AVIARIES IN PRIVATE AND PUBLIC GARDENS OF VICTORIA:
A CHANGING PERSPECTIVE OF THE LANDSCAPE

by

Francine Gilfedder

A research report submitted in partial fulfilment of the
requirements for the degree of Master of Landscape Architecture

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The aim of this research report has been to examine garden architectural structures in the belief that they document changes in Australia's social history and society's changing attitudes towards the environment.

The material which formed the basis of this study was researched using primary and secondary historical and contemporary documents.

Due to the lack of information concerning the number of aviaries in private gardens, it has not been possible to conclude that aviaries in private gardens are now any more or less common than they were in the past. However, the presence of aviaries in public gardens in Victoria has declined significantly.

The report has also highlighted some of the general changes in the design of aviaries. The designs of the earliest aviaries were purely ornamental, however, contemporary aviary design is primarily concerned with the welfare of the inhabitants.

An analysis and evaluation of garden architectural structures from a social viewpoint has revealed some of the changes in man's perceptions, social values, and cultural attitudes towards the landscape.
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CHAPTER 1: INTRODUCTION

INTRODUCTION

Gardens and parks are important components of the historic landscape because they document changes in social history and man's changing attitudes towards his environment.

A garden or park is an area, defined visually and physically, wherein an ornamental environment is created, often to a design (Bilikowski, 1983:1). These designed landscapes are ornamental and recreational sites which have changed according to changes in the tastes, fashion, politics and needs of society. Even in their most modest form, such as the private garden, these designed landscapes have always been a unique form of self-expression for professional designers and the ordinary person.

Regardless of its size or scale any designed landscape can be studied by an examination of its two major elements: plant materials and garden architectural elements, often referred to as the 'soft' and 'hard' landscape. The first category, the soft landscape, includes all vegetative elements such as trees, shrubs and herbaceous plants. The hard landscape category encompasses a range of garden architectural items extending from paving, fencing and garden furniture to a range of garden buildings. Built primarily for the purposes of leisure and pleasure and designed as embellishments to both the built environment and the landscape, typical gardens buildings were pavilions, summerhouses, ferneries and bandstands. Aviaries were another type of garden building favoured in both private and public gardens.

Past centuries have seen a mixture of styles applied to garden architecture and garden design. Political events and social changes have combined with formal, picturesque, romantic and gardenesque styles to form the nineteenth and twentieth century attitudes towards garden and landscape design.
As a type of garden building, aviaries fall between the disciplines of gardening and architecture. It is questionable whether any change in the design of aviaries could conclusively be shown to have resulted from stylistic developments in one or other professional discipline, neither could such a structure be considered an essential element of either discipline.

As significant and important components of the historic landscape in Victoria, garden buildings, such as aviaries, highlight changes in Australia’s social history and man’s changing attitudes towards his environment.

**SIGNIFICANCE OF THE TOPIC**

The study of historic gardens and the history and development of gardens in Victoria has been the subject of much interest in recent times. The focus of interest has been in terms of the significance of particular gardens and their design style. Most research on gardens has been approached from either an horticultural, landscape, or architectural bias, while the social and cultural aspects of gardens and landscapes have received little attention.

In his seminal work on historic gardens in Victoria, Watts (1983) concentrated on a descriptive list of historic gardens within the broader classification of garden types such as mansion or botanic gardens. Swanson (1984), in a report on Melbourne’s public gardens, discussed the historical development of these gardens as well as specific aspects of public use and the maintenance issues of public landscapes. Other studies (Aitken, 1986; Sanderson, 1980; Swanson, 1982) have contributed to a growing documentation and analysis of specific public and private gardens, approached from either a plant or a design bias. Management issues and guidelines for future directions have often been included in these studies. Garden architectural elements were usually documented in many of these studies but, on the whole, no study comprehensively dealt
with the many architectural structures which occur in these historic landscapes.

Apart from two reports (Burness, 1985; Poulston, 1984), little attention has been paid to the social and cultural aspects, in a historic context, of gardens. Burness (1985) attempted an assessment of attitudes towards historic gardens, whereas Poulston (1984) researched the social history associated with the development of a Western District garden.

In contrast to the singular nature of research undertaken on historic gardens in Victoria, most studies that have examined attitudes towards the Australian environment have approached the topic from a broad perspective.

Only a few authors, including Powell (1972, 1975, 1976) and Bolton (1981), have concentrated on the historical-cultural approach to environmental management. Within this field, other researchers have tackled specific aspects in more detail. The works of Lansbury (1970) and Elliott (1976) have examined the development of social-cultural attitudes associated with the environmental perspective. In particular, these works traced developments such as the English concept of Arcady in Australia, the bush ethos and nationalism.

Other authors have examined specific movements of environmental management from the historical-cultural viewpoint. These include Bardwell's (1974) study of the development of national parks in Australia; Norman's (1981) article on the history of game laws for wildlife in Victoria; Balmford's (1978) article on the history of ornithology in Victoria; and Powell's (1980) study of leisure and recreation in Australia before 1945.
Gardening has been a significant activity for recreation and leisure for much of Australian society, regardless of class, income or social status, therefore it seemed reasonable that some analysis and evaluation of gardens from a social viewpoint would expose some of the perceptions, cultural attitudes and social values of man towards the landscape.

PURPOSE OF THE STUDY

The primary objective of this research report has been to examine aviaries in a variety of gardens in Victoria in order to analyse and evaluate any significant changes in society's attitudes towards wildlife and the landscape.

By selecting one type of garden building, the purpose of this study has been to validate the hypothesis that garden architecture, as a significant and important element of historic gardens and the historic landscape, documents changes in Australia's social history and man's changing attitudes towards the environment.

LIMITATIONS OF THE STUDY

In order to document aviaries constructed within a range of garden types this report has encompassed public and private gardens constructed in Victoria.

No limitation has been placed on the date of construction of the aviaries, therefore the report documents aviaries from the earliest recorded in Victoria to contemporary examples.

While acknowledging the lack of any clear boundary between garden design and architectural styles, some influence from these disciplines is inevitable and would have influenced the design of aviaries. However, it is beyond the scope of this report to examine the historical developments in both gardening and architectural
styles. Similarly, it is not a concern of this report to analyse the architectural and structural design of aviaries nor the materials of construction. Rather, the objective of the report has been to trace the changing attitudes towards wildlife, as a particular component of the natural environment, following an examination of the change in the physical form and function of aviaries.

