

for maintenance of parks and reserves other than Queens Park was considered a non conforming activity under the Reserves Act 1977.

In 2001, the Parks Depot was moved to Racecourse Road and the Operations Unit of the Parks Division was established, with minimal storage of materials and machinery remaining at the Queens Park yard.

#### *Future:*

Many of the buildings previously used by the Parks Division have now become redundant and are gradually being removed. This area will be developed into public display gardens using the semi circular hedge as both excellent shelter and physical security to the area. This area would suit specialty garden displays that could be closed to the public at nights in a similar setup to the Aviary and Animal Reserve.

## 1.12 FLORA

Before the days of European settlement, Queens Park was covered with dense podocarp forest and was part of the Taurakitiwaru forest covering much of the City. The forest was cleared from the reserve but planting did not begin until the late 1870s when Thomas Waugh was appointed as the first Borough Gardener in 1872. In the late 1870s seeds of *Pinus radiata* and *Cupressus macrocarpa* were distributed from the Wellington Botanical Garden and some were sent to Invercargill. The oldest trees in Queens Park are believed to have originated from that source.

Apart from shelter plantings, it would appear that there was no attempt to plant ornamental trees or to beautify the Park until about 1911. This was because apart from an area used for recreation near Gala Street and a golf course, most of the Park was let out for grazing purposes. Also at this time, the Otepunī Gardens were the main town gardens and all horticultural attention was concentrated on that area.

In 1911, the Invercargill Suburban and Beautifying Society began to advocate improvements to Queens Park and to celebrate the Coronation of King George V, an avenue of trees along Coronation Avenue was planted on 22 June 1911. World War I probably inhibited much in the way of further development in the Park but between 1914 and 1920, Henry Edginton had commenced developing the rose garden and planted thousands of trees throughout the Park.

