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growing in the garden. In nature this tree is found only in a very limited area, hence the Americans call it the lone pine, and scientists have been speculating whether it is a pine being driven out of existence, or whether it is one just commencing its career. From the way it has grown in New Zealand one would certainly think it has a career before it. The finest tree of this species in the garden is over 60ft. high, and 9ft. 10in. in girth. There is a good tree of this species in the Timaru Domain, which is almost certainly of the same age as the two trees in the Christchurch garden. Professor Sargent, of the Arnold Arboretum, America, in a recent letter to the writer, describes a visit he had made to South California to see these trees, which are now protected. He found that the original trees are not only protected, but that plantations were being made of young trees of this interesting and valuable species. *Pinus ponderosa*, the contrast of the last, since it covers such a wide area in America, has been introduced to New Zealand in many forms or varieties; one measured in the park was 61ft. high, and 8ft. 9in. in girth. The Italian stone pine is well represented by a considerable clump of them; one measured was 64ft. high by 7ft. in girth. A *Thuja occidentalis* has reached the height of 30ft., and 3ft. 9in. in circumference; this species is quite an inferior tree to the Californian *Thuja*.

There are several fine evergreen oaks in the gardens of the species *Ilex and Subern*, but the largest and best is the Himalayan oak (*Quercus ailivata*), which is 57ft. high, and 6ft. in girth. A rare tree in New Zealand is the *Gymnocladus Canadensis*, a specimen in this garden is 35ft. high, and 3ft. in girth. At the upper end of the old archery lawn is an upright and striking form of *Cupressus macrocarpa*, which is 66ft. high, and 8ft. in girth. Very near the macrocarpa is the original plant of *Cupressus Lawsoniana var Armstrongii*, now widely distributed. This variety was raised by the late Mr. Armstrong. While Curator of these gardens Mr. Armstrong raised for the Provincial Council thousands of trees, which were annually distributed to the various public bodies in Canterbury, and most of the trees described in this paper were planted by him. There are growing in the gardens two or three healthy-looking kauris, which cannot be expected to endure such frosts as have, on occasions, been experienced in Christchurch, but at the present time are a remarkable illustration of trees growing in a much lower latitude than is their natural habitat. Two lime trees were measured, their respective heights being 74ft. and 49ft., and the girths 9ft. 3in. and 6ft. 8in. These trees are in perfect health, and the very fine specimens. An English birch growing near the Tea Kiosk is 66ft. high, and 6ft. 5in. in girth. The birch, sometimes called the lady of the forest, is quite unable to bear the extremes of drought sometimes experienced on the Canterbury Plains. Not far from the birch is a white thorn 35ft. high, and 5ft. 3in. in girth. English

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records give trees of the common white thorn over 50ft. in height. The silver wattle, which has proved a weed in some places, is here 74ft. high, and 8ft. 6in. in girth.

The largest redwood measured was 11ft. 6in. in girth, and 73ft. high. There is a much larger tree of this species at Riccarton. Almost certainly the finest beech trees in New Zealand are to be seen growing on the side of Riccarton road; they range from 6 to 8ft. in girth, and up to 65ft. in height, and bear a fair quantity of mast every year. An ash measured was 56ft. high, and 6ft. 2in. in girth. Ash wood, suitable for flying machines, is now in great demand, and likely to pay to grow where conditions are suitable, as, unlike most timber, Ash is most valuable before it becomes old. Several hornbeam trees in the park are about 40ft. high, and 5ft. in girth. Three white poplars growing near each other have a rather gnarled appearance; the one measured was 71ft. high, and 11ft. 9in. in girth. Another poplar known in Canterbury as *Populus alivata*, is a very fine tree, measuring 102ft. high, and 12ft. 8in. in girth. A rather unhappy looking common larch growing in the horse paddock measured 9ft. 10in. in girth by 54ft. in height. There are no large specimens of native conifers in the gardens, the best are plants of totara about 30ft. high, and tanekaha, about the same height. The *Libocedrus* is not more than 25ft. high; these are in the old native garden, and are probably fifty years old. There are small specimens of white pine, black pine, rimu and kauri in the new native garden, which are looking healthy and, under the more favourable conditions there, it is hoped better results will be obtained. All of the above have more the appearance of shrubs than forest trees, but good trees fortunately of the conifers may be seen in the near Riccarton Bush.

In conclusion, while the exact dates cannot be given when the trees were planted, with the exception of the memorial trees mentioned, we know, from the early records, that few exotic trees had been planted until 1868. The first record we have is dated June 22nd, 1864, when £30 was granted by the Provincial Council for the purchase of native trees from Governor's Bay. These trees were most likely planted in what is now known as the old native section, and in what has been known as Barker's Garden, on the bank of the Avon towards the Barbadoes Street Cemetery, Mr. Barker being, at the time, provincial gardener. Mr. Armstrong was appointed Curator, August 15th, 1867. From the time of Mr. Armstrong's appointment a more progressive policy was pursued, Mr. Armstrong raising large numbers of foreign trees, some planting being done in 1868. On the visit of the Duke of Edinburgh in 1869 an oak tree was planted by him on the lawn facing the Museum, and four other trees were planted to commemorate the event, one of them being a totara, which was planted on the river bank, where one is now to be seen. If the one still growing on the river bank is

the tree planted at this time its progress has been even slower than those planted in 1864 in the native section. During 1870 we learn that a corner was planted with pines at Carlton corner.

For the next few years it is recorded that each year public bodies were granted trees to plant cemeteries, domains, etc., and 7,379 trees, and 1,066 shrubs were given away in 1871, and similar numbers seem to have been distributed annually for many years after.

The Improvement of Live Stock through Grading.

The improvement of live stock through grading is of interest both to the bulk of the breeders and graziers in this country.

A grade is the produce of a purebred and an animal of common or mixed breeding; the sire is usually pure. If pure females were mated with a sire of mixed breeding you would reduce the value of the offspring, and besides, there would not be enough females to go round.

Animals which have several crosses of pure breeding are sometimes called high grades. To all appearances they may look equal to a purebred, but they cannot perhaps be registered. In vigour or stamina they may be equal to purebred animals, owing to the influence which the blending of new blood may bring with it. This may explain why grade animals are sometimes winners in fat stock contests against purebreds.

The advantage in grading up lies in fixing the characteristics of a superior breed upon an inferior one. The improvement is due to superior qualities of the males used. If this tendency is not encouraged by liberal feeding the looked-for improvement may not be attained.

Choose pure sires of high individuality from the same breed as frequently as they may be wanted, and this should be frequent enough to avoid in-breeding if they are line bred, in this way uniformity in the animals which are being graded up may be attained more speedily. Cross the first sire with females of common or mixed breeding and continue to use the sires chosen from generation to generation on the selected females of the progeny. In this way common animals, by using successively purebred sires from any breed can be graded up to the level of that breed. This may be attained through a number of crosses when the work is carefully done. The number of crosses will depend on the prepotency of the sires used, and the judgment used in the selecting, mating and management of the stock bred. An American writer, referring to the American Live Stock Association Records, which are closed, says:—"The average

individual excellence of Shorthorns in Great Britain is at least equal to that of the average of the same in the United States, and at no time during the period of recording shorthorns in that country have more than five crosses from pure Shorthorn sires been necessary to secure registration in the 'Coates' Herd Book.' In a country where the common stocks are inferior, the number of purebred crosses could be raised, but that number could be fixed upon that would furnish a reasonable guarantee of the animals admitted." The writer added that the rules of the American records may never be altered, but if such should prove the case, the price paid for the exclusion of alien blood with its renovating power will probably be a dear one.