Within the limited time available to carry out this report, not all the known examples of aviaries in Victoria could be documented due to the paucity of material documenting gardens and aviaries. Similarly, due to the lack of time available it was not possible to pursue some of the more obscure sources of information, such as newspapers and the records of local historical societies.

DEFINITIONS

An aviary is defined as any large enclosure specifically designed to hold a number of birds in confinement. However, in character, size, design and purpose this term encompasses enclosures of great diversity.

The first bird enclosures recorded were used by the Romans in the first century BC. The first recorded use of the term 'aviary' dates from 1577 when an Englishman, Harrison, wrote: “our costlie and curious aviaries” (Oxford English Dictionary, 1933:585).

Aviculture, the keeping and rearing of birds, did not appear as a recognised activity until 1880, whereas the scientific discipline of ornithology, the field of zoology which deals with birds, their nature and habits, was recognised and described by Fuller in 1655 (Oxford English Dictionary, 1933).
In this report, an aviary is defined as any structure which fulfills the following requirements:

* is primarily ornamental in design;
* is a structure that at some stage has contained live birds;
* is distinguished from a hutch, compartment or cage by its size;
* is a structure that forms an enclosure and restrains the free flight of its inhabitants.

The report has excluded those types of aviaries constructed for purposes other than ornamental or visual enjoyment. Therefore, structures constructed primarily for breeding purposes, or for poultry and other domestic birds, have been excluded.

A distinction also needs to be made between temporary (moveable) structures and permanent (fixed) aviaries. Temporary structures comprise structures such as moveable wire or bamboo cages, and netting-covered, wooden-framed cages. Documentation of portable structures is outside the scope of this report. This report is concerned only with permanent aviaries.

**STRUCTURE OF THE REPORT**

The report has been organised into five main sections. The first section provides the introduction and background material to the study. The second section discusses the methodology of the study. The third and fourth sections document the aviaries within public and private gardens in Victoria which formed the basis of this study. Sections three and four have been organised such that each chapter consists of four parts: introduction, source material, examples of aviaries, and discussion. The last section of the report is concerned with the conclusions of the study.
CHAPTER 2: THE DEVELOPMENT OF ENVIRONMENTAL ATTITUDES IN AUSTRALIA

In this chapter the environmental values and attitudes of the Australian society during the period 1788 to the early 1900s will be broadly outlined, concentrating on developments within the state of Victoria.

Initially, it is necessary to clarify more precisely some concepts relating to the environmental issues discussed in the report, in particular, 'ecology', 'conservation', and 'attitudes'.

In its early development ecology was synonymous with natural history; in the late nineteenth century ecologists spent a considerable amount of time describing and classifying the natural world. However, the contemporary science of ecology is defined as the study of plants and animals in relation to the place where they live or their environment (Recher, Lunney & Dunn, 1979:6).

In Powell's opinion (1976:31) conservation is a:

> dynamic concept without precise definition ... a fusion of at least eight major approaches is required, ranging from economic, political, social and ecological perspectives to those of aesthetics, ethics, philosophy and science/technology.

Fauna conservation, a specific branch of conservation, depends primarily upon two factors: the preservation of habitat and a detailed knowledge of the effects of habitat modifications on animal populations (Powell, 1976:31).

The term 'attitudes' suggests a disposition and incorporates, as discussed by Powell (1976:5), three connected components: the cognitive, affective and behavioural outlooks. This report is concerned specifically with those attitudes concerning the environment, that is environmental attitudes.
From the earliest days of settlement by Europeans, Australia presented a unique new field for science and scientists. The discovery of the new continent greatly excited botanists, geographers, zoologists and geologists.

During the formative period of 1788 to 1914 the Australian environment was irrevocably altered for future generations...specific and general orientations of the Australian public towards native fauna, flora and landscape, and to a lesser extent towards the built environment, became deeply entrenched (Powell, 1976:6).

The predominant characteristic of natural history with respect to Australia in the late eighteenth and early nineteenth century was that entitled "the concept of the reversal of Nature" (Powell, 1976:13).

In England a deep and consistent passion for natural history had gathered strength from the 1820s through to the 1860s (Barber, 1980:13). It pervaded every section of society, in particular the middle class.

By the middle of the [nineteenth] century, there was hardly a middle-class drawing-room in the country that did not contain an aquarium, a fern-case, a butterfly cabinet, a seaweed album, a shell collection, or some other evidence of a taste for natural history (Barber, 1980:13).

Natural history was also in vogue in nineteenth century Australia, and "some of the best energies of the most accomplished men of the day were focused on what we would now call the field sciences" (Powell, 1976:13).

Between 1830 and 1850, the major years of pastoral expansion in Victoria, the 'reflective attitude' towards nature, which was encouraged in Europe by Alexander von Humboldt (1769-1859) and other scholars, was already beginning to stir painters, writers and poets towards a new appreciation of the Australian landscape (Powell, 1976:28-29).
Powell (1976:48) identified three streams of environmental thought discernible in the period 1788-1860: aesthetic, ecological and utilitarian. Except for the aesthetic artistic evaluation the public attitude was primarily exploitative or utilitarian. An attitude typical of 'gentleman' squatters and much of the public towards the unique birdlife of Australia was displayed by Captain Foster Fyans, a Commissioner of Crown Lands in the pastoral district of Portland who wrote:

black ducks, large, and a delicacy . . . the bronze-wing pigeon, a fine game bird, fully equal to an English partridge; black swans; — useless and ugly . . . For an idler or a sportsman, this country affords nothing (Powell, 1976:30).

By the middle of the nineteenth century, animals were regarded as either 'vermin', 'edible', or 'game' creatures (Powell, 1976:30). As a consequence of this attitude, the notion of any true form of legal protection for native wildlife developed quite late in Australia except for some early moves to restrict the shooting seasons. Edward Wilson, editor of the Argus, and a founding member of the Zoological Society and the Acclimatisation Society, was a strong lobbyist for the Imported Game Protection Act which was passed by the Victorian Parliament in 1860. This legislation sought to encourage and protect the acclimatisation of grouse, partridges, pheasants and other species which might prove attractive to well-bred sportsmen and 'gentleman' squatters (Bolton, 1981:98).