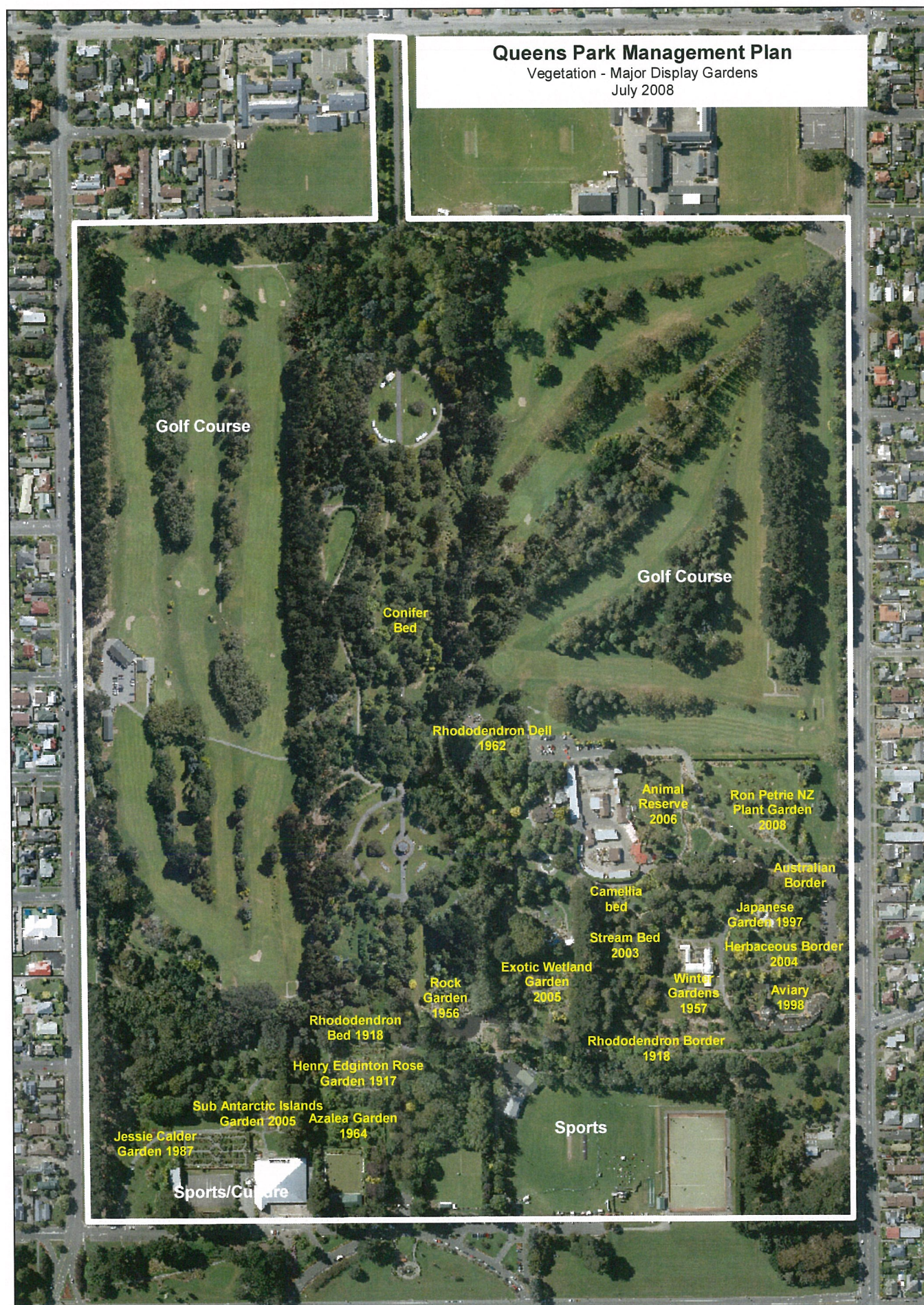


Autumn Colours Near Tea Kiosk

From that point on, there has been a continuing and steady development of the horticultural features of the Park as each successive Borough Gardener, Superintendent, Director or Manager has left his mark. Queens Park now contains a diverse range of garden displays.

*A detailed inventory of plants can be obtained from the Parks Office.*







### 1.12.1 *Henry Edginton Rose Garden*

The first rose garden in Queens Park was constructed sometime between 1914 and 1917 by Henry Edginton, the Borough Gardener at the time (after whom it is named). Apart from new plantings of roses, it has remained virtually unaltered since then. Brick pergolas were constructed in 1988 by an unemployed person's training programme (ACCESS).



Roses in full bloom  
Henry Edginton Rose Garden

This rose garden contains 1,800 bush roses and 120 climbers. Its purpose is to display a good selection of bush roses and more modern climbers to show how particular cultivars grow under local conditions.

### 1.12.2 *Jessie Calder Garden*

The Jessie Calder Garden was established following a generous bequest from the late Jessie Watson Calder (1915 - 1978) of Winton. The 2.5 ha garden is designed around a central feature of a formal rose garden with a less formal heath garden, dwarf and slow growing conifer garden and iris garden making up the remainder.



Heaths and Heathers  
Jessie Calder Garden

Receipt of the Jessie Calder bequest provided an opportunity to extend the range of roses grown in Queens Park. When the Jessie Calder Garden was planned, the central feature of the garden was devoted to old shrub roses. Construction of the Jessie Calder Rose Garden commenced in the summer of 1986-1987 with the first roses being planted during October 1987 and continuing over the next two seasons.

The Jessie Calder Garden is located in the south-western corner of Queens Park, on the site previously occupied by the Municipal Nursery. The garden was designed by Philippa Reid (Cocks), under the supervision of the then Parks Manager Laurie Metcalf. The garden was officially opened on 1 December 1989.



Jessie Calder Rose Garden

The Jessie Calder Rose Garden contains a comprehensive collection of old shrub roses and climbers of more than 900 plants and over 400 varieties. It is one of the largest and most comprehensive collections of such roses on public display in New Zealand.

In December 2005, the Jessie Calder Rose Garden was presented with a plaque in recognition of it being a "garden of significant planting" by the New Zealand Heritage Rose Society. The award was made at the International Heritage Rose conference in Dunedin as part of the national society's 25<sup>th</sup> anniversary celebrations.



