important, particularly for their part in retaining the biological diversity, ecosystem integrity, natural character and amenity values of the City. The incremental modification and loss of these areas in the past has been extensive. Any further modification or loss of remaining areas means the values for which they are important would be under threat.

Issue 16.1.2

The adverse effects of land use activities are compromising both the protection, and ultimately the life-supporting capacity, of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

Objective: 16.2.2

Policies: 16.3.2 - 16.3.6

Explanation

Activities which affect, disturb or destroy areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City and its coastal margins may compromise the protection, and ultimately the life-supporting capacity, of these ecosystems. The Council has a responsibility under the Act to ensure that this does not occur, and that these resources are protected from such adverse effects.

16.2 Objectives

Objective 16.2.1

Enhance the indigenous biodiversity, ecosystem integrity, natural character and amenity values of the City through the retention of remaining areas of indigenous vegetation and habitats of indigenous fauna.

Issue: 16.1.1

Policy: 16.3.1

Explanation

Indigenous vegetation and habitats of indigenous fauna are important, particularly for their part in retaining the biological diversity, ecosystem integrity, natural character and amenity values of the City. Individually, not all of these areas may appear to warrant consideration, however, collectively they are an important resource which the Council wishes to see retained.

Objective 16.2.2

Recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City and its coastal margins.

Issue: 16.1.2

Policies: 16.3.2 - 16.3.6

Explanation

The Act places particular emphasis on the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance. As areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City and its coastal margins are threatened by certain adverse effects of land use activities, the Council has an obligation to ensure that these resources are recognised and protected.

Principal Reasons for Adopting Objectives

The objectives are adopted because the Act requires the potential of all natural and physical resources to be sustained in order to meet the reasonably foreseeable needs of future generations. Indigenous vegetation and habitats of indigenous fauna are valued for the part they play in retaining biological diversity, ecosystem integrity, natural character and amenity values of the City. Those values are under threat due to land use practices. The Act also requires, as a matter of national importance, that the Council recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Areas of significant indigenous vegetation and significant habitats of indigenous fauna are natural resources that are valued for a range of reasons, but are distinctive in that they are ecosystems characterised by a high level of intrinsic value. These significant areas are also potentially compromised by the adverse effects of land use activities.

16.3 Policies

Policy 16.3.1

Encourage the retention of areas of indigenous vegetation and habitats of indigenous fauna.

Objective: 16.2.1

Methods: 16.4.2, 16.4.3

Explanation

Because of the potential threat to remaining areas of indigenous vegetation and habitats of indigenous fauna, and because these areas are important for their part in retaining biological diversity, ecosystem integrity, natural character and amenity values of the City, the Council's encouragement for the retention of these areas is crucial in order to sustain this resource for future generations.

Policy 16.3.2

Identify areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City and raise the level of awareness of the values of these areas.

Objective: 16.2.2

Methods: 16.4.1, 16.4.2, 16.4.4

Explanation

Awareness of the location and values of areas of significant indigenous vegetation and significant habitats of indigenous fauna is fundamental to retaining the biological diversity, ecosystem integrity, natural character and amenity values of the City, and hence sustaining this important natural resource for future generations. Without such knowledge it is not possible to clearly establish, justify and successfully implement an appropriate effects-based management regime which will protect these significant resources.

Policy 16.3.3

Avoid the effects of land use activities where those effects may compromise the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City.

Objective: 16.2.2

Methods: 16.4.4 - 16.4.6

Explanation

Activities which disturb or destroy areas of significant indigenous vegetation and significant habitats of indigenous fauna may compromise the protection, and ultimately the life-supporting capacity, of these resources by undermining ecosystem functioning and reducing the area of the resource. It is important that these adverse effects are avoided.

Policy 16.3.4

Provide for the establishment and operation of activities whose effects contribute positively to the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City.