Bolton (1981:98) considered that the 1860s were characterised by a "dawning appreciation of Australian fauna". At this time a concern was expressed by Australians for the protection of some of their more distinctive birds and animals. But many Australians opposed the introduction of laws to protect fauna: the working-class felt threatened and saw the proposals as a move to establish "the evil of the game laws [of] the mother country" in Australia, and a means to introduce a form of class hierarchy in Australia. One extraordinary argument attacking the game law proposals was put in Parliament in 1861 by the working-class representative for Collingwood. He declared that if the animals of
the colony could not protect themselves then they were clearly unfit to live in the country (Bolton, 1981:98).

Nevertheless, in June 1862, Parliament passed the Act to Provide for the Preservation of Imported Game, and during the Breeding Season of Native Game which established some degree of protection for exotic and indigenous species (Gillbank, 1980:265).

After 1850, when many of the scientists attracted to the colonies by gold had returned to their scientific pursuits, a number of societies were established such as the Philosophical Society and the Victorian Institute for the Advancement of Science. These two bodies, both founded in 1854, were colonial models of their parent societies established in London. These societies undertook descriptive and systematic work in the natural sciences.

By 1860 Hoare's opinion was that the Australian scientific profession had matured, such that "the period of the collector, the dilettante scientist and the individual worker, for so long characteristic features of colonial science, was soon to be superseded" (Powell, 1976:42-44).

In Victoria, Governor La Trobe appointed a number of scientists to administer Victoria's new bureaucratic departments. Close social and professional links were established between the new 'experts' which assisted in the formation and maintenance of formal scientific societies in Victoria. One of the most influential scientists of this period in Victoria was Ferdinand von Mueller. The appointment of Mueller to the position of Victoria's first Government Botanist in 1852 marked:

the beginning of a new era in the scientific appraisal of the Australian environment; for botany in particular it meant that the direction of research at both scientific and utilitarian levels came to be determined in Australia rather than England (Powell, 1976:46).
Up until 1859 the Australian flora had provided scientists, prompted by utilitarian concerns, with the primary focus of their research (Moyal, 1986; Mozley, 1976; Powell, 1976:17).

In the 1860s Charles Darwin's Theory of Evolution became better known following the publication of his _Origin of Species_ in 1859. Some of the controversial ideas in Darwin's work sparked interest and research by scientists into the native fauna and the Aboriginal population (Powell, 1976:17).

Despite the gradual accommodation made in Britain by scientists and clergymen, the ecological vision of Darwin's evolutionary theory was not apparent in Australia until the beginning of the twentieth century. Mozley (1967) believed a key reason for the delay was the vigorous opposition of some of Australia's most influential scientists. In Victoria opposition to Darwin's theories came from Sir Henry Barkly, Governor and President of the Royal Society, von Mueller, and Frederick McCoy. The latter men were both absolute creationists. As a consequence, man's concept of the natural world was only slowly transformed (Mozley, 1967).

With the exception of Charles Darwin’s _Origin of Species_ and the _Bible_, in Powell's opinion (1976:54) no book had a more direct and indirect influence upon Western man's perception and use of the environment than George Perkins Marsh's _Man and Nature_ published in 1864. Marsh’s _Man and Nature_ was “universally acknowledged as the very fountain-head of the conservation movement in North America and was a major influence in the rest of the Western World” (Powell, 1976:55).

In Europe long-standing traditions of environmental management were being challenged by urbanisation and industrialisation. Great debate on the evils of industrialisation took place in the nineteenth century. Australia's reaction was similar to that which occurred in Britain and Europe.
Between the end of the 1840s and 1860 Melbourne was transformed from a small port of 20,000 inhabitants to a bustling commercial centre of 125,000 residents (Powell, 1976:33). By 1861, 46% of Australia’s population lived in Victoria and the State had become the hub of Australia’s commercial, industrial and political life. As a result of the urban transformation, by the 1860s there was an equally significant transformation of Australia’s social environment (Powell, 1976:41).

The development of the learned societies and other egalitarian products of the Age of Improvement (such as the Mechanics Institutes founded in Britain in the late eighteenth century, and established during the 1830s and 1840s in the Australian colonies) raised the status of organised science. These institutes also brought scientific and technical knowledge within the reach of the working man and interested ladies.

In this social climate Marsh’s ideas were quite readily adopted within enlightened circles, but a more widespread awareness developed only slowly. As a social movement, conservation did not clearly emerge in the United States until the early years of the twentieth century, but Powell (1976:56) believed that in texts such as Marsh’s “the germinal concepts of a truly conservationist philosophy can be seen to be of [a] much older vintage”.

In the United States, Samuel P Hays emphasised that the historical role of conservation arose from the implications of science and technology in modern society (Powell, 1976:57). In the last third of the nineteenth century conservation was essentially a scientific movement.

Unfortunately in Australia there has not been a rich tradition of scholarship in the field of environmental history. However Powell (1976:58) considered it reasonable that “an examination of the American experience should provide an indispensable general perspective”, particularly given that many leading figures in conservation and resource management in Australia were keen
observers of the American scene. This idea of the existence of close parallels between Australia and America was also supported by Norman (1981), particularly with respect to government legislation for the protection of fauna. It therefore seems reasonable to accept that conservation in Australia was also a product of science and technology.

In 1870, for the first time, native-born Australian's outnumbered immigrants, and by 1880 two-thirds of the population were Australian born. In Victoria during the decade 1870-1880 the first initiatives were taken by the public to form societies to encourage interest in Australian wildlife. The debate over forest conservation - forests were then under great pressure from both pioneer settlers and commercial interests - was the chief focus of conservational interest and activity. In 1880 the Field Naturalists of Victoria was established, and by 1893 the Australasian Association for the Advancement of Science was calling for the government to subsidise closed reserves for the protection of native flora and fauna (Bolton, 1981:99).

Allied with this movement for wildlife conservation was the growing demand for large areas of land to be set aside as national parks for public recreation and habitat preservation (Bardwell, 1974; Bolton, 1981:104; Powell, 1976). The only national park created as such before 1900, the Tower Hill area, was under the nominal control of a local acclimatisation group whose interests were not strictly conservational (Norman, 1981:84).

Bolton (1981:107) believed that these developments were the precursors to the movement towards conservation in Australia which he believed arose between 1880 and 1930. Norman (1981), however, recognised 1896 as the time of a discernible change in society's attitudes towards wildlife. Norman believed that the numerous attempts made to amend the game laws after 1896 reflected the community's desire to establish sanctuaries (or similar reserves) for the protection of wildlife. By the 1890s urgent appeals were made by senior scientists and technologists
for the establishment of sound ecological principles to guide the future development of the country along conservational lines.