### 1.12.3 *Rhododendrons and Azalea Gardens*

Since the early days, rhododendrons have featured prominently in the various plantings around the Park. Rhododendrons tend to grow well in Southland's cool, moist climate.

The first rhododendrons planted were put in by Henry Edginton in around 1918. The large groups on the northern side of the Henry Edginton Rose Garden date from that period, as do some of those along the St Andrew Street track.

The azalea garden and associated rhododendron borders on the southern side of the Henry Edginton Rose Garden were established in 1964. The azalea garden was established when the Northend Croquet Club went into recess and the croquet green reverted back to Council.



Rhododendron

The Rhododendron Dell (sited between the Tea Kiosk and the Wonderland Castle) was constructed in 1962 by Ron Petrie. At the time, it was mainly planted with seedling rhododendrons obtained from the Dunedin Botanic Garden. Because few of the rhododendrons planted at the time were named cultivars, it was difficult for keen gardeners to source these plants from nurseries.

In 1990, approximately half of the Rhododendron Dell was replanted with a selection of named cultivars so that local gardeners are able to identify and evaluate plants which are suitable for their own gardens. A variety of bulbs and herbaceous plants were also planted amongst the rhododendrons so as to extend the interest of the area.

### 1.12.4 *Ron Petrie New Zealand Plant Garden*

Ever since the days of Thomas Waugh and Henry Edginton, New Zealand plants have featured prominently in plantings in Invercargill's parks and reserves. Although native plants were frequently planted, it was not until 1937 that there was a dedicated plant collection devoted to native plants of New Zealand. It was established by Mr BP Mansfield and was named the Jaquiere Garden as a tribute to George Jaquiere, a former Curator of the Southland Museum who did a great deal of work on native plants found in Southland. The first New Zealand plant section was situated in the area now occupied by the Animal Reserve.

In 1966, extensive new plantings were made and the New Zealand Plant Garden was extended eastwards across the driveway. The original Jaquiere Garden was gradually phased out as the newly developed area came into its own.

The New Zealand Plant Garden contains a comprehensive collection of native trees, shrubs and alpine plants.



Ron Petrie NZ Plant Garden



In 1982 the New Zealand Plant Garden was renamed as the Ron Petrie Garden in recognition of the contribution Mr Petrie made to the development of Queens Park when he was Director of Parks and Recreation.

The New Zealand Plant Garden was upgraded during the 2008/2009 financial year. This upgrade has improved accessibility into the garden, replaced and updated plant collections and enhanced the general area. Part of the upgrade included providing plant name labels for many of the plants in the garden.

### 1.12.5 *Japanese Garden*

In February 1993, the City of Invercargill signed a formal Sister City Agreement with the City of Kumagaya in Japan. The signing of the Sister City Agreement was aimed at encouraging and fostering mutually beneficial opportunities for cultural and commercial education, sporting and tourist exchanges.

As a gesture to further the friendship link between the two cities, the Invercargill City Council Parks Division decided to develop a Japanese Garden in Queens Park.



Japanese Garden – Tea House

The Japanese Garden was completed in 1997 using plans prepared by Kumagaya Landscape Institute President Yoshio Miyashita, who supervised the construction.

The garden is a classical Japanese design, consisting of a Japanese lantern, dry waterfall, river of pebbles, garden stream and mountain range, along with a Tea House at the entrance to the site.

The project had a budget of \$39,000 not including labour. Around 100 tonnes of rocks used in the construction were sourced from Ocean Beach, near Bluff; 12 metres of screened and graded white gravel were obtained from the Tiwai peninsula, and plant material was obtained from the Council's McIvor Road Nursery.



Japanese Garden

While not maintained to the exacting standard of a traditional garden in Japan, it still highlights the differences in gardening techniques between Japan and New Zealand. This project has resulted in a long lasting cultural tie with our Sister City, Kumagaya in Japan and allows local residents to better understand the different culture and way of life of the Japanese.

#### *Future:*

Improvements to the Japanese Garden could include some interpretive panels explaining the different aspects and symbolism of the Garden and the nature of the Sister City arrangement.



