Biodiversity Enhancement

Nature

Credit: 36
Points: 4

Outcome

The building's landscape enhances the biodiversity of the site.

Criteria

Credit Achievement	2 points	The building's site includes an appropriate landscape area.
		 The landscaping includes a diversity of species and prioritises the use of climate- resilient and indigenous plants.
		 The landscape design includes refuge and/or food for native fauna including birds, reptiles, amphibians, insects and other invertebrates as appropriate to the ecological context.
		 The project team develops a site-specific Biodiversity Management Plan and provides it to the building owner or building owner representative.
Exceptional Performance	2 points	In addition to the Credit Achievement:
		A greater area of landscaping is provided.
		 The landscaping includes critically endangered and/or endangered plant species native to the ecological district, or planting which provides foraging or habitat for critically endangered fauna species as appropriate to the ecological district.

Additional information

Stage implementation

Strategy Brief Concept Design Tender Construction Handover Use

Synergies with other credits

- Connection to Nature
- Impacts to Nature
- Nature Connectivity
- Water Use
- **Sustainable Development Goals**

Goal 13 (Climate Action)

- Climate Change Resilience
- Operations Resilience
- Culture, Heritage, and Identity

Goal 14 (Life Below Water)

Relevant reporting initiatives

GRESB

Requirements

Credit Achievement

The project must comply with all three of the following criteria:

- Landscape Area
- Diversity of Species
- · Biodiversity Management Plan

Landscape Area

At a minimum, external landscape in the building, whether horizontal or vertical must be provided at a ratio of either 15% of the site area or at a ratio of 1:500 of the GFA, whichever is larger. Vertical or horizontal landscapes are acceptable.

Diversity of Species

Landscape must be shown to be diverse and include multiple species/genus/etc.

Greater than 60% of plants must be indigenous and the site must include at least one significant (nesting) tree or equivalent habitat provision per 500m² of landscaped area.

No invasive species are allowed. Refer to local Councils for advice on invasive weeds and their management.

There are two pathways to demonstrate diversity in plant selection and climate resilience.

Prescriptive pathway

The landscaping must not exceed the following percentages per type:

- 10% of plants from one species
- 20% of plants from one genus
- 30% of plants from one family

Submission on this basis must demonstrate that species are regionally appropriate and provide key food or shelter plants for local indigenous fauna.

Performance pathway

An ecologist must assess and verify that the choice of landscaping and biodiversity is diverse and resilient to climate change impacts, thereby increasing the longevity of the landscape. A Suitably Qualified professional must provide this narrative.

Biodiversity Management Plan

A suitably qualified professional, such as a qualified ecologist or landscape architect, must prepare the Plan.

The plan must outline key actions that need to be undertaken in order to maintain the ecological integrity of biodiversity on the site, whether this is existing or that created as part of the development.

The following key requirements must be outlined in the biodiversity management plan:

• The vision and objectives for the site's biodiversity values

 Recognition of any regionally or locally threatened habitats or habitats of threatened indigenous fauna that can be offset or augmented as a key objective of the Biodiversity Management Plan

- · Roles and responsibilities in the implementation of the Plan
- · A description of the biodiversity baseline on and surrounding the site
- A description of the proposed biodiversity enhancements and how they connect to the existing baseline on and surrounding the site
- How success and implementation will be measured
- How impacts or threats to biodiversity on site post practical completion will be mitigated
- Provision for update of the Biodiversity Management Plan where necessary
- How the Plan contributes to 'Te Mana o te Taiao Aotearoa New Zealand Biodiversity Strategy' and other current indigenous
 and biodiversity strategies and policies.

The Plan must be included as part of the project's handover.

Exceptional Performance

In addition to the Credit Achievement, the project must comply with all of the following criteria:

- Landscape Area
- Diversity of Species
- Evidence that the landscape provides augmentation or offset to regionally or locally significant or threatened habitats or species

Landscape Area

As a minimum, external landscape in the building, whether horizontal or vertical must be provided at a ratio of either 30% of the site area or at a ratio of 1:300 of GFA, whichever is larger. Vertical or horizontal landscapes are acceptable.