In summary, the attitudes of contemporary Australians towards their environment can be identified as a product of the interplay between a European heritage, an evolving sense of national identity, and developments within science and scientific theory. With specific regard to the closely related fields of conservation and resource management, these disciplines have been identified as a behavioural outcome of the changing environmental attitudes, which emanated from the progress of science and technology in the latter half of the nineteenth century.
CHAPTER 3: INTRODUCTION TO AVIARIES

To enable the subject of aviaries in Victoria's public and private gardens to be placed within a worldwide context it is necessary to briefly examine the historical development of aviaries.

Unlike most exotic pets, cage birds have always shared the patronage of the rich and poor. To possess an aviary full of rare and brightly coloured species from all over the world has been one of the social graces throughout history.

The earliest recorded enclosures for birds were used by the Romans in the first century BC. Their birds were not purely aesthetic creatures: while species such as pigeons were kept for their decorative value, many were intended for the table, while others were used as the carriers of messages (Fisher, 1966:32). In the grounds of the villa of Marcus Terentius Varro (116–27 BC) was an aviary called the ‘Ornithon’, which contained a flight cage devoted entirely to song birds, in particular blackbirds and nightingales (Fisher, 1966:32).

In the centuries to follow aviaries were constructed in all shapes and sizes, generally reflecting the rank and wealth of the owner. The materials of construction varied according to the time and place: early Chinese aviaries were made of bamboo, whole or split, whereas English aviaries of the early nineteenth century pioneered the new materials of the day, glass and iron.

The explorations of scientists, naturalists and travellers to exotic and distant lands after the Middle Ages opened up new sources of rare and beautiful birds for collectors in western Europe. Wilkinson and Henderson (1985:14) stated that by the sixteenth century the aviary, often built in combination with a fountain, had become a consistent and important feature of the garden.
The eighteenth century in Europe was the heyday for the creation of new parks and gardens. A revival of interest in aviaries and the keeping of birds for display purposes occurred at this time. Roberts (1972:44) reported that "birdkeeping on a grand scale, as an attraction in the grounds of a 'stately home', developed with the changing fashions in landscape gardening in the eighteenth century".

Eleanor von Erdberg Consten, in her book *Chinese Influences on European Garden Structures*, stated that the improved democracy that characterised the eighteenth century also contributed to the increased popularity of aviaries. She wrote that "keeping rare and beautiful birds in a gorgeous cage has always been a favourite pastime of the great and mighty... The democratic late eighteenth century extended this privilege to the well-to-do bourgeois class" (Wilkinson & Henderson, 1985:15). Consten also noted that an exotic style of aviary was usually selected to house exotic birds with the result that, on many a small estate, often the cage was more exotic than its inhabitants (Wilkinson & Henderson, 1985:15).

With respect to architectural styles, a fashion for oriental architecture appeared at the same time as the popularity for birdkeeping increased. Throughout the seventeenth and eighteenth centuries the 'chinoiserie' style entered Europe and England and adaptations of Indian art and architecture, known as the 'Indian revival', flourished rather rapidly in the last quarter of the eighteenth century.

Aviaries constructed in England and Europe in the seventeenth and eighteenth centuries displayed the changing architectural tastes. For example, a prominent French garden, the Parc Monceau in Paris, featured an octagonal Chinese aviary, while in England the Prince of Wales set the trend in 1808 with designs for a Pheasantry and an Aviary at the Royal Pavilion which incorporated the oriental styles (Conner, 1979:136-39; Hix, 1974:64,87).
The popularity for the collection and display of birds continued and increased during the early nineteenth century in England. One of the reasons for the increase was the fashion of the time for glasshouses and conservatories, which provided a popular new means of displaying birds.

Conservatories were usually constructed as part of, or adjacent to the house, whereas glasshouses were usually free-standing.

In 1822 the Scotsman, John Claudius Loudon, who was both an architect and one of the most productive horticultural and architectural writers of the nineteenth century, first published his influential *Encyclopaedia of Gardening* which contained a number of proposals for the accommodation of birds. Loudon ambitiously proposed the covering of "several acres, even a whole country residence" under an enormous glass roof. Loudon suggested that the roof ought to be high enough to allow for "the tallest oriental trees, and the undisturbed flight of appropriate birds among their branches" (Hix, 1974:29).

By 1850 the construction of aviaries reached the peak of its activity in England. Towards the end of the nineteenth century there was a decline in the popularity of aviaries which was an indirect consequence of the same social factors which had destroyed the settled hierarchy of the nineteenth century class structure and discouraged home-based leisure activities such as birdkeeping.

The adherents of birdkeeping in the late nineteenth and early twentieth century became more specialised in their choice of birds, with respect to breeding and colour, and specialist avicultural societies were established. The first society of this type appeared in England in 1894 and is still active. In Australia the first avicultural society, the Avicultural Society of Australia, was formed in 1928 and remains one of the many active societies for bird fanciers (Roberts, 1972:86).
CHAPTER 4: METHODOLOGY

The methodology detailed in this chapter describes the various techniques that were used to locate the information contained within this research report.

Firstly, a clear definition of the term 'aviary' was established, and then a range of methods were used to locate the information required.

A computer search of the key word 'aviary' was made but this yielded no useful information. The selected key word approach was then repeated unsuccessfully using alternative words to 'aviary', such as 'enclosure', 'cage' and 'birdkeeping'. Finally, an alternative approach was undertaken in an attempt to locate aviaries through a computer search of associated listings such as 'garden architecture', 'garden design', 'garden history', 'zoological garden', 'leisure' and 'hobbies'. However, even these attempts produced no useful information on aviaries. No Australian references were found which considered aviaries from either a design or historical perspective.

Subsequent research centred on a literature search of the related alternative topics, predominantly within the subject of garden history. One of the most beneficial methods of detecting the occurrence of aviaries was by way of reference to historic gardens, aviaries being one of a range of buildings within gardens, particularly historic gardens.

In order to analyse some of the social and environmental factors that influenced changes in the design of aviaries, a certain amount of research was undertaken to provide this perspective.
The primary and secondary sources used in this report are outlined below.