### 1.12.6 *Sub-Antarctic Islands Garden*

In 1992 a small garden area featuring plants from the Sub-Antarctic Islands was developed adjacent to the Southland Museum and Art Gallery. Designed to represent the rugged landscape of the Southern Antarctic Islands, the garden includes a rocky "mountain" and boardwalk.

A variety of seeds collected from the Islands in 2003 have been propagated in Council's nursery. The garden has been faced south to try to simulate the cold, wet and windswept climate found on the Sub-Antarctic Islands. This area is unique in that few other places in New Zealand have the necessary climatic conditions which enable a comprehensive collection of plants from these islands to be grown.



Sub-Antarctic Islands Garden

The garden complements the display found in the Southland Museum and Art Gallery and adds to the Queens Park collection of birds and animals from the region including the Campbell Island Teal, the Antipodes Island Parakeets and Enderby Island rabbits. It is vital to retain the link between Queens Park and the Museum and Art Gallery.

#### *Future:*

Future improvements may be added to help recreate the microclimate of the Islands.

### 1.12.7 *Steans Centennial Winter Gardens - Indoor Display Gardens*

Until 1957 the only public display house in Invercargill's parks was at the Otepuni Gardens. The receipt of a bequest from Mr John Baker in 1948 and a later bequest from IA Steans provided the necessary stimulus for the construction of a more comprehensive range of display houses in Queens Park.

Construction commenced in 1956 and the building was officially opened on 19 September 1957. In accordance with an earlier Council decision, the northern wing was named the John Baker Wing.



Steans Centennial Winter Gardens

The original complex consisted of an entrance foyer from which three wings extend to the north, south and west. Prefabricated Hartley greenhouses were used for construction of the wings while the foyer was constructed of brick and has a glass domed roof. Later a fourth section was added onto the end of the western wing to be used for propagating on site. Two further growing-on houses were provided at a later date and one of these has since been removed in 2005.

In 1974, an alpine house was constructed. Funding for it was largely provided by Mrs MJ Horsburgh of Timaru (\$500). Unfortunately some design deficiencies caused it to be unsuitable for housing alpine plants and so in 1979 when a



substantial collection of cacti was donated, the house was converted to a cactus house.

The Steans Centennial Winter Gardens have commonly been called the "Winter Gardens" by both staff and some members of the public. Instead of emphasising the year-round nature of the attraction, the term "Winter Gardens" give the impression that it is primarily a winter attraction.

As currently managed, the plant collections are arranged as follows:

*Foyer:* Contains a heated pool in which tropical water lilies are grown and goldfish live. Around the foyer a general range of tropical and subtropical plants are displayed.

*Southern Wing:* The tropical wing is used to house a collection of tropical plants. A large centre bed enables plants to be grown to a more mature size giving visitors a better impression of those plants.

*West Wing:* This house is used for displaying those plants which prefer temperatures intermediate between the tropical wing and the cooler John Baker Wing (northern). The accent is less on displaying a wide range of plants at any one time and more on larger displays of individual kinds of plants.

*John Baker Wing:* The northern wing is used for massed displays of popular flowering plants which need protected (not hot) growing temperatures which are only a few degrees above those outdoors.

*Cactus House:* Mainly only the larger growing species of cacti are grown here and they are planted in beds so as to provide a more natural display. There is also a small bench display of succulents.

The Winter Gardens are open daily 10am-5pm during Summer (1 October-30 April) and 10am-4pm during Winter (1 May-30 September). They are closed Christmas Day. The opening hours are kept under constant review.

*Future:*

Future developments of the Steans Centennial Winter Garden will include further plant labelling.