Objective: 16.2.2

Method: 16.4.5

Explanation

Certain activities have the positive effect of contributing to the protection, and ultimately the life-supporting capacity, of areas of significant indigenous vegetation and significant habitats of indigenous fauna. For each of these areas the types of activities that may have a positive effect will need to be determined on a case by case basis because of the different characteristics and values, and hence different levels of vulnerability, pertaining to each area. Management plans will be an important tool in achieving this.

Policy 16.3.5

Support efforts to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna in private ownership in the City.

Objective: 16.2.2

Methods: 16.4.2, 16.4.6

Explanation

Areas of significant conservation value in Dunedin City are in both public and private ownership. Sites in public ownership can be considered to be better assured of ongoing protection than those in private ownership because a broader funding basis exists to support them. Accordingly, the Council considers that it may be appropriate to support the protection of sites in private ownership.

Policy 16.3.6

Facilitate the identification and resolution of cross-boundary management issues relating to the protection of those areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City.

Objective: 16.2.2

Methods: 24.4.2, 24.4.3

Explanation

Certain areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City may be influenced by cross boundary management factors because of their location relative to administrative boundaries. Protection of these resources from the adverse effects of land use activities can only be achieved by cooperation between the Council and other local authorities. The Council is committed to such cooperation in order to achieve the management objective.

Principal Reasons for Adopting Policies

The key factors which influence the attainment of the objectives have been reflected in the policy framework. Areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City are identified in the District Plan as ‘Areas of Significant Conservation Value’ because recognition of their presence enables the Council, and other agencies where appropriate, to implement management strategies for their protection. It is essential that such strategies recognise and provide for the fact that while some effects of land use activities threaten to obstruct attainment of the Council’s objectives, other effects actually help achieve the objectives by maintaining and enhancing resource quality. While the majority of resources identified in the District Plan as being areas of significant conservation value are in public ownership, some are not, and private land owners interested in protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna deserve support where appropriate in order to facilitate resource protection. Finally, management strategies must give recognition to the fact that some mechanism is required to facilitate cooperation between management agencies in instances where cross-boundary issues arise.

For remaining indigenous vegetation and habitats of indigenous fauna in the City that have not been identified as being significant in the District Plan, the Council believes that a non-regulatory approach to encourage their retention is the most effective way of sustaining that natural resource for future generations. These areas are difficult to identify in the District Plan because individually they may not appear to warrant retention. However, collectively they contribute to the City’s biological diversity, ecosystem integrity, natural character and amenity values.

16.4 Methods of Implementation

In addition to the rules, the methods to be used to achieve the objectives and policies identified in this section include the following:

Method 16.4.1 Maps

Areas of significant indigenous vegetation and significant habitats of indigenous fauna (Areas of Significant Conservation Value) are identified on District Plan Maps.

Policy: 16.3.2

Method 16.4.2 Promotion and Liaison

Raise awareness of and share information on:

- the importance of retaining areas of indigenous vegetation and habitats of indigenous fauna in general; and,
- the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna

with landowners and other interested parties, for example highlighting options available for protection outside of this District Plan.

Policies: 16.3.1, 16.3.2, 16.3.5

Method 16.4.3 Guidelines and Accords

Encourage the development and adoption of guidelines and accords, including codes of practice, that seek to encourage landowners to sustain indigenous vegetation and habitats of indigenous fauna.

Policy: 16.3.1

Method 16.4.4 Schedules *[Amended by Consent Order 4/5/04]*

Identify areas of significant indigenous vegetation and significant habitats of indigenous fauna (Areas of Significant Conservation Value) for inclusion in Schedule 25.4 based on the following criteria:

- (i) Criteria for identification of areas of significant conservation value:

Any natural resource, or aggregation of such resources, will be considered to be an area of significant conservation value under one or more of the following criteria:

 - (a) Existing protected areas: habitat or indigenous vegetation that has been specially set aside by statute or covenant for protection and preservation.
 - (b) Wetlands: including wetlands that are listed in the WERI inventory by virtue of their ecological and representative importance or that are listed in the schedules of the Otago Regional Council's Regional Plan: Water.
 - (c) Sites within the Dunedin City boundaries that are listed in an Otago Regional Council Regional Plan as having significant conservation value. For sites listed in the Regional Plan: Coast, including the Marine Mammal and Bird Sites in Schedule 3.1, the Dunedin City Council will establish the extent to which these sites extend inland of the Coastal Marine Area.