**Maps and plans**

Many maps and plans were examined, in particular the *Melbourne and Metropolitan Board of Works Detail Plans* (MMBW), 40 feet to 1 inch series, from 1890 onwards, held at the State Library of Victoria and the Baillieu Library, University of Melbourne.

**Illustrations**

The LaTrobe Library was an invaluable source of material with its excellent collection of nineteenth century photographs which provided a starting point for the research into aviaries within parks and gardens.

The Illustrations Index (First Floor Reading Room, LaTrobe Collection, State Library of Victoria) was checked under the listing of 'aviary' but no entries were recorded. Known locations of aviaries, such as within a public garden, were checked under their location listing in the Illustrations Index but again no examples of aviaries were located.

Another source of illustrations searched was the Rose Postcard Series, held by the LaTrobe Picture Collection, State Library of Victoria. Although a few examples of aviaries were indexed no postcards of those listed were available.

**Government files**

Detailed research was made of the relevant government departmental files held at the Public Record Office, Victoria.
Journals and newspapers

A number of journals and newspapers were examined but those containing any relevant information were usually of a general nature. Specific journals on the subject of birds and birdkeeping, such as *The Emu*, contained little information on aviaries.

Books, theses and reports

A number of books on gardening and birdkeeping published in the nineteenth century were researched for information on aviaries.

Many contemporary works documenting historic gardens in Victoria were studied in order to find often obscure references to aviaries.

Other sources

An important source of information on the location of aviaries in public and private gardens in Victoria was individuals. This has resulted in a somewhat random search for material based often only on snippets of information or vague childhood recollections of visits to a garden containing an aviary.

Local historical societies, in particular those at the Kew and the Camberwell-Waverley Regional Libraries, were a useful and helpful source of information, particularly for material on local historic houses and gardens which may have contained an aviary.

Trade catalogues were also examined for information on manufacturer's and suppliers of aviaries.
CHAPTER 5: BACKGROUND TO PUBLIC GARDENS

The historical development and interplay between two organisations, the Zoological Society and the Acclimatisation Society, needs to be reviewed briefly in order to appreciate the reasons behind the construction of aviaries in Melbourne's public gardens.

The interaction of these societies ultimately provided the guiding force behind the establishment of the Royal Melbourne Zoological Gardens, the Royal Botanic Gardens, and the network of regional botanic gardens established throughout Victoria.

On 6 October 1857 a meeting was convened in Melbourne to establish a society to promote the breeding "of the finer kinds of poultry and cage birds" (Jenkins, 1979:60). The Chairman, Dr Black, suggested that the original aim be extended to establish a Zoological Society for the purposes of science and public edification (Powis, 1968:29).

The Zoological Society's objectives were to "obtain a collection and hold exhibitions of zoological species, in order to encourage the introduction of foreign specimens, and to domesticate the indigenous animals and birds of the colony" (Powis, 1968:29-30).

Throughout the 1850s, growing pressure for the establishment of an Acclimatisation Society was led by Edward Wilson who had participated in the foundation of the British Acclimatisation Society in 1859-1860. As a result of Wilson's efforts the Acclimatisation Society of Victoria was formed in 1861, at which time it was only the third such society in the world (Gillbank, 1980:260).
The objectives of the Acclimatisation Society were far reaching and included "the introduction, acclimatization and domestication of all innoxious animals, birds, fishes, insects and vegetables whether useful or ornamental" (Jenkins, 1979:61).

The involvement of Melbourne's leading colonists in the Acclimatisation Society has been studied in more detail by Powis (1968), Jenkins (1979) and Gillbank (1980), but it is worthwhile to identify two eminent scientists, McCoy and von Mueller, who were active in the establishment of acclimatisation societies in Victoria in the early 1860s. Professor Frederick McCoy was Victorian Government Palaeontologist, Professor of Natural History at the University of Melbourne, and Director of the Museum of Natural and Applied Sciences. Dr Ferdinand von Mueller was the Victorian Government Botanist and Director of the Royal Botanic Gardens, a founder of the Royal Society of Victoria, and President of the Geographical Society, Victorian Branch (Gillbank, 1980:259).

By 1862 the Acclimatisation Society's interests had shifted to creatures of an edible or useful kind in preference to those of a purely ornamental nature (Powis, 1968:15).

In 1872 the Acclimatisation Society had become the Zoological and Acclimatisation Society of Victoria. This organisation assumed control of the Zoological Gardens in Royal Park until 1937 when the Victorian Government established the Zoological Board of Victoria (Gillbank, 1980:266). The acclimatisation aspects of the Acclimatisation Society had virtually ceased by 1872. Thereafter, the Society concerned itself almost totally with the importation of exotic animals, solely for their display at the Zoological Gardens in Royal Park (Powis, 1968:2).

Mueller was appointed Director of the Royal Botanic Gardens on the 13 August 1857. One of his passionate interests was the acclimatisation of plants and animals. At the time of his appointment he was also given temporary responsibility for the management of the Zoological Society of Victoria's collection of
animals, which was at that stage housed on 33 acres (13.2 hectares) of ground in Richmond Park, just across the Yarra River from the Botanic Gardens (Gillbank, 1980:261).

Aviaries and animal enclosures were introduced into the Royal Botanic Gardens soon after Mueller’s appointment as Director. One of the aims of constructing aviaries was to allow the introduction and acclimatisation of foreign song birds. The first consignment of nightingales was released in 1857 (Pescott, 1982:43).

In a letter of 13 July 1858 from McCoy, Director of Museums, to the Acclimatisation Society, McCoy recommended that:

> the placing of any public collections of living animals in the Botanic Gardens and Reserve would increase the attractions of the latter, be as convenient for the public and perfectly suitable and healthy for the animals (CB of 26, 1865).

At the first Zoological Society meeting, Professor McCoy expressed his great desire of combining the Royal Botanic Gardens and the Zoological Gardens in recognition of Mueller’s belief in the better soil and ease of access at the Botanic Gardens, and for simplicity of administration and economy.

In a letter dated 9 October 1858 von Mueller (in 1857 Mueller inherited a German baronetcy and became von Mueller) resolved to combine the Royal Botanic Gardens and the Zoological Gardens. He had “no objection to placing the animals in various exhibitable spots in the Botanic Gardens”, as he believed that the presence of animals and birds tended to enliven and beautify the Gardens (IRC, 1858). The Committee were convinced by von Mueller of the benefits to be obtained by the public from the union and in 1859 the Melbourne Botanic Gardens became the Botanical and Zoological Gardens.
CHAPTER 6: THE ROYAL BOTANIC GARDENS

SOURCE MATERIAL

The material examined of relevance to this chapter has been drawn from primary and secondary sources.