Diversity of Species

Landscape must be shown to be diverse and include multiple species/genus/etc.

A qualified ecologist must review, assess, and verify how the choice of landscaping and biodiversity is diverse and resilient to climate change impacts, thereby increasing the longevity of the landscape.

Greater than 80% of plants must be indigenous and the site must include at least one significant (nesting) tree or equivalent habitat provision (i.e. pond for frogs, rock area for lizards etc.) per 250m² of landscaped area.

No invasive species are allowed. Refer to local Councils for advice on invasive weeds and their management. The site must preserve, restore and/or support vulnerable ecosystem through planting critically endangered and/or endangered plant species which are native to the ecological district, and/or planting which provides foraging or habitat to critically endangered fauna species native to the ecological district.

Submission content

Submissions for this credit must contain:

- Submission form
- Evidence to support claims made in the submission

Recommended evidence:

Landscape Area

• Site Plans marked up with landscaping

- Schedules of plant species numbers and diversity
- Aerial Site Photographs marked up with landscaping

Diversity of Species

- · Schedules of plant species numbers and diversity
- If qualified ecologist appointed, confirmation of:
 - No invasive species
 - Diverse landscaping
 - Climate-resilient landscaping district.
- · Ecologist report on:
 - Landscaping diversity and resiliency
 - No invasive species
 - How the site supports vulnerable ecosystems

Biodiversity Management Plan

Biodiversity management plan

Alternate documentation can also be used by project teams to demonstrate compliance.

The recommended evidence listed above is applicable to the as built submission. See the *Error! Reference source not found.* section in the Introduction for more information on submitting evidence for the Design assessment.

The key requirement is that evidence is provided to support each claim made within the Submission form.

Guidance

Relationship with Connection to Nature credit

The Connection to Nature credit in the Healthy category deals specifically with internal plants. The only external planting/landscaping that can be counted is an accessible green roof. Biodiversity Enhancement deals specifically with external landscaping and has a stronger biodiversity focus. Should a green roof be provided, this can contribute towards both credits provided the landscaping requirements are met, that is, diverse plant selection, resilient plants, and no invasive species.

The Connection to Nature credit encourages productive plants, which can be both native and non-native. Because Biodiversity Enhancement has a strong biodiversity focus, it requires native plants. This does not mean that the credits are mutually exclusive, and both can be satisfied through a wide selection of plants.

Relationship with Impacts to Nature credit

In the *Impacts to Nature* credit, an ecologist determines whether existing landscaping is of high biodiversity value. When this is the case, 50% of the landscaping area needs to be retained. When this occurs, it can contribute towards meeting compliance with this credit. The spaces can be counted in both credits and no further landscaping is required for those spaces. The project team must still demonstrate that the landscaping area requirements of this credit are satisfied.

Relationship with Nature Connectivity Credit

One pathway under the *Nature Connectivity* credit is to incorporate landscaping for 25% of the external site area. It is a requirement for this landscaping to be contiguous or consistent with discontinuous linkages across the landscape. Should this credit be targeted, the landscaping area may be claimed in the *Biodiversity Enhancement* credit provided the project team can demonstrate the landscaping requirements of the credit: that is, diverse plant selection, resilient plants, and no invasive species.

Indigenous plants

An indigenous plant is one that is found or occurs in a local area or region. A native plant can be one that is found in New Zealand, whereas an indigenous plant is found in a specific geographic location, such as a city or region.

Landscaping selection

New Zealand has extensive resources that provide information for the selection of restoration and landscape planting in line with the credit requirements. See your local Council for guidelines specific to regions.

- · Auckland Council Native forest restoration guide
- · Auckland Council Coastal forest planting guide

Definitions

Significant (nesting) Tree

A large tree that can attain a height of minimum 15m or can be demonstrated to provide wildlife habitat.

A Suitably Qualified Professional

A Suitably Qualified Professional includes someone with a minimum of five years continuous experience working as an Ecologist.

Supporting information

Auckland Council - Native forest restoration guide

Auckland Council - Coastal forest planting guide

Auckland Council - Healthy Waters Biodiversity Offset Bank