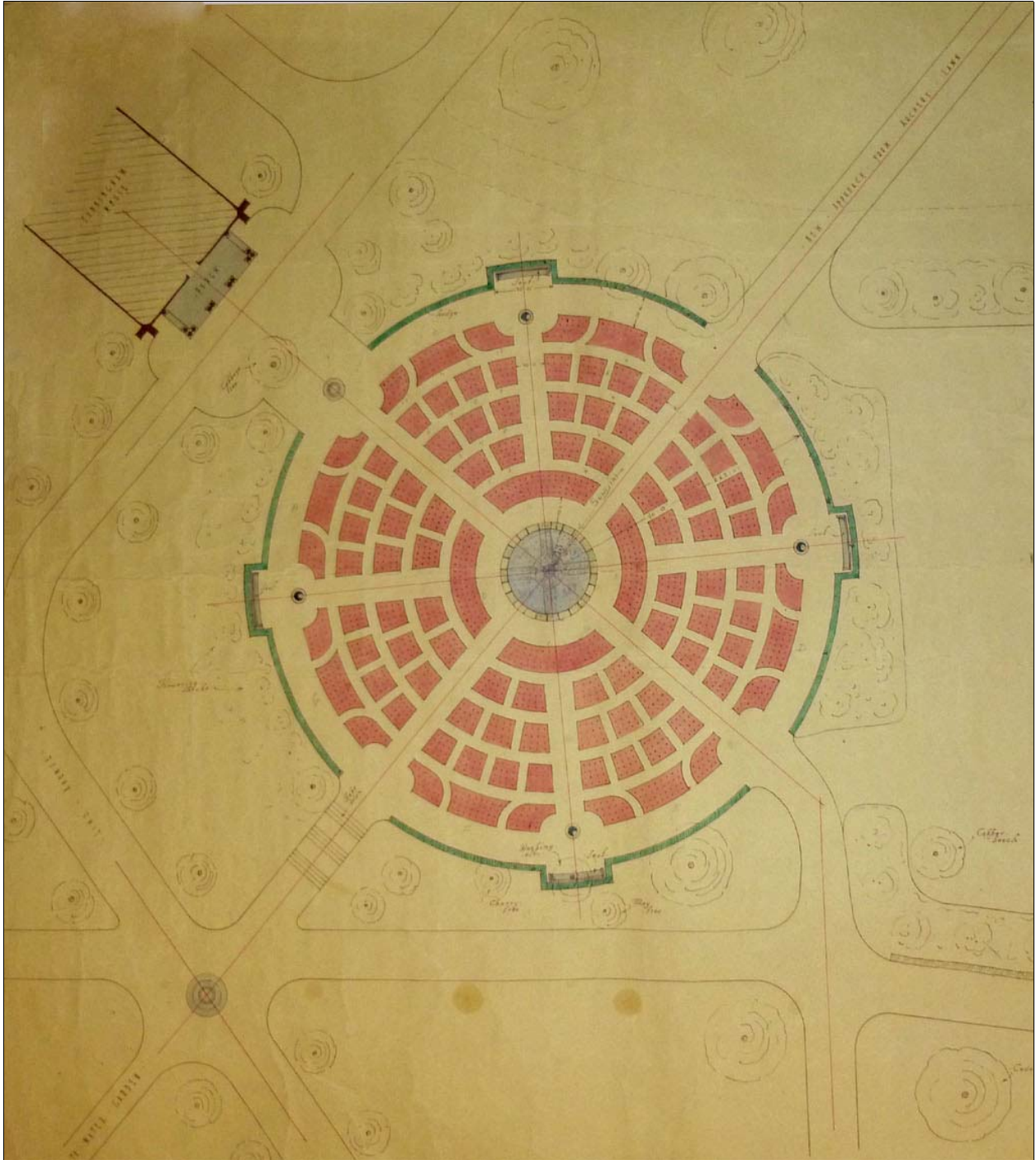
"SCOTICUS."

Agricultural and Pastoral Review of the Year.

In the notes written under this heading last year it was mentioned that the period reviewed had been the most eventful since the war began, the Government having extended the policy of commanding produce on behalf of the Imperial authorities by including wool, cheese and hides. During the time that has elapsed since those notes were written the war has continued, and in several respects the situation is much more serious than a year ago, although there are prospects that with the successful holding up of the German forces in the West, the end of the war may be nearer than it has hitherto seemed. The reduction of shipping through the operations of enemy submarines has continued, and the construction of new vessels has not yet begun to have any appreciable effect in the supply of tonnage, while at the same time the transport of American troops and supplies to France is engaging a vast amount of overseas transport, and further curtailing the number of vessels available for the carriage of produce from the Dominions.

As a farming year the last twelve months has been a most disappointing one to the grain grower, but on the whole a satisfactory one to the stock owner. It is usual after a period of dry seasons to have a good cropping year, but the prospects of bountiful crops in 1917-18 were spoilt by very dry weather in October and November, followed by a month or six weeks of rain in midsummer. The result was that both wheat and oat crops were poor—rust, blight and other troubles considerably reducing the yields to much below the average. The potato blight was, moreover, prevalent throughout the country.

The rains that set in in December, resulting in 3.78 inches for that month, brought up the total rainfall for 1917 at Christchurch to 26.36 inches, which is close to the average.



Appendix 7. Detail from 'Proposed new layout of Rose Garden' designed by Helmore Cotterell, 1934
Source: Historic plan collection, CBGA

Appendix 8. Table showing significant, ceremonial and other known associational plantings in the Christchurch Botanic Gardens and Hagley Park. Those which are known to survive in the Botanic Gardens are shown in light grey boxes and those which are extant in Hagley Park appear in dark grey boxes. Those which require further investigation are marked with asterisks.

Date planted	Tree	Planted by	Location	Reference	Extant / Removed
Accepted date is 9 July, 1863*	Albert Edward oak (<i>Quercus robur</i>)	Enoch Barker Government Gardener commemorating the marriage of the Prince of Wales	Near east of south bridge	<i>The Press</i> 20 December 1873, p. 2	Extant
* No primary source has been located to confirm this planting date. However, on July 19 th 1864 Enoch Barker planted a four year old oak to mark the commencement of forming the Acclimatisation Society grounds which at that time extended into parts of the area now known as the Botanic Gardens. <i>Lyttelton Times</i> , 21 July 1864, p. 3					
24 April, 1869	Prince Alfred's oak (<i>Quercus robur</i>)	Duke of Edinburgh	Centre of the Armstrong Lawn and was planted to align with the "centre mound between the two enclosures".	Minute Book 24/4/1869 p. 24, CH343, 133, CCCA	Extant
24 April, 1869	<i>Wellingtonia gigantea</i> now known as <i>Sequoiadendron giganteum</i>	Duke of Edinburgh	North side of the centre path between the "upper enclosure"	Minute Book 24/4/1869 p. 24, CH343, 133, CCCA	Extant
24 April, 1869	<i>Cedrus deodara</i> (Deodar cedar)	Duke of Edinburgh	North side of the centre path between the "upper enclosure"	Minute Book 24/4/1869 p. 24, CH343, 133, CCCA	Died prior to 1919
24 April, 1869	<i>Podocarpus totara</i> (Totara)	Presented by John Armstrong and planted by the Duke of Edinburgh	Planted as above but nearer the path along the river	Minute Book 24/4/1869 p. 24, CH343, 133, CCCA	Died between 1916 and 1919
24 April, 1869	<i>Cedrus libani</i> (Lebanon cedar)	Duke of Edinburgh	"Planted on the rise between the first and second paddock near the footpath on the west side"	Minute Book 24/4/1869 p. 24, CH343, 133, CCCA	No record held by BG
April, 1870	<i>Araucaria imbricata</i> (now known as <i>A. araucana</i>)	Believed to have been planted for Sir George Grey and previously attributed to Governor (Sir) George Bowen	South of Moorhouse Statue	<i>Journal of the Canterbury Agricultural and Pastoral Association</i> Vol VI, 1918. p.22 <i>The Star</i> , 13/3/1893, p. 3	Removed October 1996
April, 1870	<i>Araucaria imbricata</i> (now known as <i>A. araucana</i>)	Possibly planted by Sir George Bowen	East of the Eveleyn Couzins Memorial and in the general area of Bowen's other plantings	<i>The Press</i> , 26/2/1874, p. 3 (This article records another <i>Araucaria</i> growing in the Domain at this time)	Extant but provenance requires further investigation

April, 1870	<i>Quercus sp.</i> Oak	Governor (Sir) George Bowen	Near north west corner of the enclosure near the College grounds	McPherson, J.A. (1938) <i>The History of Hagley Park and the Botanic Gardens,</i>	Oak removed in 1893 and replaced by elm (see ca. 1890S elm)
April, 1870	<i>Ailanthus altissima</i>	Governor (Sir) George Bowen	Front lawn near Hereford Gates	Allan, H. H. (1947) Historic Trees, ACGO 8387 IA 63 Record 8/25, ANZ	<i>Ailanthus</i> removed in 2007 from same place
1 May, 1875	<i>Cedrus libani</i> (Lebanon cedar)	Marchioness of Normanby	Armstrong Lawn immediately in front of the Museum	<i>The Press</i> , 11/5/1875; McPherson (1938)	Removed in 2009
1 May, 1875	<i>Quercus robur</i> (Oak)	Marquess of Normanby (Governor of NZ)	End of the Archery Lawn beyond the Limes	<i>The Press</i> , 11/5/1875; McPherson (1938)	*** No record held by BG
1 May, 1875	<i>Araucaria araucana</i> (Monkey puzzle)	Marquess of Normanby (Governor of NZ)	Armstrong Lawn near Museum gates	George Harper list 1932 (transcribed copy), BGA	Felled 1936
1880 (possibly November)	<i>Cedrus deodara</i> (Deodar cedar)	To celebrate J. F. Armstrong's 60 th birthday	Armstrong Lawn	Staples, J. (1953) Trees planted by Royalty in Botanic Gardens. Compiled for <i>Star-Sun</i> , July 1953	Extant
?Prior to 1889	<i>Wellingtonia</i> now known as <i>Sequoiadendron giganteum</i>	Planted by Joseph Armstrong for/on behalf of Sir James Fergusson	Near Sir George Grey's Araucaria	Armstrong quoted in <i>The Star</i> , 13/3/1893, p. 3	*** No record held by BG
C. 1890s	Elm Planted as a replacement for the Oak (above)	Unknown	Near north west corner of the enclosure near the College grounds	McPherson, J.A. (1938) <i>The History of Hagley Park and the Botanic Gardens,</i>	<i>Ulmus glabra Camperdownii</i> survives on corner of Archery Lawn
6 June, 1893	York Oak (<i>Quercus robur</i>)	Mr H. P. Murray- Aynsley to celebrate the marriage of George V	Triangle near the Curator's residence	McPherson (1938)	Extant
August, 1902	Coronation Oaks (King Edward VII) (<i>Quercus robur</i>) Progeny of the 1863 Albert Edward Oak	Misses M. Murray- Aynsley and E. M. Reeves on behalf of the Domains Board	"Two British oaks were, planted together..." Eastern side of Central Lawn	<i>The Star</i> , 9/8/1902, p. 5	Extant
August, 1902	Coronation Oaks (King Edward VII) (<i>Quercus robur</i>) Progeny of the	Mrs Wigram (Mayor's wife) planted the King Edward Oak followed by the	Just inside the Armagh Street gates, on the southern side of Hagley Park	<i>The Star</i> , 9/8/1902, p. 5; <i>The Sun</i> ; 22/8/1931; Allan,(1947)	*** No record held by BG