The primary sources examined were the following files held at the Public Record Office, Victoria:

* Inward Registered Correspondence 1851-1863 (Botanic and Science Series 1857) (VPRS 1189, unit 744);
* Inward Registered Correspondence 1851-1863 (Botanical and Scientific [Museums] Series 1858) (VPRS 1189, unit 745);
* Public Works Department (Summary of Contracts) (VPRS 972, volume 1).

The secondary sources were generally those concerned with the history of the Royal Botanic Gardens. These included two books by R T M Pescott, *W R Guilfoyle: The Master of Landscaping* (1974a), and *The Royal Botanic Gardens, Melbourne* (1982); and several journal articles by various authors (Gillbank, 1980; Jenkins, 1979; Le Souef, 1965).

THE ROYAL BOTANIC GARDENS

As early as 1841, seven years after the founding of Melbourne, the Government moved to establish a botanic garden close to the centre of the rapidly developing town. This was in response to the many requests from the public for the provision of such a garden (Pescott, 1982:3).

The 16 March 1846, the date of Governor Gipps' approval for the foundation of the Botanic Gardens in Melbourne, has been recognised as the commencement date of the Gardens (Pescott, 1982:16).
The presence of birdlife in the Royal Botanic Gardens (RBG) can be traced from 1850 when early sketches were made of waterfowl in the lagoon (Pescott, 1982:30). Other early reports that concerned birds were the celebrated arrival of four white swans from England in 1853 (Pescott, 1982:30) and the release of nightingales into the Gardens in 1857 (Pescott, 1982:43). Incidents such as these signified the growing interest in birds at the Gardens in the mid-nineteenth century.

The desire for the presence of exotic birds within the RBG was to culminate in the establishment of a number of aviaries between c.1857 and 1870 to provide added attractions for the Garden's visitors.

In a letter dated 30 September 1857 from D Macadam, Secretary of the Philosophical Institute of Victoria, a request was made to the Government to supply funds for the erection of an aviary within the Botanic Gardens. The Philosophical Institute considered that “the erection of an aviary in the Botanical Gardens would add greatly to their interest with those who resort to them” (IRC, 1857). The aviary was intended to house “Song Birds” which the Institute proposed should be introduced into the colony by experimental means for the purpose of acclimatisation (IRC, 1857).

Ferdinand Mueller, appointed Director of the Botanic Gardens on 13 August 1857, responded on 13 October 1857 with the encouraging news that:

a building constructed of close wire and of wood would be desirable for the reception of any foreign songbirds in the botanical gardens. With a size of 20 x 18 feet and a height of 10 feet it would be sufficiently large for the propagation of some of the introduced birds, whilst those that were set gradually at liberty would become probably domiciled in the shrubberies of these gardens. The price of a wire building of the above dimensions would approach to 195£ [sic] inclusive of lining and fitting” (IRC, 1857).
The site suggested for the aviary was a shady and sheltered position on the "south western bank of the lagoon" (IRC, 1857).

It would appear that this aviary was constructed in late 1857 or early 1858 as Mueller reported, in the "Annual Report" of February 1858, that the birds had been secured by the Philosophical Institute "for our aviary", and that "contractor Grimwood" had undertaken "some ornamental work [on the aviary] as well as [constructed] a strong central post for supporting the roof" (IRC, 1858).

Mueller's letter of response to the Philosophical Institute dated 13 October 1857 also recommended the extension of an existing wire enclosure located at the southern part of the lagoon. This extension was intended for the reception of "additional foreign waterbirds" and its "enlargement by 240 yards would cause an approximate expense of £4£ [sic]" (IRC, 1857). It would appear that the existing wire enclosure was the first recorded enclosure for birds in the RBG, although the exact date of construction of the enclosure referred to by Mueller has not been determined.

By June 1858 construction works were again proposed to be undertaken on the wire enclosure (at the southern part of the lagoon) and its surrounds. Mueller wrote that:

> a new walk is completed through the southern glade and another under progress from the aviary to the menagerie. Along the latter we desire to extend the enclosure for waterbirds. At the menagerie and aviary attention has been given to shelter the animals against the cold and wet (IRC, 1858).

By July 1858 this proposed walk from the menagerie to the aviary had been completed.

An aviary and menagerie were listed in the Return of Accounts, covering the period 1 November to 30 November 1858; a cost of £11 6s 101/2p was allocated to the aviary (IRC, 1858). The aviary referred to appears to have been that constructed in late
1857 or early 1858; the amount allocated was probably due to the
purchase cost of the additional birds which were mentioned in
Mueller's December 1858 report: "Skylarks and a few other singing
birds have been added to the Aviary" (IRC, 1858).

In January 1859 a plan "for the enlargement of the [late 1857 or
early 1858] aviary and forming a bower at it" was submitted and
approved by the Chief Commissioner of Public Works (IRC, 1859).

In March 1859 the new wing of the aviary had been completed and
partially filled with birds. Despite this extension, only four
months later Mueller reported that "the arrival of forty six
thrushes sent by Mr Ed Wilson rendered the removal of our eagles to
one of our stables necessary until there will be possible to arrange
for an other building for these animals" (IRC, 1859).

An aviary recorded by the Public Works Department (Summary of
Contracts) in 1859, was that built in the Gardens by the contractor
Mr Douglas for the considerable sum of £149. This was listed as a
"New Aviary" but it has not been determined whether this was the
new wing to the aviary built in late 1857 or early 1858 or a
separate structure.

October 1859 brought much excitement when a lyrebird was
"secured for our aviary by Hugh Frazer Esq of Welshpool"
(IRC, 1859). This was reported to be the first lyrebird to be
brought alive to Melbourne.

By the end of 1859 the menagerie was described as being in a
prosperous state, the various English singing birds had commenced
nesting, and the English pheasants were laying, but the lack of
accommodation within the aviaries was considered a significant
factor in hindering the birds multiplication (IRC, 1859).

In July 1860 alternative accommodation in the form of the heated
Palm House within the RBG became the temporary home of 150
skylarks. This consignment of birds had been shipped to Victoria for acclimatisation purposes (Jenkins, 1979:74).