#### **1.12.8 Rock Garden**

The Rock Garden was constructed in 1956 and was originally known as the Speden Memorial Rock Garden. Some of the money for its construction was provided from a bequest of £100 from the estate of James Speden of Gore. James Speden devoted over 40 years of his life to collecting indigenous plants in Otago and Southland. In 1943 he was awarded the Loder Cup and shortly before he died in 1952, was made an honorary member of the Institute of



Rock Garden



Horticulture<sup>7</sup>. The money was actually bequeathed to the Invercargill Horticultural Society which in turn gave it to Council as they did not have a suitable area or the resources for such a project. Because of Mr Speden's love of alpine plants and in particular native alpine plants, the original rock garden featured native alpine plants. However, with the extended development of the New Zealand Plant Section from 1966 onwards and the development of a new native alpine garden, the Rock Garden was gradually converted to exotic alpinists and rock plants.

The Rock Garden was constructed with limestone from the Forest Hill Lime Company and construction was supervised by Mr Carl Teschner of Dunedin. The use of limestone in construction of the Rock Garden, while having some limitations as to what can be grown, highlights the rock occurring naturally in the Southland area.

*Future:*

The Rock Garden is currently being renovated. Development includes the introduction of signage and interpretation together with improving access to the Garden.

#### **1.12.9 Herbaceous Border**

This area was developed in 1962/1963 in conjunction with construction of the Southland Times Centennial Fountain. Unfortunately the impractical design of the fountain caused it to fall into disrepair and it was removed and the Millennium Garden has replaced it.

Unfortunately at the time of planting, too many background trees and shrubs were planted so that over the years the area for herbaceous plants became less and less and some have had to be removed. Continued maintenance of this area will ensure that trees do not become overgrown.

The aim of the herbaceous border is to display a good range of herbaceous plants which will provide a colourful display over a longer period and demonstrate which are suitable for local conditions.

*Future:*

Future developments in this area may include the introduction of signage and interpretation.

#### **1.12.10 Exotic Wetland Garden**

The Exotic Wetland Garden was constructed in 1960 and was commonly called the Bog Garden by staff due to its wet nature. Originally the southern part of the garden was designed as an iris garden and was constructed so as to recognise the Iris Convention which was held in the City during that year. Because of extensive shading from surrounding trees, it was never a success as an iris garden. After a period, the irises were removed and it was planted with fuchsias. In 1979 the fuchsias were removed as, while they made a nice display for a short period during the summer, for much of the year the area had little interest.

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<sup>7</sup> Murihiku - The Southland Story (2006); 'The Southland to 2006' Book Project Committee



The area now displays a comprehensive collection of plants which prefer moist, or wetland conditions and provides interest from September until March.

*Future:*

Future developments in this area may include the introduction of signage and interpretation.

#### **1.12.11 Herb Garden**

This area is on the north side of the Blind Centre and is maintained by the Southland Herb Society.

#### **1.12.12 Ornamental Tree Management**

One of the key issues for managing trees and vegetation in Queens Park and for providing a pleasant environment for park users is the strong salt laden wind that occurs from the west/south west quarters. Maintaining and replacing shelter trees is an ongoing and essential role of the Parks Division. In general, deciduous trees are very reliant on the shelter provided by *Pinus radiata* and *Cupressus macrocarpa*. Without this shelter, the heavily salt laden spring and early summer winds could damage the soft growth of deciduous trees.

Shading is quite severe and prolonged in some parts of the Park and this has an influence on what plants can be grown, where they can be grown and how well they grow.

The Park and shelter belts have been designed to provide "rooms" of sheltered areas allowing ornaments trees to be showcased. Hedges also provide an important shelter role in the Park.

The golf course is also reliant on the shelter provided by the trees in Queens Park. Trees and vegetation along the road boundaries provide a barrier to stop golf balls from flying outside of the golf course.

A plant tagging system has been undertaken in the Park and, while not complete, has almost 3,000 trees on the system. The tagging system is linked to Council's GIS aerial mapping system meaning trees can be selected from an aerial image and identified. Members of the public can note a tag number from a tree and have it identified.

*Future:*

More trees and shrubs will be added to the plant tagging system and these lists will be available for the public to help them identify trees in the Park.

#### **1.12.13 Airport Height Restriction**

Under the Invercargill City District Plan 2005, airport height and obstacle clearance restrictions are placed on the take off and approach surfaces. This is to ensure the safe and efficient functioning of the Invercargill Airport and in particular, the safety of aircraft operations.