	1863 Albert Edward Oak	Mayor on behalf of the United Friendly Societies who planted the Queen Alexandra Oak			
22 June, 1911	Coronation Oak (King George V) (<i>Quercus robur</i>)	Mrs J. Beswick, Wife of Chairman of Domains Board	North west of South Bridge	Domains Board Minutes, 4 July 1911	Removed 1966
20 July, 1911	29 weeping ash and elm with possibly oak, birch, aralia, hornbeam, alder and willow	Members of the Domains Board to commemorate their final term of office. Messrs. G Scott , C. Cuningham, H. Beswick, H.G. Ell, W. H. Cooper. Trees presented by Mrs (Annie) Townend	Between the Rosary and South Bridge	<i>The Star</i> , 5/7/1911, p. 3 and 21/7/1911, p. 2	*** Some may possibly be extant
1 Sept. 1917	2 x Spanish Chestnuts	Governor General Lord Liverpool at commencement of the building of the Rock Garden	Near the south bridge at the entrance to the rock garden. Intended to be the start of an avenue leading to the Rock Garden.	Domains Board Minute Book 1916-1918; <i>The Sun</i> 1/9/1917; <i>Weekly Press</i> , Photograph, Sept 1917	Died.
1 Sept. 1917	2 x Cedars 1x <i>Quercus palustris</i> 1 x English lime	Domains Board members H. Beswick, G. Harper James Jamieson & Mayor Henry Holland	Rock Garden	Domains Board Minute Book 1916-1918; Alan (1947)	1 large Cedrus in area 2 x <i>Quercus palustris</i> removed post earthquake One old Oak in area
1 September 1917	<i>Tilia americana</i> English lime walk	Planted by Domains Board members	Planted to honour Harry Joseph Beswick, mayor and long serving Domains Board member	Domains Board Minute Book 1916-1918; Taylor's 1958 plan	Extant
15 May, 1920 at 6.10pm	<i>Agathis australis</i> (Kauri)	Duke of Windsor (then the Prince of Wales)	Archery Lawn	Curator's report to Domains Board 4/6/1920	Extant
22 May, 1920	<i>Cedrus deodara</i> (Deodar cedar)	Governor General Lord Liverpool	? Archery Lawn	Duff, G. (1981) <i>The History of the Botanic Gardens and Hagley Park</i>	*** No record held by BG
22 May, 1920	<i>Fagus sylvatica purpurea</i>	Captain Rhodes for Lady Liverpool	Archery Lawn, either side of the kauri planted by the Prince of Wales	Curator's report to Domains Board 4/6/1920	*** Unmatched but two large trees in area
22 May, 1920	<i>Fagus sylvatica purpurea</i>	Rt. Hon W. F. Massey, Prime Minister	Archery Lawn, either side of the kauri planted by the Prince of Wales	Curator's report to Domains Board 4/6/1920	*** As above

22 May, 1920	<i>Fagus fusca</i> (Red birch)	Mr M. Donald (MP)	Archery Lawn	Curator's report to Domains Board 4/6/1920	*** No record held by BG
22 May, 1920	<i>Cedrus deodara</i> (Deodar cedar)	Mr G. Harper	Archery Lawn	Curator's report to Domains Board 4/6/1920; Alan (1947)	*** Old Cedrus in area
26 June, 1920	<i>Plagianthus</i> Ribbonwood	Dr Charles Chilton	Bog Garden	Sun, 28/6/1920	*** No record held by BG
3 July, 1920	Various	George Harper, Messrs. McGregor, Wright, McKellar, Ford, Jamieson, Andrews, Winsor, Eaglesome, Hervey, Hilson, Beanland, Mr & Mrs McKellar, and three media representatives	Bog Garden (Names of the Board etc were attached to trees with metal tags)	Sun, 28/6/1920	*** No record held by BG
Between 1920 and 1924	<i>Fontanesia phillyreoides</i> (Maytenus)	Lord Jellicoe/Mrs G. Harper	Armstrong Lawn	Alan (1947); Duff, G. (1981) <i>The History of the Botanic Gardens and Hagley Park</i>	Removed in 1968
Between 1920 and 1924	<i>Fagus sylvatica</i> var. <i>cuprea</i> (Weeping Copper beech)	Lord Jellicoe	Armstrong Lawn	Duff (1981)	Extant
15 March, 1927	<i>Fagus sylvatica</i> (European beech)	King George VI (then Duke of York)	Archery Lawn	McPherson (1938)	Removed 1996
28 May, 1928	<i>Agathis australis</i> (Kauri)	Robert McDougall	West end of Archery Lawn	<i>The Press</i> , 29/5/1929, p. 9 Domains Board Supplementary Minutes 28/5/1928	One exists east of Rosary
28 May, 1928	Scarlet oaks and Copper beeches	Mayors of Wellington, Dunedin, Wanganui and Christchurch. Leader of the National Party, Hon. William Rolleston, Sir Heaton Rhodes, Chairman of the Domains Board - Sir Francis Bell for the city's Diamond Jubilee (60 years)	Along the path then known as Central Walk and renamed Jubilee Avenue on the south side of the Archery Lawn. (Now once again known as Central Walk)	Domains Board Minutes, 25/5/1928; <i>The Sun</i> 28/5/1928, <i>Auckland Weekly News</i> , 7/6/1928	"Now removed" H. H. Alan, (1947)

17 November, 1929	<i>Triomphe de Bascoup Cupressus</i> (Indian cedar)	Sir Charles Fergusson, Governor General	Armstrong Lawn	<i>Evening Post</i> , 18/11/1929, p. 10	Removed 1961
Arbor Day, observance 1931	Golden ash & Blue cypress. Swamp cypress	Members of the Domains Board	Trees gifted by R.B. (Riverbank) Owen. Planted on the edges of Victoria Lake; on the Gardens' side of the Avon River from the Kiosk down the Southern bank to the Hospital boundary and planted in the boggy portion of the gardens near the Western Bridge	<i>The Press</i> , 10/11/1931; <i>Christchurch Times</i> , 10/11/1931	*** No record held by BG
May, 1932	<i>Cedrus deodara</i> (Deodar cedar)	Sydney Pascall – First Rotary International President	Rotary Lawn	Taylor's 1958 plan	Extant
January, 1933	<i>Eucalyptus cypellocarpa</i> (Australasian Mountain Gum)	Tree of friendship planted by Charles Stanton, Young Australian League for Rt Hon. J A Lyons Australian PM.	Australian section near Cuningham Winter Garden	<i>The Sun</i> 27/1/1933	Dead by October 1933 (Newspaper clipping annotation)
1 August, 1934	26 Beech	West Christchurch District High School	Row planting between double line of beech along Riccarton Avenue between the United Tennis Club courts and Riccarton Gates at 15 yard intervals	<i>The Press</i> , 2/8/1934	*** Not determined
27 February, 1935	<i>Pinus canariensis</i> (Canary Island Pine)	Governor General Lord Bledisloe	West of Cuningham House	<i>The Press</i> , 1/3/1935 Allan (1947)	Extant
6 April, 1935	<i>Zelkova serrata</i> (Japanese zelkova)	Paul Harris – Rotary founder	Rotary Lawn	Duff (1981)	Extant
6 May, 1935	<i>Quercus sp.</i> Oak	Boy Scouts commemorating the Silver Jubilee of His Majesty the King	North Hagley Park, east side of Victoria Lake	Minutes of the Gardens & Parks Committee of the Domains Board, 30/4/1935	*** Possibly extant but no records
30 May, 1935	<i>Cedrus deodara verticullata</i> (Verticullata Himalayan Cedar)	Robert. B. Owen member of the Gardens and Parks Committee of the Domains Board	West of the Rosary	Minutes of the Gardens and Parks Committee of the Domains Board, 30/5/1935	*** No record held by BG