In 1861 the cage bird population had reportedly increased to such an extent that birds were released from the aviaries in the hope that they would acclimatise within the Gardens (Pescott, 1982:66). This liberation of birds was the final stage of the experimental song bird project which had been initiated by the Philosophical Institute in 1857.

In 1862 the reserve in the Botanic Gardens set aside for the collection of animals and birds was deemed unsuitable and much of the zoological collection was moved to the new headquarters of the Acclimatisation Society at Royal Park (Gillbank, 1980:268; Jenkins, 1979:62).

Despite the proclamation of a permanent reserve for zoological purposes at Royal Park, aviaries were recorded in the Royal Botanic Gardens for a number of years after the official transfer of birds and animals to Royal Park. An undated plan c.1865 of the "Government House Reserve, Botanic Garden and its Domain", drawn by E B Heyne, the Assistant Curator, included a number of buildings for animals and a relatively large rectangular enclosure designated "Aviary" with a pathway passing through the centre. On the lagoon was a structure designated "Projected Floating Swan House".

The overcrowding of the aviaries was to be a continuing problem; in 1863 a Mr Michie offered to build a suitable aviary for the newly arrived Chinese sparrows as the existing one in the Botanic Gardens was reportedly overcrowded (Le Souef, J., 1965:12).

In spite of the cramped accommodation, Mueller reported in September 1863 that the English sparrows had nested in the aviaries in the Gardens (Le Souef, J., 1965:12).

A plan of the RBG, prepared by E B Heyne in 1872, detailed the layout of the Gardens upon the retirement of Baron von Mueller
(Mueller became von Mueller in 1869, following the inheritance of a German baronetcy) from the Directorship of the Botanic Gardens in 1873. The animal enclosures and the aviary noted in c.1865 remained features of the drawing.

Baron von Mueller was replaced by William Guilfoyle who considered “incongruous and dreary the cages of birds and said these would be removed, freeing more space for the formation of a fern gully” (Pescott, 1982:100). Pescott (1974a:82) reported that under the Curatorship of Guilfoyle the bird cages were dismantled and disposed of but a number of free emus were retained in the Gardens.

No further aviaries were constructed in the RBG, but Guilfoyle provided a small ornamental lake for waterbirds in 1909, based on the English tradition of providing sanctuary for birdlife (Pescott, 1982:140; Watts, 1983:65).

DISCUSSION

The historical material provides evidence for the existence of aviaries within the Royal Botanic Gardens from c.1857 until 1873. However, it was not possible to accurately determine the total number of aviaries constructed in the Gardens due to the paucity of information recording the existence and construction of these structures. Nevertheless, it seems that at least two structures were built; the first of these was the wire enclosure constructed before October 1857, and the second was the aviary constructed in late 1857 or early 1858.

Whilst it is possible that the earliest enclosure was built for the ornamental display of its inhabitants and possibly because of a desire for song birds, the latter was built for the purpose of the experimental introduction of song birds into the Gardens.
In 1860 the heated Palm House served the function of an aviary in the absence of a more suitable structure.

Under the Directorship of von Mueller additions of birds after 1861 would probably have been made to further the purposes of the Acclimatisation Society.

Under the Curatorship of William Guilfoyle in 1873, the aviaries were removed to allow for the development of the Fern Gully. The presence of waterbirds in the Gardens continued, but now the birds were allowed unrestricted movement on the ornamental lake and its surrounds. The design of this open habitat recognised the sanctuary concept of providing the birds with an adequate environmental setting.
Figure 1: Entrance to the aviary, Royal Botanic Gardens, 1867.
CHAPTER 7: THE ROYAL MELBOURNE ZOOLOGICAL GARDENS

SOURCE MATERIAL

The primary sources examined included the following files held at the Public Record Office, Victoria:

* Cash Book of the Zoological Board 1861-1944 (VPRS 3422);
* Zoological Board of Victoria (VPRS 132, VPRS 133).

The Annual Reports of the Royal Melbourne Zoological Gardens (RMZG) were examined, dating from 1885 to the present day.

A number of newspapers which contained information on the RMZG were examined, including the Australasian Sketcher and the Herald.

The secondary sources used were generally those concerned with the history of the Royal Melbourne Zoological Gardens. The material used included Charles Barrett’s Rambles Round the Zoo and Albert Le Soeuf’s Guide to the Zoological and Acclimatisation Society’s Gardens, Royal Park. A report by Jacobs, Lewis and Vines (1979), a research thesis by Powis (1968), and a journal article by J C Le Soeuf (1966) provided additional information.

ROYAL MELBOURNE ZOOLOGICAL GARDENS

Aviaries are known to have existed at the Royal Melbourne Zoological Gardens before the first building for animals was erected (Le Souef, J., 1966:228). The building of pheasant aviaries in c.1861 was one of the first tasks undertaken in the establishment of the RMZG (Le Souef, J., 1966:228).
Over the period 1860-1870, only a few references to aviaries could be located. On 24 July 1863 a payment of six shillings was made for a cage for the bronze-wing pigeon (ZB, 1863). The considerable sum of £67 10s for "Park Improvements Avaries [sic]" was recorded as having been spent on 30 September 1864 (ZB, 1864). Three years later, on 19 November 1867, the additions or improvements to aviaries, listed as "extra on pheasantry", cost £6 (ZB, 1867).

Over the next thirty years, from 1870 until the end of the century, there was to be a profusion of aviaries constructed at the RMZG. Some were little more than functional structures while others contained many highly ornamental features typical of the Victorian architectural style. In early 1876 a report in the Australasian Sketcher (1876:186) remarked that at the Zoological and Acclimatisation Society Gardens "canaries and other small song birds are increasing rapidly in the aviaries and also pigeons and doves of very rare and beautiful kinds".

An aviary that achieved special notoriety in 1875 was the structure from which £15 worth of finches were stolen. Bird thefts seem to have been a rare occurrence, although the official records of this period do mention problems with the plucking of the long white feathers from the ostriches (Le Souef, J., 1966:235).

In 1878 the theft of birds from the 'song bird aviary' was to have serious repercussions for the viability of the Zoological and Acclimatisation Society. "On the night of 1 November 1878 the song bird aviaries [sic] at Royal Park were broken into and the entire collection of birds stolen" (Powis, 1968:56). The Director, Albert Le Souef, reported that the aviaries would not be restocked unless the services of a nightwatchman could be obtained. A man was employed for a while then discharged, but the song birds were not replaced.
Powis (1968:55) claimed that this incident was one of the most critical of a series of events which eventually terminated many of the earlier endeavours of the Zoological and Acclimatisation Society, in particular, its involvement with the introduction of songbirds into the colony of Victoria.