- (d) **Rarity/distinctiveness:** the degree to which vegetation and habitat types that were formerly common are now reduced in extent, or are naturally rare, or support native species (plants or animals) that are uncommon, in decline or threatened with extinction within an ecological district/subdistrict, ecological region or nationally, including those listed in Appendix 16A.
- (e) **Representativeness:** the degree to which vegetation is representative of that which formerly covered Dunedin City's ecological districts. Representativeness is defined by the percentage present of the native plant species that are known to have been in that vegetation type in the Dunedin district since European settlement (the 'characteristic' species), and the percentage contribution of native species to the plant cover.
- (f) **Viability:** the degree to which existing natural habitat or vegetation is capable of maintaining or recovering its structure and composition in the absence of additional management, or is subject to a formal restoration programme.
- (g) **Context in the Ecological Landscape:** the degree to which an area of native habitat or vegetation links other such areas or contributes to the ecological significance of the immediate vicinity. Such areas have a significant ecological function if they are within flying distance for the majority of native birds, a maximum of approximately 500m, or if they increase habitat suitability for terrestrial and aquatic flora and fauna by providing cover, shelter, food, nesting sites, a buffer from harmful influences, etc.
- (h) **Diversity/pattern:** the number of species of native vascular plants and animals, and the number of vegetation/habitat types, contained in an area.
- (i) **Naturalness/intactness:** the degree of absence of disturbance and damage by human activity and the activity of introduced animals.
- (j) **Size and shape:** the size of an area of vegetation or habitat and the degree to which its shape influences the viability of the site.

(ii) **Process for including areas of significant conservation value in Schedule 25.4:**

A plan change, in accordance with the First Schedule of the Act, will be required before an area of significant conservation value that meets the criteria listed in (i)(a) to (j) above can be included in Schedule 25.4. Consultation will be carried out with the owner of land identified for inclusion in accordance with the First Schedule of the Act.

Where a plan change for an area of significant conservation value to be included in Schedule 25.4 has been implemented, the provisions in (a) and (b) below will be observed by the Council:

- (a) Advise owners of property adjoining the area of significant conservation value in writing of:
- the location of that area of significant conservation value relative to the boundaries of their property
 - the values of the area of significant conservation value that the Council is seeking to protect
 - the rules relating to the management of areas of significant conservation value as set out in the District Plan
 - the responsibility of landowners to comply with the provisions of the Forest and Rural Fires Act 1977 in respect of open fires

- the responsibility of landowners to comply with the provisions of the Wild Animal Control Act 1977 and the Wildlife (Farming of Unprotected Wildlife) Regulations 1985 in respect of the keeping and farming of wild animals and fitches respectively.
- (b) Provide the agencies responsible for processing burning permit applications under the Resource Management Act 1991, the Forest and Rural Fires Act 1977 and the Land Act 1948 with a list of areas of significant conservation value identified in the District Plan for the purpose of ensuring that appropriate provision can be made for the security of those areas when considering applications for burning.

Policies: 16.3.2, 16.3.3

Method 16.4.5 Areas of Significant Conservation Value Management Plans and Indigenous Habitat Management Plans

Formulate management plans by agreement between Council and landowners to provide for the management of all activities undertaken on that land identified in Schedule 25.4 or undertaken on land that has been assessed for inclusion in Schedule 25.4 so as to achieve protection of those specific areas of significant conservation value listed, or proposed to be listed, in Schedule 25.4. Such a management plan will identify the values of the site which merit its inclusion in Schedule 25.4, the potential threats to these values and limitations on land use necessary to avoid such threats, and the activities which may be undertaken as a controlled activity on the land. An Indigenous Habitat Management Plan may also identify areas covered by Rule 16.6.2 which do not warrant inclusion in Schedule 25.4 and the activities which may be undertaken as a controlled activity on those areas.