Arbor Day, 1936	27 Yoshino Flowering Cherries	Domains Board members	Harper Avenue from the bridge	<i>The Press</i> 6/8/1936, p. 10	Extant
Arbor Day observance 5 August 1936	41 Purple Sycamores	30 pupils from Christchurch Boys High School	North west corner of South Hagley Park, near the corner of Riccarton and Deans Avenues	<i>The Press</i> 6/8/1936, p. 10, Illustration p. 16	Some still exist
Arbor Day observance 13 August. 1936	Several <i>Ginkgo biloba</i> (Maidenhair tree)	Botanic Gardens staff	Towards the west of the Rosary	McPherson Report for year ending 1937 CH355/22, Box 1, CCCA	Some still exist other relocated
? Nov. 1938	<i>Phyllocladus glaucus</i>	Prof. Scottsberg to mark the opening of Leonard Cockayne Memorial Garden	Cockayne Memorial Garden	Taylor's 1958 plan	Replaced with P. toatoa
15 June, 1938	<i>Ginkgo biloba</i> (Maidenhair tree)	Governor General Lord Galway	Armstrong Lawn on the site where the Marquis of Normanby's Araucaria stood	Duff / George Harper list 1932 (transcribed copy), BGA	Extant
? Nov. 1939	<i>Fagus sylvatica</i> (European beech)	Lady Galway	Rotary Lawn	Duff (1981)	Removed
5 March, 1946	<i>Betula papyrifera</i> (Paper birch)	Sir Cyril Newall and Lady Newall	Armstrong Lawn near Museum gates	Taylor's 1958 plan; Curator's Report for the year ending 31 March 1946 CH355, Box 22 /1, CCCA	Extant
25 Sept. 1947	<i>Quercus coccinea</i> (Scarlet Oak)	S. K. Guernsey – Rotary International	Rotary Lawn	Taylor's 1958 plan	Removed 1999
12 October, 1949	<i>Metasequoia glyptostroboides</i> (Dawn redwood) seedling from A W Anderson, Curator of Parks, Timaru Borough Council via E. D. Merrill, Arnold Arboretum	Mr H. Gilpin	Lawn fronting Townend House	CH 377 Box 4 Donations, Bequests and Memorials, CCCA	Extant
10 August, 1950	12 large Oaks	NZ Founders' Society for Centennial Arbor Day	Near the Philpott Memorial in South Hagley Park	Report to Council 28/8/1950, Canterbury Centennial Tree Planting Scheme	*** No record held by BG
11 Sept. 1950	25 Oaks	Women's Club and Women's Division of Federated Farmers	South Hagley Park	Canterbury Centennial Tree Planting Scheme	*** No record held by BG

		for Centennial Arbor Day			
14 Sept. 1950	8 Oaks	President and members of the Gardening Circle, Home Economics Assn. for Centennial Arbor Day	South Hagley Park	Canterbury Centennial Tree Planting Scheme	*** No record held by BG
12 Nov, 1952	<i>Metasequoia glyptostroboides</i> (Dawn redwood)	Mr H. Brunner-Rotary International	Rotary Lawn	Duff (1981)	Extant
4 June, 1953	<i>Liquidambar styraciflua</i> (Sweet gum)	Mr R. McFarlane (Mayor) to commemorate the coronation of Queen Elizabeth II	Inside the holly hedge, Rolleston Avenue near Museum	Reserves Committee Report 24/8/1953 CH355 Box 20	Extant
4 June, 1953	<i>Acer platanoides</i> 'Goldsworth Purple'	Mr Feast, Town Clerk, to commemorate the coronation of Queen Elizabeth II	Armstrong Lawn near the Museum	Reserves Committee Report 24/8/1953 CH355 Box 20	Ring barked by anti-royalist protestors and removed in 1986
5 August, 1953	<i>Malus 'pumila Oporto'</i> (Crabapple)	Sir Willoughby Norrie	Museum end of lawn fronting Rolleston Street	Reserves Committee Report 24/8/1953 CH355 Box 20	Removed for proposed new entrance
5 August, 1953	<i>Malus purpurea</i> 'Lemoinei' (Crabapple)	Lady Norrie	Museum end of lawn fronting Rolleston Street	Reserves Committee Report 24/8/1953 CH355 Box 20	As above
18 November, 1955	<i>Ulmus campestris</i> 'Louis van Houtte' (Golden Elm)	A. Z. Baker – Rotary International	Rotary Lawn	Taylor's 1958 plan Duff (1981)	Extant
19 September, 1958	<i>Carpinus sp.</i> (Hornbeam)	C. A. Randall – Rotary International	Rotary Lawn	Taylor's 1958 plan Duff (1981)	Died and removed 1973
17 July, 1961	<i>Tilia americana reforma</i> 'Macrophylla'	J. A. Abey – Rotary International	Rotary Lawn	Taylor's 1958 plan Duff (1981)	Extant
? Sept. 1961	Golden cedar	Cr.W. MacGibbon	Pinetum	<i>The Press</i> , 27/9/1961, p. 12	Extant
31 July, 1962	<i>Quercus robur</i> (Oak)	Governor General Viscount Cobham for Arbor Day	North Hagley Park inside the Mickle Gates	CH 377 Box 4 Donations, Bequests and Memorials, CCCA	*** No record held by BG

7 February 1963	<i>Quercus robur</i> (Oak)	Queen Elizabeth II to commemorate the centenary of the Gardens	South east of Stafford Lawn	<i>The Press</i> , 22/4/1986	Extant
7 February 1963	<i>Pinus picea</i> (Silver fir) clump	Messrs. Gilpin, McPherson, Harvey, Barnett, Metcalf, Jones, Henderson and Skellerup	Adjacent to MacGibbon Gates, North Hagley Park	Duff (1981)	Extant
Nov. 1963	<i>Fagus sylvatica</i> (European beech)	Girl Guides	Little Hagley Park adjacent to Harper Avenue	Duff (1981)	Extant
27 May, 1964	<i>Dacrydium cupressinum</i> (Rimu)	Governor General Sir Bernard Fergusson	South west Armstrong Lawn	Duff (1981)	Extant
28 August, 1964	<i>Aesculus carnea</i> var. <i>Briotii</i> (Red horse-chestnut)	Cr. W.E. Olds, the Acting Chairman, Reserves Committee	South of Australian Garden	Duff (1981)	Removed
8 October, 1965	<i>Platanus acerifolia</i> 'Pendula'	Cr. Skellerup. Chairman, Reserves Committee	River walk	Duff (1981)	Died and removed 1967
? 1965	4 x Limes 1 x Golden Elm	Edgar Taylor as part of the 1965 Rolleston Avenue replanting	Hereford Street entrance to Gardens River bank, Armagh Road bridge	Duff (1981)	Extant
? 1965	2 x Pin Oaks	L.J. Metcalf as part of the 1965 Rolleston Avenue replanting	Museum entrance to Gardens	Duff (1981)	Extant
? 1965	1 x Plane	Dr Roger Duff as part of the 1965 Rolleston Avenue replanting	Opposite Museum entrance	Duff (1981)	Extant
? 1965	3 x Copper Beech	G. Manning, Mayor P.J.Skellerup, Councillor I.W. Bolton, Christ's College	North end of Rolleston Avenue	Duff (1981)	Extant
? 1965	3 x <i>Ginkgo biloba</i> (Maidenhair tree) 1 x <i>Betula pendula</i> 'Tristis' (Weeping birch)	Huia Gilpin, Curator Botanic Gardens	South end of Rolleston Avenue	Duff (1981)	Extant
? 1965	2 x English Beech	G.G. Henderson, Assistant Director	Rolleston Ave entrance to Art Gallery	Duff (1981)	Extant

? 1965	2 x Limes	R C Cutter, Chief Clerk, Reserves Department	Christ's College entrance	Duff (1981)	Extant
? 1965	2 x <i>Acer platanoides</i> (Norway maple)	J.B. Christensen, Overseer	Entrance middle gates	Duff (1981)	Extant
July, 1965	3x <i>Sequoiadendron sempervirens</i>	Cr P. J. Skellerup, Mayor G. Manning, Huia Gilpin to commemorate the coming of the year 2000 A.D.	North Hagley Park near Lake Albert	Rolleston Avenue Trees, CH377 Box 53, file 22/24a, CCCA	*** No record held by BG
30 September, 1967	Totara from Kennedy's Bush	Planted in memory of the late Prof. Arnold Wall by his granddaughter Martha	By the pond near the Cockayne Garden	Press, 30/9/67; Notes BGA	Extant
13 October, 1969	<i>Acer saccharinum</i> (Silver maple)	F. A. Conway – Rotary International	Rotary Lawn	Duff (1981)	*** No record held by BG
1972	<i>Magnolia grandiflora</i> (Bull bay)	Governor General Sir Arthur Porritt	Armstrong Lawn near Museum	Duff (1981)	Extant but relocated to playground
16 October, 1972	<i>Dacrydium cupressinum</i> (Rimu)	In memory of James Cole, Botanic Gardens' staff member	West side of Rosary	Duff (1981)	Extant
1973?	<i>Sophora microphylla</i> (Small-leaved Kōwhai)	C. A. Randall – Rotary International (replacement tree)	Rotary Lawn	Duff (1981)	Extant
18 June 1973	3 x <i>Quercus palustris</i> (Pin oak)	Descendants of the Ward family to commemorate the arrival of the family in Chch in the early 1860s	Hagley Park opposite Park Terrace	CH 377 Box 4 Donations, Bequests and Memorials, CCCA	Not known
21 November, 1973	<i>Cedrus atlantica</i> var <i>glauca</i> (Blue atlas cedar)	W. C. Carter – Rotary International	Rotary Lawn	Duff (1981)	Extant
29 October, 1974	<i>Magnolia acuminata</i> (Cucumber tree)	H. T. Thomas – Rotary International	Riverbank, Rotary Lawn	Duff (1981)	Extant
3 April, 1976	8 x <i>Cornus florida</i> (Flowering dogwood)	Representatives of the US Embassy to mark the American Bicentennial Year	South Armstrong Lawn. Planted in association with a plaque	CH 377 Box 4 Donations, Bequests and Memorials, CCCA	Extant

