

# Planting within residential zones around Queenstown Airport

This practice note relates to the Residential Design Guide 2021 and provides additional guidance for plantings in residential areas proximate to Queenstown Airport, to mitigate bird strike risk.

## Residential Design Guide 2021

Section 11 (*Landscape Materials and Planting*) of the Residential Design Guide provides guidance on plants that are suitable for residential developments within Queenstown Lakes District.

Some species, namely Lemonwood/ Tarata (*Pittosporum eugenioides*), Ornamental Pear (*Pyrus calleryana*), Copper Beech (*Fagus sylvatica purpurea*), and Marble Leaf (*Carpodetus serratus*) are identified as not appropriate for residential areas close to Queenstown Airport.

This is because these species are bird attractants and give rise to a risk of bird strike for aircraft using the Airport.

Mitigating bird strike risk is not only essential for protecting aircraft and passengers but also for maintaining operational integrity and regulatory compliance.

## What is the resource management issue of a bird strike?

A bird strike is a collision between a bird and an aircraft.

Bird strike at airports is relatively common and can be a significant threat to flight safety, potentially causing engine failure, structural damage, loss of aircraft power or necessitating emergency landings. While infrequent, human fatalities are the most significant risk.

Bird strike can occur during any phase of flight, but it is most common during take-off and landing, or during low altitude flight.

## Using appropriate plant species to avoid bird strikes

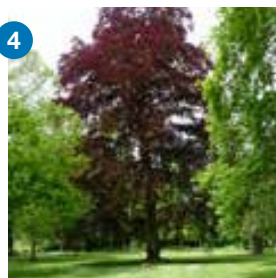
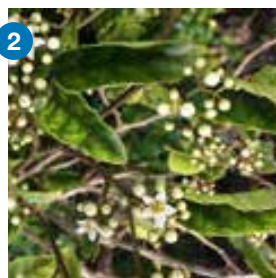
Plant species can significantly influence bird strike risk at airports. Certain plant species attract birds, particularly those that provide food (fruits, seeds, nectar) or shelter, making birds more likely to be present in and around airport environments.

Managing vegetation, including plant selection and maintenance, is crucial for mitigating bird strike hazards. This includes avoiding planting species that are known to attract birds that pose a high strike risk, especially in areas near runways.

## What types of plants should I avoid?

The following species are attractive to birds and are not appropriate for use within the residential zones located around Queenstown Airport:

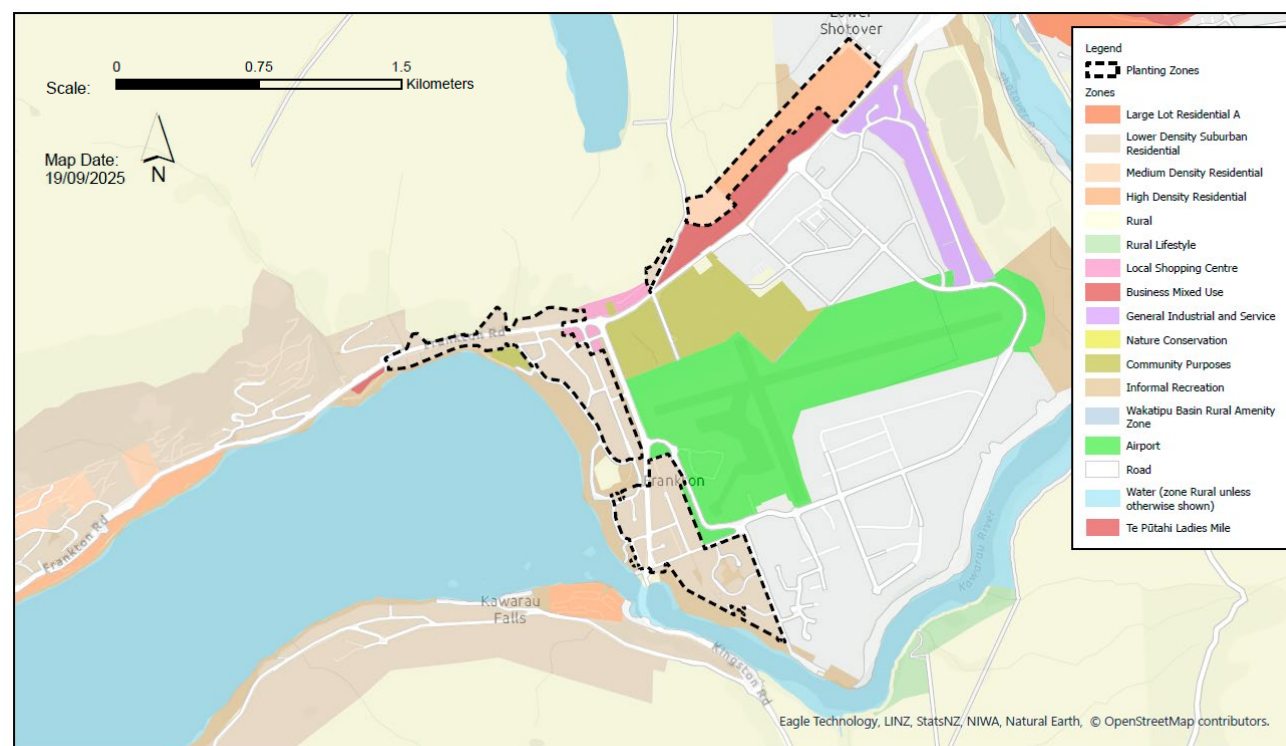
- 1 Lemonwood, Tarata (*Pittosporum eugenioides*)
- 2 Marble Leaf (*Carpodetus serratus*)
- 3 Ornamental Pear (*Pyrus calleryana*)
- 4 Copper Beech (*Fagus sylvatica purpurea*)