Policies: 16.3.3, 16.3.4

[Amended by Consent Order 4/5/04]

Method 16.4.6 Economic Instruments

At the written request of the owner of an area of significant conservation value listed in Schedule 25.4 which is in private ownership, the Council will consider providing financial assistance in order to help facilitate the protection of that area of significant conservation value.

Policies: 16.3.3, 16.3.5

Principal Reasons for Adopting Methods

The methods seek to avoid the adverse effects of land use activities on areas of significant indigenous vegetation and significant habitats of indigenous fauna. Clear criteria have been identified to facilitate the identification of such significant resources. Because of the importance of areas of significant conservation value and their vulnerability to the effects of a wide range of land use activities, the Council has established a regulatory framework to ensure the protection of these resources from activities carried out within them. Because the effects of activities carried out on land adjacent to areas of significant conservation value can also threaten the security of the values of those areas, processes have been identified which seek to raise both the level of public awareness of areas of significant conservation value locations and values generally, and to manage those adverse effects of land use activities which pose the greatest threat to the resources concerned.

Remaining areas of indigenous vegetation and habitats of indigenous fauna in the District that have not been identified as being significant in the District Plan are difficult to identify in the District Plan because individually they may not appear to warrant retention. However, collectively they contribute to the City's biological diversity, ecosystem integrity, natural character and amenity values. For these areas and habitats, the Council believes that a non-regulatory approach to encourage their retention is the most effective way of sustaining that natural resource for future generations. The methods seek to encourage landowners to retain remaining areas of indigenous vegetation and habitats of indigenous fauna in the City through greater awareness and availability of information. It is anticipated that this non-regulatory approach may be further enhanced through the development of guidelines and industry codes of practice that seek to encourage landowners to sustain indigenous vegetation and habitats of indigenous fauna.

16.5 Rules for Areas of Significant Conservation Value listed in Schedule 25.4 [Amended by Consent Order 4/5/04]

Rule 16.5.1 Permitted Activities

The following activities are the only permitted activities in respect of the areas of significant conservation value listed in Schedule 25.4, provided that they comply with the relevant conditions in Rule 16.5.2:

- (i) Signs.
- (ii) For sites in respect of which a conservation management strategy, conservation management plan or covenant established under the Conservation Act 1987 or any other Act specified in the First Schedule to the Conservation Act 1987 is in force:
 - (a) Any activity which complies with the relevant strategy, plan or covenant.

Rule 16.5.2 Conditions Attaching to Permitted Activities

- (i) **Signs**
 - (a) There shall be no more than one sign per public entry point to an area of significant conservation value.
 - (b) No sign shall exceed 2 m².
 - (c) The content of any permitted sign shall be confined to information which pertains directly to the area of significant conservation value, including matters relating to its management.

Rule 16.5.3 Controlled Activities

The following activities are controlled activities in respect of the areas of significant conservation value listed in Schedule 25.4:

- (i) For sites in respect of which an Area of Significant Conservation Value Management Plan is in force:
 - (a) Any activity provided for in the relevant management plan. The matters over which Council will exercise its control are the effects of the proposed land use with regard to the values for which the site has been protected in Schedule 25.4. Applications under this rule may be considered without the need to obtain the written approval of affected persons.

Rule 16.5.4 Discretionary Activities (Restricted)

The following activities are discretionary activities (restricted) in respect of areas of significant conservation value listed in Schedule 25.4:

- (i) Any sign which does not comply with the conditions in Rule 16.5.2. The Council's discretion is restricted to the condition or conditions with which the activity fails to comply.