19 October, 1976	<i>Sequoiadendron sempervirens</i> (California Redwood)	Col. D. W. Bennett, to commemorate friendship/ co-operation in Operation Deep Freeze	Pinetum, half way between Traffic Bridge and Washbourne Creek	CH 377 Box 4 Donations and Bequests, Memorials, CCCA	Extant
3 September, 1977	<i>Quercus obtusa</i> (Swamp laurel oak)	Professor R. T. Kennedy	Children's playground / Rotary Lawn	Duff (1981)	*** Not determined
20 January, 1978	<i>Ginkgo biloba</i> (Maidenhair tree)	W. J. Davis – Rotary International	Rotary Lawn	Duff (1981)	Extant
9 August, 1979	<i>Ginkgo biloba</i> <i>Quercus sp. x Hamilton</i>	Huia Gilpin Mrs Gilpin	River bank between Armagh and Gloucester Street	Duff (1981)	*** No record held by BG
9 August, 1979	<i>Liriodendron tulipifera aureo-marginatum</i> (Golden variegated tulip tree)	Huia Gilpin	South west corner of Archery Lawn	Duff (1981)	Extant
28 August, 1979	<i>Liriodendron tulipifera aureo-marginatum</i> (Golden variegated tulip)	T. Chapman, President World Council, Young Men's Service Clubs	South of Museum gates	Duff (1981)	Extant
28 November, 1980	<i>Libocedrus plumosa</i> (Kawaka)	Dr S. M. McCaffery, - Rotary International	Rotary Lawn	Duff (1981)	Removed
5 July, 1982	<i>Eucalyptus sp.</i>	Dr Arthur Watson, Lord Mayor of Adelaide	Australian Lawn	<i>The Press</i> , 5/7/1982	*** Not determined
20 August, 1983	<i>Styrax obassia</i>	Lady Beattie to commemorate the centenary of the Chch Y.M.C.A	Harper Lawn	Pers.comm. L. Beaumont/Sue Malloy	Extant
6 November 1984	<i>Ulmus parvifolia</i> (Chinese Elm)	Governor of Gansu (Christchurch Sister City)	Location unknown. Planted in conjunction with plaque	<i>The Press</i> , 7/11/1984	Removed
28 February, 1986	<i>Liriodendron</i> (Tulip tree)	Queen Elizabeth II	Location unknown	<i>The Press</i> , 22/4/1986	Felled by protestors on the anniversary of her 60 th birthday
1988	?	Allison Dowson, World President of International Inner	Rotary Lawn	Morgan, J. M. (2008) <i>Arboreal Eloquence</i> , p. 117	*** Not determined

		Wheel (Rotary)			
10 June, 1990	<i>Acer pseudoplatanus</i> (Sycamore maple)	Dr Warwick Harris, President, Friends of the Gardens	Potts Lawn	J. P. Adam (2008)	Extant
1992	<i>Pinus wallichiana</i> (Bhutan pine)	His Holiness the fourteenth Dalai Lama	Pinetum	CBG Walking Guide PDF January 2011	Extant
2001	<i>Pinus x hispanica</i> 'Acerifolia' Hippocratic Plane	Grown from seed imported by Barry Tait and taken from the Plane tree in Kos that Hippocrates is believed to have taught under.	Currently in hospital-administered grounds between hospital and Avon River	Pers.comm. Dieter Steinegg/Barry Tait. Pers.comm. L. Beaumont Barry Tait	Extant
2003	Oak (Graft from 1863 Albert Edward oak)	Planted by a descendant of Enoch Barker	Armstrong Lawn	BGA	Extant
21 Sept. 2007	<i>Cinnamomum camphora</i> Camphor Tree	Deputy Mayor Carole Evans. Planted as a peace tree	Near the Peace Bell in the Botanic Gardens	CCC Peace Walk leaflet online, Accessed May 2012	Extant
18 March, 2011	English Beech signifying the rebirth of the city following 22/2/2011 earthquake	Prince William, Rt. Hon. John Key, Bronagh Key, Governor General Anand Satyanand and Mark Soloman	Hagley Park - in area where Beech trees were removed because of earthquake damage	Livestream Memorial Service, ceremony 18/3/2011	Extant
30 January, 2013	Wollemi pine gifted to Curator Dr David Given as a mark of the esteem in which he was held in the field of plant conservation	Mayor Bob Parker, with members of the former Curator Dr David Given's family	Gondwana Garden, Botanic Gardens	Marking the 150 th year of the Botanic Gardens	Extant



Figure 6.1. Sir Francis Bell planting a tree in the Botanic Gardens as part of the city's Diamond Jubilee commemorations on May 28, 1928

Source: Sir George Grey Special Collections, AWNS-19280607-44-1, AL



Figure 6.2. Botanic Garden's Curator Dr John Clemens, staff and guests at the planting of the Wollemi Pine on 29 January 2013. Planting cage in foreground

Source: Christchurch City Council album <https://www.facebook.com/ChristchurchCityLibrary>

ICOMOS New Zealand Charter

for the Conservation of Places of Cultural Heritage Value

Revised 2010

Preamble

New Zealand retains a unique assemblage of **places** of **cultural heritage value** relating to its indigenous and more recent peoples. These areas, **cultural landscapes** and features, buildings and **structures**, gardens, archaeological sites, traditional sites, monuments, and sacred **places** are treasures of distinctive value that have accrued meanings over time. New Zealand shares a general responsibility with the rest of humanity to safeguard its cultural heritage **places** for present and future generations. More specifically, the people of New Zealand have particular ways of perceiving, relating to, and conserving their cultural heritage **places**.

Following the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter - 1964), this charter sets out principles to guide the **conservation** of **places** of **cultural heritage value** in New Zealand. It is a statement of professional principles for members of ICOMOS New Zealand.

This charter is also intended to guide all those involved in the various aspects of **conservation** work, including owners, guardians, managers, developers, planners, architects, engineers, craftspeople and those in the construction trades, heritage practitioners and advisors, and local and central government authorities. It offers guidance for communities, organisations, and individuals involved with the **conservation** and management of cultural heritage **places**.

This charter should be made an integral part of statutory or regulatory heritage management policies or plans, and should provide support for decision makers in statutory or regulatory processes.

Each article of this charter must be read in the light of all the others. Words in bold in the text are defined in the definitions section of this charter.

This revised charter was adopted by the New Zealand National Committee of the International Council on Monuments and Sites at its meeting on 4 September 2010.

Purpose of conservation

1. The purpose of conservation

The purpose of **conservation** is to care for **places** of **cultural heritage value**. In general, such **places**:

- (i) have lasting values and can be appreciated in their own right;
- (ii) inform us about the past and the cultures of those who came before us;
- (iii) provide tangible evidence of the continuity between past, present, and future;
- (iv) underpin and reinforce community identity and relationships to ancestors and the land; and
- (v) provide a measure against which the achievements of the present can be compared.

It is the purpose of **conservation** to retain and reveal such values, and to support the ongoing meanings and functions of **places** of **cultural heritage value**, in the interests of present and future generations.

Conservation principles

2. Understanding cultural heritage value

Conservation of a **place** should be based on an understanding and appreciation of all aspects of its **cultural heritage value**, both **tangible** and **intangible**. All available forms of knowledge and evidence provide the means of understanding a **place** and its **cultural heritage value** and **cultural heritage significance**. **Cultural heritage value** should be understood through consultation with **connected people**, systematic documentary and oral research, physical investigation and **recording** of the **place**, and other relevant methods.

All relevant **cultural heritage values** should be recognised, respected, and, where appropriate, revealed, including values which differ, conflict, or compete.

The policy for managing all aspects of a **place**, including its **conservation** and its **use**, and the implementation of the policy, must be based on an understanding of its **cultural heritage value**.

3. Indigenous cultural heritage

The indigenous cultural heritage of **tangata whenua** relates to **whanau**, **hapu**, and **iwi** groups. It shapes identity and enhances well-being, and it has particular cultural meanings and values for the present, and associations with those who have gone before. Indigenous cultural heritage brings with it responsibilities of guardianship and the practical application and passing on of associated knowledge, traditional skills, and practices.

The Treaty of Waitangi is the founding document of our nation. Article 2 of the Treaty recognises and guarantees the protection of **tino rangatiratanga**, and so empowers **kaitiakitanga** as customary trusteeship to be exercised by **tangata whenua**. This customary trusteeship is exercised over their **taonga**, such as sacred and traditional **places**, built heritage, traditional practices, and other cultural heritage resources. This obligation extends beyond current legal ownership wherever such cultural heritage exists.