Queens Park falls within the Take Off and Approach zone of the Invercargill Airport. This has an impact on the management of the Park by setting a

maximum permitted height for any tree or structure within the zone. This height varies within the Park from between 36m and 46m maximum height. The Invercargill Airport advises Council every five years if there are trees that are required to be topped to meet this restriction and this work is carried out.

*Future:*

Invercargill Airport Limited have recently applied for a District Plan change to lower the height by a further 3.5m.

## 1.13 FAUNA

The fauna of Queens Park falls into two easily definable sections - captive fauna and wild or feral fauna.

The captive fauna are an important feature of the Park and one which helps to extend the public's interest and enjoyment of the area. While captive birds and animals are commonly regarded as objects of casual interest and amusement, they also contribute as an important educational tool.

*A detailed inventory of animals and birds contained within Queens Park can be obtained from the Parks Office..*

### 1.13.1 Captive Fauna - Animal Reserve

Red deer were first held in captivity in Queens Park in 1953. In 1969 the passing of the Noxious Animals in Captivity Regulations required that the place of captivity be an authorised place. Accordingly, the enclosure had to be surveyed off and gazetted as a reserve for a public deer park (Gazette Notice 90, 18 November 1971).

Later another animal enclosure was constructed adjacent to the yard to house an increasing display of animals and birds.



Animal Reserve Entrance

The introduction of the Reserves Act 1977 meant that areas containing noxious animals in captivity no longer had to be kept in authorised places.

The acquisition of Donovan Park Farm has meant that only breeding pairs of red deer are kept at Queens Park on display and the balance are kept at the farm. The farm provides not only a source of some breeds but also a respite for animals living in Queens Park.

In recent years the Animal Reserve has been redeveloped to allow people better access to the animals, improved interpretation and a more diverse display of animals. The display includes a collection of old horse-drawn machinery. On 4 December 2006, the refurbished Animal Reserve was officially opened to the public.



The Animal Reserve is seen as an important attraction in Queens Park adding value to the experiences of park users. The Reserve provides important educational opportunities, hands on experiences and entertainment value.

The proposed education centre to be located adjacent to the Animal Reserve will enhance the educational opportunities.

The Animal Reserve is open to the public throughout the year from 8am-4.30pm and the Parks Division offers pre-arranged guided tours for groups. The opening hours are kept under constant review.

*Future:*

Future developments may include further interpretation on some of the heritage features of the Park.

### **1.13.2 Captive Fauna - Aviary**

The original municipal aviary was located in the Otepunu Gardens. As Queens Park was developed and became the main park in the City, the aviary at Otepunu Gardens was phased out and a new aviary constructed in Queens Park. Council reports (11 August 1961) indicate the first Queens Park aviary was demolished in 1961. This was located in the area to the south of what is now the playground, near the pond. Construction of the aviary at the playground commenced in 1958. A shortage of finance hindered construction of this aviary and it was not until 1960 that it was completed with funds presented from the Invercargill Horticultural Society. The funds were surplus from the Society's autumn floral festival and were donated in 1956. This aviary was located to the west of the playground on what is now a hard stand picnic area.



Aviary

The old aviary was constructed of untreated timber which was milled from the Park. Unfortunately this meant that all wooden parts became riddled with borer and that mice could gain entry, causing problems at nesting time by disturbing nesting birds. The aviary was 140ft by 30ft with eight flight pens, one of them 40ft by 40ft. The location of the aviary also created problems with it being overshadowed by the surrounding trees. That meant that for quite long periods of the year the aviary was very cold.

The 1991 Queens Park Management Plan discussed whether Queens Park was the appropriate place for an aviary at all and if so, where it should be located. The Plan identified that the primary purpose of the Park was for horticultural displays and features, with ancillary features such as aviaries or animal reserves remaining as subservient to the primary purpose. Limitations of space and the lack of other suitable sites within Queens Park were seen as limitations to the reconstruction of the aviary. However the Management Plan went on to say that an aviary of some kind is a desirable visitor attraction in Queens Park.