## Where must these species be avoided?

The species listed above must not be planted within the PDP residential zoned areas proximate to Queenstown Airport, namely being the Lower Density Suburban Residential Zone, the Medium Density Residential Zone and the High Density Residential Zone. The areas where the listed species must not be planted are contained within the dashed black lines in the map below.

Note: Species that are not listed may be planted in these areas.



The information provided on this map is intended to be general information only. While considerable effort has been made to ensure that the information provided on this map is accurate, current and otherwise adequate in all respects, Queenstown Lakes District Council does not accept any responsibility for content and shall not be responsible for, and excludes all liability, with relation to any claims whatsoever arising from the use of this map and data held within.

## Who should use this practice note?

This practice note applies to residential developments within the parts of the Lower Density Suburban Residential Zone, the Medium Density Residential Zone and High Density Residential Zone proximate to Queenstown Airport, including residential development within these zones that requires resource consent under QLDC's Proposed District Plan (PDP).

Resource consent applicants undertaking residential development within these zones should refer to this note to determine whether the development site is located within the areas denoted by the black dashed lines on the map above.

If the development site is located within the areas denoted by the black dashed lines, then the species listed earlier in this note must not be planted, to mitigate bird hazards and the risk of bird strike at Queenstown Airport.

This note can also be used as guidance for owners and occupiers of existing residences who wish to undertake plantings for beautification and landscaping purposes within these areas.

Applicants seeking to undertake residential development, as well as owners and occupiers of existing residences in the identified locations, shall undertake planting that does not attract birds.

## Why can't I just rely on the Residential Design Guide, 2021?

QLDC's Residential Zone Design Guide 2021 has been prepared to promote good design principles to achieve high quality, high amenity built residential developments while providing for growth in Queenstown Lakes District. The Design Guide applies to the following zones:

- > High Density Residential (HDR), PDP Chapter 9
- > Medium Density Residential (MDR), PDP Chapter 8
- > Lower Density Suburban Residential (LDSR), PDP Chapter 7

Section 11 of the Design Guide identifies plants which are suitable for residential developments within the District, because:

*"...well designed landscape treatment for a development can add significant amenity and value and can be combined with low impact approaches to stormwater management. Also look to retain well-established trees if possible."*

Page 29 of the Design Guide identifies species that are not appropriate for planting in residential areas close to airports. However, the Design Guide neither defines or further delineates the location of these areas, nor explains the reasons for avoiding the identified species or the risks they pose to safe airport operations.

This practice note elaborates on these matters to guide applicants seeking to undertake residential development involving landscaping or planting within the areas of the HDR, MDR and LDSR Zones as delineated by the black dashed lines shown on the map above, and by the Council when processing resource consent applications for residential activities in these areas.

## Any questions?

If you have any questions, comments, or concerns, or are unsure about the indicated locations and the types of species suitable for planting, please get in touch with our friendly Policy Planning team: **PDPenquiries@qldc.govt.nz**