Particular **matauranga**, or knowledge of cultural heritage meaning, value, and practice, is associated with **places**. **Matauranga** is sustained and transmitted through oral, written, and physical forms determined by **tangata whenua**. The **conservation** of such **places** is therefore conditional on decisions made in associated **tangata whenua** communities, and should proceed only in this context. In particular, protocols of access, authority, ritual, and practice are determined at a local level and should be respected.

4. Planning for conservation

Conservation should be subject to prior documented assessment and planning.

All **conservation** work should be based on a **conservation plan** which identifies the **cultural heritage value** and **cultural heritage significance** of the **place**, the **conservation** policies, and the extent of the recommended works.

The **conservation plan** should give the highest priority to the **authenticity** and **integrity** of the **place**.

Other guiding documents such as, but not limited to, management plans, cyclical **maintenance** plans, specifications for **conservation** work, interpretation plans, risk mitigation plans, or emergency plans should be guided by a **conservation plan**.

5. Respect for surviving evidence and knowledge

Conservation maintains and reveals the **authenticity** and **integrity** of a **place**, and involves the least possible loss of **fabric** or evidence of **cultural heritage value**. Respect for all forms of knowledge and existing evidence, of both **tangible** and **intangible values**, is essential to the **authenticity** and **integrity** of the **place**.

Conservation recognises the evidence of time and the contributions of all periods. The **conservation** of a **place** should identify and respect all aspects of its **cultural heritage value** without unwarranted emphasis on any one value at the expense of others.

The removal or obscuring of any physical evidence of any period or activity should be minimised, and should be explicitly justified where it does occur. The **fabric** of a particular period or activity may be obscured or removed if assessment shows that its removal would not diminish the **cultural heritage value** of the **place**.

In **conservation**, evidence of the functions and intangible meanings of **places** of **cultural heritage value** should be respected.

6. Minimum intervention

Work undertaken at a **place** of **cultural heritage value** should involve the least degree of **intervention** consistent with **conservation** and the principles of this charter.

Intervention should be the minimum necessary to ensure the retention of **tangible** and **intangible values** and the continuation of **uses** integral to those values. The removal of **fabric** or the alteration of features and spaces that have **cultural heritage value** should be avoided.

7. Physical investigation

Physical investigation of a **place** provides primary evidence that cannot be gained from any other source. Physical investigation should be carried out according to currently accepted professional standards, and should be documented through systematic **recording**.

Invasive investigation of **fabric** of any period should be carried out only where knowledge may be significantly extended, or where it is necessary to establish the existence of **fabric** of **cultural heritage value**, or where it is necessary for **conservation** work, or where such **fabric** is about to be damaged or destroyed or made inaccessible. The extent of invasive investigation should minimise the disturbance of significant **fabric**.

8. Use

The **conservation** of a **place** of **cultural heritage value** is usually facilitated by the **place** serving a useful purpose.

Where the **use** of a **place** is integral to its **cultural heritage value**, that **use** should be retained.

Where a change of **use** is proposed, the new **use** should be compatible with the **cultural heritage value** of the **place**, and should have little or no adverse effect on the **cultural heritage value**.

9. Setting

Where the **setting** of a **place** is integral to its **cultural heritage value**, that **setting** should be conserved with the **place** itself. If the **setting** no longer contributes to the **cultural heritage value** of the **place**, and if **reconstruction** of the **setting** can be justified, any **reconstruction** of the **setting** should be based on an understanding of all aspects of the **cultural heritage value** of the **place**.

10. Relocation

The on-going association of a **structure** or feature of **cultural heritage value** with its location, site, curtilage, and **setting** is essential to its **authenticity** and **integrity**. Therefore, a **structure** or feature of **cultural heritage value** should remain on its original site.

Relocation of a **structure** or feature of **cultural heritage value**, where its removal is required in order to clear its site for a different purpose or construction, or where its removal is required to enable its **use** on a different site, is not a desirable outcome and is not a **conservation** process.

In exceptional circumstances, a **structure** of **cultural heritage value** may be relocated if its current site is in imminent danger, and if all other means of retaining the **structure** in its current location have been exhausted. In this event, the new location should provide a **setting** compatible with the **cultural heritage value** of the **structure**.

11. Documentation and archiving

The **cultural heritage value** and **cultural heritage significance** of a **place**, and all aspects of its **conservation**, should be fully documented to ensure that this information is available to present and future generations.

Documentation includes information about all changes to the **place** and any decisions made during the **conservation** process.

Documentation should be carried out to archival standards to maximise the longevity of the record, and should be placed in an appropriate archival repository.

Documentation should be made available to **connected people** and other interested parties. Where reasons for confidentiality exist, such as security, privacy, or cultural appropriateness, some information may not always be publicly accessible.

12. Recording

Evidence provided by the **fabric** of a **place** should be identified and understood through systematic research, **recording**, and analysis.

Recording is an essential part of the physical investigation of a **place**. It informs and guides the **conservation** process and its planning. Systematic **recording** should occur prior to, during, and following any **intervention**. It should include the **recording** of new evidence revealed, and any **fabric** obscured or removed.

Recording of the changes to a **place** should continue throughout its life.

13. Fixtures, fittings, and contents

Fixtures, fittings, and **contents** that are integral to the **cultural heritage value** of a **place** should be retained and conserved with the **place**. Such fixtures, fittings, and **contents** may include carving, painting, weaving, stained glass, wallpaper, surface decoration, works of art, equipment and machinery, furniture, and personal belongings.

Conservation of any such material should involve specialist **conservation** expertise appropriate to the material. Where it is necessary to remove any such material, it should be recorded, retained, and protected, until such time as it can be reinstated.

Conservation processes and practice

14. Conservation plans

A **conservation plan**, based on the principles of this charter, should:

- (i) be based on a comprehensive understanding of the **cultural heritage value** of the **place** and assessment of its **cultural heritage significance**;
- (ii) include an assessment of the **fabric** of the **place**, and its condition;
- (iii) give the highest priority to the **authenticity** and **integrity** of the **place**;
- (iv) include the entirety of the **place**, including the **setting**;
- (v) be prepared by objective professionals in appropriate disciplines;
- (vi) consider the needs, abilities, and resources of **connected people**;
- (vii) not be influenced by prior expectations of change or development;
- (viii) specify **conservation** policies to guide decision making and to guide any work to be undertaken;
- (ix) make recommendations for the **conservation** of the **place**; and
- (x) be regularly revised and kept up to date.

15. Conservation projects

Conservation projects should include the following:

- (i) consultation with interested parties and **connected people**, continuing throughout the project;
- (ii) opportunities for interested parties and **connected people** to contribute to and participate in the project;
- (iii) research into documentary and oral history, using all relevant sources and repositories of knowledge;
- (iv) physical investigation of the **place** as appropriate;
- (v) use of all appropriate methods of **recording**, such as written, drawn, and photographic;
- (vi) the preparation of a **conservation plan** which meets the principles of this charter;
- (vii) guidance on appropriate **use** of the **place**;
- (viii) the implementation of any planned **conservation** work;
- (ix) the **documentation** of the **conservation** work as it proceeds; and
- (x) where appropriate, the deposit of all records in an archival repository.

A **conservation** project must not be commenced until any required statutory authorisation has been granted.

16. Professional, trade, and craft skills

All aspects of **conservation** work should be planned, directed, supervised, and undertaken by people with appropriate **conservation** training and experience directly relevant to the project.

All **conservation** disciplines, arts, crafts, trades, and traditional skills and practices that are relevant to the project should be applied and promoted.

17. Degrees of intervention for conservation purposes

Following research, **recording**, assessment, and planning, **intervention** for **conservation** purposes may include, in increasing degrees of **intervention**:

- (i) **preservation**, through **stabilisation**, **maintenance**, or **repair**;
- (ii) **restoration**, through **reassembly**, **reinstatement**, or **removal**;
- (iii) **reconstruction**; and
- (iv) **adaptation**.

In many **conservation** projects a range of processes may be utilised. Where appropriate, **conservation** processes may be applied to individual parts or components of a **place** of **cultural heritage value**.

The extent of any **intervention** for **conservation** purposes should be guided by the **cultural heritage value** of a **place** and the policies for its management as identified in a **conservation plan**. Any **intervention** which would reduce or compromise **cultural heritage value** is undesirable and should not occur.

Preference should be given to the least degree of **intervention**, consistent with this charter.

Re-creation, meaning the conjectural **reconstruction** of a **structure** or **place**; replication, meaning to make a copy of an existing or former **structure** or **place**; or the construction of generalised representations of typical features or **structures**, are not **conservation** processes and are outside the scope of this charter.

18. Preservation

Preservation of a **place** involves as little **intervention** as possible, to ensure its long-term survival and the continuation of its **cultural heritage value**.

Preservation processes should not obscure or remove the patina of age, particularly where it contributes to the **authenticity** and **integrity** of the **place**, or where it contributes to the structural stability of materials.

i. Stabilisation

Processes of decay should be slowed by providing treatment or support.

ii. Maintenance

A **place** of **cultural heritage value** should be maintained regularly. **Maintenance** should be carried out according to a plan or work programme.

iii. Repair

Repair of a **place** of **cultural heritage value** should utilise matching or similar materials. Where it is necessary to employ new materials, they should be distinguishable by experts, and should be documented.