Rule 16.5.5 Discretionary Activities (Unrestricted)

The following activities are discretionary activities (unrestricted) in respect of areas of significant conservation value listed in Schedule 25.4:

- (i) Pastoral intensification.
- (ii) Vegetation clearance or modification.
- (iii) Earthworks over 1m³ in volume or 25m² in area, with the exception of earthworks involved in the maintenance or formation of tracks up to 1.5m in width, and the maintenance of roads. *[Amended by Plan Change 11, 11/10/10]*

Rule 16.5.6 Non-Complying Activities

Any activity not specifically identified as permitted, controlled or discretionary in the rules of this section is non-complying.

16.6 Rules for indigenous vegetation, coastal habitat, wetlands and skink habitat not listed in Schedule 25.4

[Rule 16.6 was Inserted by Consent Order 4/5/04]

Note: These rules are an interim measure to protect potential areas of significant conservation value while Schedule 25.4 Areas of Significant Conservation Value is being updated. These interim rules (and any appendices, definitions and methods that are specific only to these rules) are to be removed as part of the plan change process of updating the Schedule.

Rule 16.6.1 Controlled Activities

The following activities are controlled activities in respect of areas of indigenous vegetation, coastal habitat, wetlands (see Definitions Section), or skink habitat (as identified in Map 79) not listed in Schedule 25.4:

- (i) For sites in respect of which an Indigenous Habitat Management Plan is in force:
 - (a) Any activity provided for in the relevant management plan. The matters over which Council will exercise its control are the effects of the proposed land use with regard to the criteria used to identify Areas of Significant Conservation Value in Method 16.4.4(i). Applications under this rule may be considered without notification and without the need to obtain the consent of, or serve notice on, affected persons.

Rule 16.6.2 Discretionary Activities (Unrestricted)

In the Rural and Rural Residential zones, excluding any Urban Landscape Conservation Area, the following are discretionary activities (unrestricted):

- (i) Clearance or modification of indigenous vegetation.
- (ii) Earthworks over 1m³ in volume or 25m² in area (including deposit of fill in wetlands). *[Amended by Plan Change 11, 11/10/10]*
in respect of:
 - (a) Coastal habitat.
 - (b) Wetland.
 - (c) Skink habitat as identified in Map 79.
 - (d) Indigenous vegetation.

Except that this rule does not apply to:

1. Indigenous vegetation which is not in a coastal habitat, a wetland or a skink habitat, so long as all of the following conditions are satisfied:
 - (a) The indigenous vegetation is totally separated from other indigenous vegetation; and
 - (b) The area containing indigenous vegetation is less than the minimum area shown in map 79; and
 - (c) The indigenous vegetation does not include either a threatened species listed in Appendix 16A or mature tree(s) of a species listed in Appendix 16B.

NOTE:

- (i) Indigenous vegetation which is divided by a road, river, stream, firebreak, track, fence line or property boundary is not considered to be separated and the combined area must be less than the minimum area.
 - (ii) If the indigenous vegetation straddles two minimum area rules, the lesser minimum area shall apply.
 - (iii) Indigenous vegetation can include a range of habitat types within the same area.
2. Vegetation which was planted for harvesting, shelterbelt or amenity purposes.
 3. Vegetation which has grown naturally on land that has been clear of such vegetation less than 15 years prior, and does not contain a threatened species as listed in Appendix 16A.
 4. Topdressing or oversowing of areas that have been previously topdressed or oversown in the last 15 years.
 5. Cultivation of areas that have been previously cultivated in the last 15 years.
 6. Where residential activity (including the buildings) is a permitted activity, clearance of vegetation and ground disturbance to create a 1000 m² building platform if there is no existing cleared building platform within the site and a 3.5 m wide access to the building platform provided that no species as listed in Appendix 16A or mature tree(s) of a species listed in Appendix 16B are cleared.
 7. Forestry activity where there is an understorey of indigenous vegetation.
 8. Areas within a forestry activity where, during the previous or current rotation, either seedlings did not strike or trees were wind thrown.
 9. Reestablishment of access tracks previously used for the planting, maintenance or harvesting of a forestry activity.
 10. Maintenance of existing utilities (including irrigation infrastructure), tracks, drains, structures, roads, fire breaks and fence lines but not their extension.
 11. Construction of tracks up to 1.5 m in width. *[Amended by Plan Change 11, 11/10/10]*
 12. Removal of wind thrown or dead standing trees which have become dangerous to life or property.
 13. Removal of pest plants (as included in the New Zealand Pest Plant Manual, August 2002, published by Protect New Zealand and available at www.protectnz.org.nz).
 14. Planting of indigenous vegetation or removal of exotic vegetation which enhances the conservation values of the habitat.
 15. Any activity which complies with a conservation management strategy, conservation management plan or covenant established under the Conservation Act 1987 or any other Act specified in the First Schedule of the Conservation Act 1987.

In assessing any application, Council will, in addition to other matters, have regard to the criteria used to identify Areas of Significant Conservation Value in Method 16.4.4(i).

16.7 Assessment of Resource Consent Applications

In assessing any application, in addition to the matters contained in the Fourth Schedule of the Act, the Council will have regard to, but not be restricted by the following matters:

16.7.1 Cumulative Effects

The cumulative effect of the incremental loss or modification of areas of indigenous vegetation and habitats of indigenous fauna.

16.7.2 Conservation Values

The necessity of the proposed activity for the purpose of maintaining or enhancing the conservation values of the area.

16.7.3 Sensitivity

The sensitivity of the area of significant conservation value to the actual and potential adverse effects of the proposed activity in terms of the likelihood of, and projected time frame for, complete recovery from any such effects.

16.7.4 Guidelines and Accords

Any guidelines, accords or codes of practice which address conservation values such as the Otago Regional Council's Code of Practice for the management of Vegetation Burning in the Otago High Country and the Forestry Stewardship Council's Forest Certification process.

[Inserted by Consent Order 4/5/04]

16.8 Anticipated Environmental Results

The anticipated environmental results are:

16.8.1

Remaining areas of indigenous vegetation and habitats of indigenous fauna are retained.

16.8.2

Areas of significant conservation value are protected.

16.8.3

Enhanced public awareness of areas of indigenous vegetation and habitats of indigenous fauna, and areas of significant conservation value.

16.8.4

Identification of additional areas to be accorded 'Areas of Significant Conservation Value' status.

Appendix 16A [Inserted by Consent Order 4/5/04]

List of 'Threatened Plants' present on land within Dunedin City

Species	Threat Classification	Type of Plant	Habitat
<i>Crassula peduncularis</i>	Nationally endangered	Herb	Lowland-montane wetland
<i>Lepidium oleraceum</i>	Nationally endangered	Herb (cress)	Coastal ledges
<i>Myosurus minimus</i> subsp. <i>novae-zelandiae</i>	Nationally endangered	Herb	Montane wetland
<i>Olearia hectorii</i>	Nationally vulnerable	Small tree	Coastal forest
<i>Carex litorosa</i>	Serious decline	Sedge	Coastal marsh
<i>Myosotis pygmaea</i> var. <i>pygmaea</i>	Serious decline	Herb (forget-me-not)	Coastal headland
<i>Olearia fimbriata</i>	Serious decline	Small tree	Montane shrubland
<i>Brachyglottis sciadophila</i>	Gradual decline	Climber (climbing daisy)	Coastal shrubland
<i>Desmoschoenus spiralis</i>	Gradual decline	Sedge	Coastal dunes
<i>Epilobium chionanthum</i>	Gradual decline	Herb (willow herb)	Lowland-montane swamps
<i>Lepidium tenuicaule</i>	Gradual decline	Herb (cress)	Coastal herbfield
<i>Peraxilla colensoi</i>	Gradual decline	Hemi-parasitic shrub (mistletoe)	Silver beech forest
<i>Peraxilla tetrapetala</i>	Gradual decline	Hemi-parasitic shrub (mistletoe)	Silver beech forest
<i>Ranunculus recens</i> var. <i>recens</i>	Gradual decline	Herb (buttercup)	Coastal herbfields
<i>Tupeia antarctica</i>	Gradual decline	Hemi-parasitic shrub (mistletoe)	Lowland forest
<i>Carmichaelia crassicaule</i>	Gradual decline	Shrub (broom)	Montane tussockland
<i>Dracophyllum uniflorum</i> var. <i>frondosum</i>	Gradual decline	Shrub	Montane tussockland
<i>Raoulia parkii</i>	Gradual decline	Herb	Alpine cushionfield
<i>Teucrium parvifolium</i>	Gradual decline	Shrub	Lowland forest
<i>Olearia fragrantissima</i>	In decline, Dunedin has nationally significant populations.	Small tree	Coastal forest and shrubland