A number of sites around Queens Park were assessed for their suitability for an aviary. Requirements for an aviary included adequate light for 12 months of the year and readily accessible to the public, with nearby car parking. Corson

Associates, Landscape Architects of Dunedin were employed to produce concept drawings and the detailed design was prepared by McDowell Architects.

The Queens Park Aviary was opened in Spring 1998 with generous funding of \$750,000 from the Community Trust of Southland, as well as contributions of money or birds from Grey Power Southland, Cage Bird Club, Forest and Bird Society and many individuals.

The Aviary performs several functions. It assists in the public's enjoyment of Queens Park and the range of birds provides educational opportunities for various interested parties. Some of the exotic birds provide examples of those species which are suitable for domestic aviaries. The native birds are often the only example of native avifauna that tourists and other visitors may encounter while in the Southland region.

The Aviary is seen as an important attraction in Queens Park adding value to the experiences of park users. The Aviary provides important educational opportunities and entertainment value.

The complex has been designed to ensure that birds enjoy a warm and sheltered living environment. The site itself has an open sunny position and each Aviary unit includes an enclosed roosting area which provides both protection and privacy.

The Aviary includes a large walk-through flight where visitors can walk amongst and watch a variety of species interact including, but not limited to, doves, budgerigars, canaries and cockatiels.

Members of the parrot family, including the South Island Kaka, Antipodes Island Parakeet and Kea, are on display in separate flights. The Aviary is also home to the rarest waterfowl in the world, the Campbell Island Teal.

The Aviary is part of a New Zealand Captive Breeding Programme which includes the Antipode Island Parakeet and South Island Kara.

The Aviary is open to the public throughout the year from 8am till dusk and the Parks Division offers pre-arranged guided tours for groups. Opening hours are kept under constant review.

*Future:*

Any additions of new species not currently on display may be considered, especially those that provide an advocacy role and assist in the protection of that species.

### **1.13.2 Wild and Feral Fauna**

In general, wild and feral animals are problem or pest fauna preying on other birds and animals, competing for food and destroying plants.

Queens Park supports a very good population of wild birds. Native birds to be found in the Park include tui, kereru (Wood Pigeon), fantail and bellbird. At some times of the year, the call of the Little Owl may be heard during the day.



The principal wild mammal which occurs in the Park is the Australian brush-tailed possum. Possums cause damage to roses, trees and shrubs.

Rats and mice are an ongoing nuisance in the Aviary. Rabbits have been a problem in Queens Park since the early days of settlement. Hedgehogs occur in moderate numbers.

The feral cat is one of the worst predators preying on the wild bird population.

*Future:*

Ongoing monitoring and control of pest fauna.

## **1.14 PRESENT MANAGEMENT**

### **1.14.1 Education**

Queens Park has considerable potential as an educational resource for general public, special interest groups and schools. Brochures, signage and guided tours are used to promote public understanding and enhance and stimulate public awareness of Queens Park and its environs.

In March 2004 a report was prepared on the educational potential of Queens Park<sup>8</sup>. The report suggests that the Park is an under-utilised resource which falls short of its potential in terms of education. The report identified that one of the drawbacks for any visiting educational group is the lack of an indoor facility; a venue to meet, present information, store resources and, in wet weather, take shelter and/or have lunch.

Council is currently developing a Learning Centre/Classroom adjacent to the Animal Reserve that offers an indoor space to seat an average sized primary school class or special interest group with interpretation material. This facility will provide a "low-risk" area for groups to gather during their visit to the Park. Curriculum based interpretation will be provided with a goal of increasing overall knowledge of the Park and the environment and improving the students' experience. The Learning Centre will be aimed at, but not limited to, school aged children.



Invercargill Parks and Gardens Brochure

For casual visitors, interpretational panels, signage, rack cards on feature areas, brochures and some plant labels are available for the general public to use during their visit to the Park.

The Aviary, Animal Reserve and Steans Centennial Winter Gardens are areas of the Park where staff are often asked to provide educational tours for schools and interest groups.