Traditional methods and materials should be given preference in **conservation** work.

Repair of a technically higher standard than that achieved with the existing materials or construction practices may be justified only where the stability or life expectancy of the site or material is increased, where the new material is compatible with the old, and where the **cultural heritage value** is not diminished.

19. Restoration

The process of **restoration** typically involves **reassembly** and **reinstatement**, and may involve the removal of accretions that detract from the **cultural heritage value** of a **place**.

Restoration is based on respect for existing **fabric**, and on the identification and analysis of all available evidence, so that the **cultural heritage value** of a **place** is recovered or revealed. **Restoration** should be carried out only if the **cultural heritage value** of the **place** is recovered or revealed by the process.

Restoration does not involve conjecture.

i. Reassembly and reinstatement

Reassembly uses existing material and, through the process of **reinstatement**, returns it to its former position. **Reassembly** is more likely to involve work on part of a **place** rather than the whole **place**.

ii. Removal

Occasionally, existing **fabric** may need to be permanently removed from a **place**. This may be for reasons of advanced decay, or loss of structural **integrity**, or because particular **fabric** has been identified in a **conservation plan** as detracting from the **cultural heritage value** of the **place**.

The **fabric** removed should be systematically **recorded** before and during its removal. In some cases it may be appropriate to store, on a long-term basis, material of evidential value that has been removed.

20. Reconstruction

Reconstruction is distinguished from **restoration** by the introduction of new material to replace material that has been lost.

Reconstruction is appropriate if it is essential to the function, **integrity**, **intangible value**, or understanding of a **place**, if sufficient physical and documentary evidence exists to minimise conjecture, and if surviving **cultural heritage value** is preserved.

Reconstructed elements should not usually constitute the majority of a **place** or **structure**.

21. Adaptation

The **conservation** of a **place** of **cultural heritage value** is usually facilitated by the **place** serving a useful purpose.

Proposals for **adaptation** of a **place** may arise from maintaining its continuing **use**, or from a proposed change of **use**.

Alterations and additions may be acceptable where they are necessary for a **compatible use** of the **place**. Any change should be the minimum necessary, should be substantially reversible, and should have little or no adverse effect on the **cultural heritage value** of the **place**.

Any alterations or additions should be compatible with the original form and **fabric** of the **place**, and should avoid inappropriate or incompatible contrasts of form, scale, mass, colour, and material. **Adaptation** should not dominate or substantially obscure the original form and **fabric**, and should not adversely affect the **setting** of a **place** of **cultural heritage value**. New work should complement the original form and **fabric**.

22. Non-intervention

In some circumstances, assessment of the **cultural heritage value** of a **place** may show that it is not desirable to undertake any **conservation intervention** at that time. This approach may be appropriate where undisturbed constancy of **intangible values**, such as the spiritual associations of a sacred **place**, may be more important than its physical attributes.

23. Interpretation

Interpretation actively enhances public understanding of all aspects of **places of cultural heritage value** and their **conservation**. Relevant cultural protocols are integral to that understanding, and should be identified and observed.

Where appropriate, interpretation should assist the understanding of **tangible** and **intangible values** of a **place** which may not be readily perceived, such as the sequence of construction and change, and the meanings and associations of the **place** for **connected people**.

Any interpretation should respect the **cultural heritage value** of a **place**. Interpretation methods should be appropriate to the **place**. Physical **interventions** for interpretation purposes should not detract from the experience of the **place**, and should not have an adverse effect on its **tangible** or **intangible values**.

24. Risk mitigation

Places of cultural heritage value may be vulnerable to natural disasters such as flood, storm, or earthquake; or to humanly induced threats and risks such as those arising from earthworks, subdivision and development, buildings works, or wilful damage or neglect. In order to safeguard **cultural heritage value**, planning for risk mitigation and emergency management is necessary.

Potential risks to any **place of cultural heritage value** should be assessed. Where appropriate, a risk mitigation plan, an emergency plan, and/or a protection plan should be prepared, and implemented as far as possible, with reference to a conservation plan.

Definitions

For the purposes of this charter:

Adaptation means the process(es) of modifying a **place** for a **compatible use** while retaining its **cultural heritage value**. **Adaptation** processes include alteration and addition.

Authenticity means the credibility or truthfulness of the surviving evidence and knowledge of the **cultural heritage value** of a **place**. Relevant evidence includes form and design, substance and **fabric**, technology and craftsmanship, location and surroundings, context and **setting, use** and function, traditions, spiritual essence, and sense of place, and includes **tangible** and **intangible values**. Assessment of **authenticity** is based on identification and analysis of relevant evidence and knowledge, and respect for its cultural context.

Compatible use means a **use** which is consistent with the **cultural heritage value** of a **place**, and which has little or no adverse impact on its **authenticity** and **integrity**.

Connected people means any groups, organisations, or individuals having a sense of association with or responsibility for a **place of cultural heritage value**.

Conservation means all the processes of understanding and caring for a **place** so as to safeguard its **cultural heritage value**. **Conservation** is based on respect for the existing **fabric**, associations, meanings, and **use** of the **place**. It requires a cautious approach of doing as much work as necessary but as little as possible, and retaining **authenticity** and **integrity** to ensure that the **place** and its values are passed on to future generations.

Conservation plan means an objective report which documents the history, **fabric**, and **cultural heritage value** of a **place**, assesses its **cultural heritage significance**, describes the condition of the **place**, outlines **conservation** policies for managing the **place**, and makes recommendations for the **conservation** of the **place**.

Contents means moveable objects, collections, chattels, documents, works of art, and ephemera that are not fixed or fitted to a **place**, and which have been assessed as being integral to its **cultural heritage value**.

Cultural heritage significance means the **cultural heritage value** of a **place** relative to other similar or comparable **places**, recognising the particular cultural context of the **place**.

Cultural heritage value/s means possessing aesthetic, archaeological, architectural, commemorative, functional, historical, landscape, monumental, scientific, social, spiritual, symbolic, technological, traditional, or other **tangible** or **intangible values**, associated with human activity.

Cultural landscapes means an area possessing **cultural heritage value** arising from the relationships between people and the environment. **Cultural landscapes** may have been designed, such as gardens, or may have evolved from human settlement and land use over time, resulting in a diversity of distinctive landscapes in different areas. Associative **cultural landscapes**, such as sacred mountains, may lack **tangible** cultural elements but may have strong **intangible** cultural or spiritual associations.

Documentation means collecting, **recording**, keeping, and managing information about a **place** and its **cultural heritage value**, including information about its history, **fabric**, and meaning; information about decisions taken; and information about physical changes and **interventions** made to the **place**.

Fabric means all the physical material of a **place**, including subsurface material, **structures**, and interior and exterior surfaces including the patina of age; and including fixtures and fittings, and gardens and plantings.

Hapu means a section of a large tribe of the **tangata whenua**.

Intangible value means the abstract **cultural heritage value** of the meanings or associations of a **place**, including commemorative, historical, social, spiritual, symbolic, or traditional values.

Integrity means the wholeness or intactness of a **place**, including its meaning and sense of **place**, and all the **tangible** and **intangible** attributes and elements necessary to express its **cultural heritage value**.

Intervention means any activity that causes disturbance of or alteration to a **place** or its **fabric**. **Intervention** includes archaeological excavation, invasive investigation of built **structures**, and any **intervention** for **conservation** purposes.

Iwi means a tribe of the **tangata whenua**.

Kaitiakitanga means the duty of customary trusteeship, stewardship, guardianship, and protection of land, resources, or **taonga**.

Maintenance means regular and on-going protective care of a **place** to prevent deterioration and to retain its **cultural heritage value**.

Matauranga means traditional or cultural knowledge of the **tangata whenua**.

Non-intervention means to choose not to undertake any activity that causes disturbance of or alteration to a **place** or its **fabric**.

Place means any land having **cultural heritage value** in New Zealand, including areas; **cultural landscapes**; buildings, **structures**, and monuments; groups of buildings, **structures**, or monuments; gardens and plantings; archaeological sites and features; traditional sites; sacred **places**; townscapes and streetscapes; and settlements. **Place** may also include land covered by water, and any body of water. **Place** includes the **setting** of any such **place**.

Preservation means to maintain a **place** with as little change as possible.

Reassembly means to put existing but disarticulated parts of a **structure** back together.

Reconstruction means to build again as closely as possible to a documented earlier form, using new materials.

Recording means the process of capturing information and creating an archival record of the **fabric** and **setting** of a **place**, including its configuration, condition, **use**, and change over time.

Reinstatement means to put material components of a **place**, including the products of **reassembly**, back in position.

Repair means to make good decayed or damaged **fabric** using identical, closely similar, or otherwise appropriate material.

Restoration means to return a **place** to a known earlier form, by **reassembly** and **reinstatement**, and/or by removal of elements that detract from its **cultural heritage value**.