<i>Pseudopanax ferox</i>	In decline, Dunedin has nationally significant populations.	Small tree	Lowland forest and scrub
<i>Aciphylla subflabellata</i>	In decline, Dunedin has nationally significant populations.	Herb (speargrass)	Lowland-montane grasslands
<i>Olearia bullata</i>	Sparse	Shrub	Lowland-montane bogs and shrubland
<i>Olearia lineata</i>	In decline, Dunedin has nationally significant populations.	Small tree	Lowland-montane shrubland + forest
<i>Scandia geniculata</i>	In decline, Dunedin has nationally significant populations.		
<i>Fuchsia percan dens</i>	In decline, Dunedin has nationally significant populations.		
<i>Urtica ferox</i>	In decline, Dunedin has nationally significant populations.		
<i>Coprosma virescens</i>	In decline, Dunedin has nationally significant populations.		
<i>Ileostylus micranthus</i>	In decline, Dunedin has nationally significant populations.		
<i>Chionochloa rubra</i> <i>subsp. cuprea</i>	In decline, Dunedin has nationally significant populations.	Grass (red or copper tussock)	Lowland-montane poorly drained grasslands

Appendix 16B *[Inserted by Consent Order 4/5/04]*

List of important native tree species present on land within Dunedin City

Mature trees of these species are defined as those whose protection is desirable to provide a seed source necessary for maintenance or re-establishment of a sustainable local population of the species, or which provide essential ecological services (shelter, habitat, food) for the maintenance of populations of other native flora and fauna. Mature trees are those which are greater than 15 years old.

Botanical Name	Common Name
<i>Dacrycarpus dacrydioides</i>	Kahikatea
<i>Dacrydium cupressinum</i>	Rimu
<i>Elaeocarpus hookerianus</i>	Pokaka
<i>Halocarpus bidwillii</i>	Bog pine
<i>Halocarpus biformis</i>	Pink pine
<i>Hoheria angustifolia</i>	Narrow-leaved lacebark
<i>Libocedrus bidwillii</i>	Cedar
<i>Lophomyrtus obcordata</i>	
<i>Melicope simplex</i>	
<i>Myoporum laetum</i>	Ngaio
<i>Nothofagus menziesii</i>	Silver beech
<i>Phyllocladus alpinus</i>	Celery pine
<i>Plagianthus regius</i>	Lowland ribbonwood
<i>Podocarpus hallii</i>	Hall's totara
<i>Podocarpus totara</i>	Totara
<i>Prumnopitys ferruginea</i>	Miro
<i>Prumnopitys taxifolia</i>	Matai
<i>Sophora microphylla</i>	Kowhai
<i>Streblus heterophyllus</i>	Milk tree
<i>Weinmannia racemosa</i>	Kamaha