<sup>8</sup> Exploring the Educational Potential of Queens Park; Cathy Macfie, Heritage Interpretation, March 2004

The Aviary has been designed to accommodate groups of students and has interpretation panels for self-guided tours. A curriculum-based booklet of activities called "Remarkable Birds" was prepared in 2005 to help teachers achieve the best educational outcomes from their visit to Queens Park Aviary.

The Animal Reserve has been redeveloped with a "farm yard" theme to allow better access to the animals and to improve educational opportunities. Information panels are found around the reserve and guided tours are popular with children who can have a hands-on experience with some of the animals.

During the period January 2004 until December 2007, 76 groups went on guided tours through the Aviary and 37 groups through the Animal Reserve with a total of 3,230 people. The majority of these people were part of school groups with 66% of all visitors on guided tours being primary school aged students.

Other theme gardens in the Park also display useful educational information.

#### *Future:*

Future developments of the educational aspects of Queens Park may include the enhancement of the "self educational" facilities available. Promotion of the Aviary, Animal Reserve and other areas as destinations for interest groups, development of the Learning Centre and providing seasonal gardening demonstrations for park users are all important aspects of education in Queens Park.

### **1.14.2 Drainage**

One of the limitations with managing Queens Park over the years has been the poor drainage. The issue of poor drainage was recognised as far back as 1863 when the native forest - Taurakitewaru, began to be cleared and has been an ongoing problem for the Park since, with numerous references concerning drainage. The wet nature of the reserve and the resulting poor drainage is typical of the low lying land in the area and is likely to always be a problem.

- In 1915 when the Queens Park Golf Club was formed, a great deal of maintenance work particularly with regard to drainage was undertaken by Council.
- Considerable amounts of drainage works were carried out by James McPherson, during his tenure as Superintendent of Reserves (1926-1933).
- In 1971 drainage again became a problem and many existing drains had to be renewed or lifted and re-laid.
- In 1986 drains throughout the Park required continuing attention because of their age. During the 1986/1987 year, the City's major relief storm water drain was laid through the Park from Newcastle Street to Fox Street (Windsor Drain). During the course of laying the drain, new connections for Park drainage were made and this greatly increased the efficiency of drainage in the northern half of the Park.
- In 1992 the North Invercargill relief storm water drain was laid through the Park from St Andrew Street to Kelvin Street. As with the Windsor drain, new



connections for park drainage were made to this major City drain to improve drainage in the southern half of the Park.

- An enclosed drain running between the Animal Reserve and St Andrew Street track was reopened, contoured and planted in 2004. This has improved drainage conditions in this area and the enhancements have made the open stream a feature of the area.

*Future:*

Future developments should look at further opportunities for improvements to the drainage system as well as opportunities for enhancing the Park through the establishment and planting of open streams.

### **1.14.3 *Park Misuse, Vandalism and Nuisance***

Misuse of the Park is generally of a minor nature and includes such things as riding bikes in areas not permitted, abuse of the dog control policies and dropping rubbish.

Acts of vandalism include graffiti, damage to park furniture, fire, removal or damage to vegetation, theft and turf damage by vehicles on the Park.

Nuisance is where people behave in a manner that annoys, offends or endangers park users.

The design and location of paths, lighting, fences and vegetation all have an influence on crime prevention in Queens Park. Security Cameras are in place around the Park. Vehicle access to the Park is closed between dusk and dawn although people can still walk through the Park at night.

*Future:*

When development takes place consideration will be given, when possible, to ways of limiting opportunities of misuse, vandalism and nuisance.

### **1.14.4 *Control and Management***

Queens Park is under the control and management of the Invercargill City Council Parks Division.

Clubs which own facilities and/or use fields or grounds on Queens Park have their responsibilities defined within their lease documents and are fully responsible for maintenance of their buildings and, in some cases, grounds. Clubs which have car parking associated with their buildings are responsible for development and maintenance of the car park to an approved level.

In addition to the Park Asset staff who oversee the day to day management and future planning of the Park, there are 14.5 full time equivalent staff members dedicated to Queens Park. Their roles include attendants in the Aviary and Winter Gardens, gardeners, maintenance operators and arborists.