Setting means the area around and/or adjacent to a **place** of **cultural heritage value** that is integral to its function, meaning, and relationships. **Setting** includes the **structures**, outbuildings, features, gardens, curtilage, airspace, and accessways forming the spatial context of the **place** or used in association with the **place**. **Setting** also includes **cultural landscapes**, townscapes, and streetscapes; perspectives, views, and viewshafts to and from a **place**; and relationships with other **places** which contribute to the **cultural heritage value** of the **place**. **Setting** may extend beyond the area defined by legal title, and may include a buffer zone necessary for the long-term protection of the **cultural heritage value** of the **place**.

Stabilisation means the arrest or slowing of the processes of decay.

Structure means any building, standing remains, equipment, device, or other facility made by people and which is fixed to the land.

Tangata whenua means generally the original indigenous inhabitants of the land; and means specifically the people exercising **kaitiakitanga** over particular land, resources, or **taonga**.

Tangible value means the physically observable **cultural heritage value** of a **place**, including archaeological, architectural, landscape, monumental, scientific, or technological values.

Taonga means anything highly prized for its cultural, economic, historical, spiritual, or traditional value, including land and natural and cultural resources.

Tino rangatiratanga means the exercise of full chieftainship, authority, and responsibility.

Use means the functions of a **place**, and the activities and practices that may occur at the **place**. The functions, activities, and practices may in themselves be of **cultural heritage value**.

Whanau means an extended family which is part of a **hapu** or **iwi**.

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This revised text replaces the 1993 and 1995 versions and should be referenced as the *ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value* (ICOMOS New Zealand Charter 2010).

This revision incorporates changes in conservation philosophy and best practice since 1993 and is the only version of the ICOMOS New Zealand Charter approved by ICOMOS New Zealand (Inc) for use.

Copies of this charter may be obtained from
ICOMOS NZ (Inc) PO Box 90 851 Victoria Street West, Auckland 1142, New Zealand.

Appendix 10. Florence Charter, 1981



Adopted by ICOMOS in December 1982.

PREAMBLE

The ICOMOS-IFLA International Committee for Historic Gardens, meeting in Florence on 21 May 1981, decided to draw up a charter on the preservation of historic gardens which would bear the name of that town. The present Florence Charter was drafted by the Committee and registered by ICOMOS on 15 December 1982 as an addendum to the Venice Charter covering the specific field concerned.

DEFINITIONS AND OBJECTIVES

Article 1.

"A historic garden is an architectural and horticultural composition of interest to the public from the historical or artistic point of view". As such, it is to be considered as a monument.

Article 2.

"The historic garden is an architectural composition whose constituents are primarily vegetal and therefore living, which means that they are perishable and renewable." Thus its appearance reflects the perpetual balance between the cycle of the seasons, the growth and decay of nature and the desire of the artist and craftsman to keep it permanently unchanged.

Article 3.

As a monument, the historic garden must be preserved in accordance with the spirit of the Venice Charter. However, since it is a living monument, its preservation must be governed by specific rules which are the subject of the Present charter.

Article 4.

The architectural composition of the historic garden includes:

- Its plan and its topography.
- Its vegetation, including its species, proportions, colour schemes, spacing and respective heights.
- Its structural and decorative features.
- Its water, running or still, reflecting the sky.

Article 5.

As the expression of the direct affinity between civilisation and nature, and as a place of enjoyment suited to meditation or repose, the garden thus acquires the cosmic significance of an idealised image of the world, a "paradise" in the etymological sense of the term, and yet a testimony to a culture, a style, an age, and often to the originality of a creative artist.

Article 6.

The term "historic garden" is equally applicable to small gardens and to large parks, whether formal or "landscape".

Article 7.

Whether or not it is associated with a building in which case it is an inseparable complement, the historic garden cannot be isolated from its own particular environment, whether urban or rural, artificial or natural.

Article 8.

A historic site is a specific landscape associated with a memorable act, as, for example, a major historic event; a well-known myth; an epic combat; or the subject of a famous picture.

Article 9.

The preservation of historic gardens depends on their identification and listing. They require several kinds of action, namely maintenance, conservation and restoration. In certain cases, reconstruction may be recommended. The authenticity of a historic garden depends as much on the design and scale of its various parts as on its decorative features and on the choice of plant or inorganic materials adopted for each of its parts.

MAINTENANCE, CONSERVATION, RESTORATION, RECONSTRUCTION

Article 10.

In any work of maintenance, conservation, restoration or reconstruction of a historic garden, or of any part of it, all its constituent features must be dealt with simultaneously. To isolate the various operations would damage the unity of the whole.

MAINTENANCE AND CONSERVATION

Article 11.

Continuous maintenance of historic gardens is of paramount importance. Since the principal material is vegetal, the preservation of the garden in an unchanged condition requires both prompt replacements when required and a long-term programme of periodic renewal (clear felling and replanting with mature specimens).

Article 12.

Those species of trees, shrubs, plants and flowers to be replaced periodically must be selected with regard for established and recognised practice in each botanical and horticultural region, and with the aim to determine the species initially grown and to preserve them.

Article 13.

The permanent or movable architectural, sculptural or decorative features which form an integral part of the historic garden must be removed or displaced only insofar as this is essential for their conservation or restoration. The replacement or restoration of any such jeopardised features must be effected in accordance with the principles of the Venice Charter, and the date of any complete replacement must be indicated.

Article 14.

The historic garden must be preserved in appropriate surroundings. Any alteration to the physical environment which will endanger the ecological equilibrium must be prohibited. These applications are applicable to all aspects of the infrastructure, whether internal or external (drainage works, irrigation systems, roads, car parks, fences, caretaking facilities, visitors' amenities, etc.).

RESTORATION AND RECONSTRUCTION**Article 15.**

No restoration work and, above all, no reconstruction work on a historic garden shall be undertaken without thorough prior research to ensure that such work is scientifically executed and which will involve everything from excavation to the assembling of records relating to the garden in question and to similar gardens. Before any practical work starts, a project must be prepared on the basis of said research and must be submitted to a group of experts for joint examination and approval.

Article 16.

Restoration work must respect the successive stages of evolution of the garden concerned. In principle, no one period should be given precedence over any other, except in exceptional cases where the degree of damage or destruction affecting certain parts of a garden may be such that it is decided to reconstruct it on the basis of the traces that survive or of unimpeachable documentary evidence. Such reconstruction work might be undertaken more particularly on the parts of the garden nearest to the building it contains in order to bring out their significance in the design.

Article 17.

Where a garden has completely disappeared or there exists no more than conjectural evidence of its successive stages a reconstruction could not be considered a historic garden.

USE**Article 18.**

While any historic garden is designed to be seen and walked about in, access to it must be restricted to the extent demanded by its size and vulnerability, so that its physical fabric and cultural message may be preserved.

Article 19.

By reason of its nature and purpose, a historic garden is a peaceful place conducive to human contacts, silence and awareness of nature. This conception of its everyday use must contrast with its role on those rare occasions when it accommodates a festivity. Thus, the conditions of such occasional use of a historic garden should be clearly defined, in order that any such festivity may itself serve to enhance the visual effect of the garden instead of

perverting or damaging it.

Article 20.

While historic gardens may be suitable for quiet games as a daily occurrence, separate areas appropriate for active and lively games and sports should also be laid out adjacent to the historic garden, so that the needs of the public may be satisfied in this respect without prejudice to the conservation of the gardens and landscapes.

Article 21.

The work of maintenance and conservation, the timing of which is determined by season and brief operations which serve to restore the garden's authenticity, must always take precedence over the requirements of public use. All arrangements for visits to historic gardens must be subjected to regulations that ensure the spirit of the place is preserved.

Article 22.

If a garden is walled, its walls may not be removed without prior examination of all the possible consequences liable to lead to changes in its atmosphere and to affect its preservation.

LEGAL AND ADMINISTRATIVE PROTECTION

Article 23.

It is the task of the responsible authorities to adopt, on the advice of qualified experts, the appropriate legal and administrative measures for the identification, listing and protection of historic gardens. The preservation of such gardens must be provided for within the framework of land-use plans and such provision must be duly mentioned in documents relating to regional and local planning. It is also the task of the responsible authorities to adopt, with the advice of qualified experts, the financial measures which will facilitate the maintenance, conservation and restoration, and, where necessary, the reconstruction of historic gardens.

Article 24.

The historic garden is one of the features of the patrimony whose survival, by reason of its nature, requires intensive, continuous care by trained experts. Suitable provision should therefore be made for the training of such persons, whether historians, architects, landscape architects, gardeners or botanists. Care should also be taken to ensure that there is regular propagation of the plant varieties necessary for maintenance or restoration.

Article 25.

Interest in historic gardens should be stimulated by every kind of activity capable of emphasising their true value as part of the patrimony and making for improved knowledge and appreciation of them: promotion of scientific research; international exchange and circulation of information; publications, including works designed for the general public; the encouragement of public access under suitable control and use of the media to develop awareness of the need for due respect for nature and the historic heritage. The most outstanding of the historic gardens shall be proposed for inclusion in the World Heritage List.

Nota Bene

The above recommendations are applicable to all the historic gardens in the world.

Additional clauses applicable to specific types of gardens may be subsequently appended to the present Charter with brief descriptions of the said types.