In 1879 the Director, Mr Albert Le Souef, and his wife embarked on a tour abroad. They inspected overseas zoos motivated by their wish to have the Zoological and Acclimatisation Society Gardens looking their best for the International Exhibition held in Melbourne between 1880-1881.

Soon after the Le Souefs return to Australia, an aviary was constructed at the Gardens of which it was said: "there was nothing anywhere half as pretty" either in Australia or overseas (Le Souef, J., 1966:239). The frieze and cresting for this aviary was supplied by Cockrane and Scott for £10 15s and 3d but, despite its decorative appearance, the structure was not a great success as an aviary. The ornamental structure was retained and over the years it hosted a range of changing exhibitions which did not always contain avifaunal inhabitants. By 1966 this aviary had been moved to a position near the Australian section of the RMZG (Le Souef, J., 1966:239) but its current status and location are unknown.

Reports of two aviaries constructed c.1880, possibly for the 1880-1881 International Exhibition, appeared in the Australasian Sketcher of 22 October 1881.

One of the largest of the aviaries has a lofty curved roof. It is divided into four compartments, separated from one another by wire netting. This aviary contains specimens of the white pea fowl... In the parrot and cockatoo house are some birds of brilliant plumage. There are fifty or sixty specimens... (including parrots and macaws). Of songsters there is a considerable variety.
In 1885 a full account and description of the buildings in the Zoological and Acclimatisation Society Gardens was recorded by the Zoological and Acclimatisation Society (Le Souef, A., 1885). The buildings listed of relevance to this study are outlined below.

* The Eagles' Aviary: as well as eagles, the "sweet liquid note" of the piping crow-shrike and the white-backed crow-shrike could be distinguished.

* The Smaller Pheasantry which was a circular aviary containing pheasants for breeding purposes.

* The Owl House.

* The Gull Enclosure.

* The Large Aviary and Parrot House, which consisted of a Parrot House in the centre and an outer aviary containing a number of "handsome birds", was the largest aviary in the Gardens in 1885. This was possibly one of the aviaries mentioned in the Australasian Sketcher in 1881.

* The Song Bird Aviary, which was described as "one of the prettiest cages in the Garden", contained a large selection of foreign birds and some varieties of Australian finches.

* The Larger Pheasantry.

* The Satin Bower-Bird Aviary: these native birds were popular and their habits and appearance considered "very interesting and amusing" by the Zoological and Acclimatisation Society.

* The Cockatoo and Parrot House which appeared to be of a similar design to the Large Aviary and Parrot House listed above. It consisted of a central cage containing cockatoos, surrounded by a range of "beautifully plumaged" macaws in separate divisions of the outer cage. It is possible that this
was one of the c.1880 structures, discussed earlier, whose construction was noted by the *Australasian Sketcher* of 22 October 1881.

The 1865 description of the zoological buildings was the last record of aviaries that were constructed within the Victorian stylistic period under the 1860-1902 Directorship of Albert Le Souef.

The landscape style characteristic of the 1902-1923 Directorship of Dudley Le Souef emphasised a more natural environment for the zoo’s inhabitants.

An old picnic ground of 3.5 acres (1.4 hectares) near the giraffe house was devoted to cages and aviaries c.1902. These aviaries, which housed scrub turkeys and other birds, were known as "Johnson’s aviaries" in memory of David Johnson one of the zookeepers of the mid-1870s, (Le Souef, J., 1966:244). Apparently, despite only limited funds being available, this section quickly became a centre of attraction (Le Souef, J., 1966:239), and many aviaries remain in this area today.

In 1908 an aviary called the Fern Aviary was built. The "45th Annual Report of the Zoological and Acclimatisation Society of Victoria" (Z & AS of V, 1908:6) contained a brief description: "the beautiful Fern Aviary has now been completed, and will be tenanted by small native birds, such as Warblers and Wrens".

The Octagonal Galah House, constructed in 1928, was considered a unique addition to the RMZG’s collection of aviaries. This aviary, designed by the architect and civil engineer H J Wagstaff, was originally intended for cockatoos and parrots (Herald, 1928:13). The *Herald* of 26 September 1928 featured an article titled "Unique Aviary Planned for Melbourne Zoological Gardens" which included an architectural plan and elevation; an examination of the plan indicated that only the central core of the structure was ever constructed. The *Parkville Historic Area Study* (Jacobs, Lewis and
Vines, 1979:213-216) included a description of the extant structure: "red brick piers with rendered capitals and beams support a vaulted corrugated iron roof with a finial". The authors considered the building in its landscape setting compared with bandstands common in municipal gardens of the same era. The aviary remains a popular feature and contains a colourful and noisy display of cockatoos, parrots and macaws. Between 1979 and 1985 the roof of the structure was altered.

The impressive cathedral-like structure now known as the Great Flight Aviary or the Giant Aviary originated in the early 1900s. The Royal Zoological and Acclimatisation Society of Victoria has been credited with the construction of the Great Flight Aviary in 1934, but it seems more likely that this structure originated from an aviary constructed in 1908 called the Flight Aviary.

In February 1909, at the Annual Meeting of the Zoological and Acclimatisation Society of Victoria (Z & AS of V, 1909:9), a Mr Godfrey stated that "the new Flight Aviary recently erected was one of the best of its kind he had seen, which opinion was endorsed by Col Ryan, Mr Grimwade and Col Horne".

In 1923 Barrett (1923:122) referred to a structure called the Flight Cage and described this as a "big flight cage" home to small native birds displayed in a simulated natural landscape setting where its inhabitants "hardly know they are captives".

In the early 1920s a row of flight cages was constructed that probably originated from the large flight cage. For many years these flight cages housed a successful exhibition of wedge-tailed eagles and a limited collection of other species (B of RMZG, 1960:29).

The Pictorial Souvenir of the Melbourne Zoo (n.d.) contained a photograph taken c.1940 of a structure that was certainly the antecedent of the present Great Flight Aviary. The caption stated
that the series of "six large flight aviaries in the Australian Section... were completed in 1939 and house a variety of birds".

The Aviary was officially opened and renamed the Great Flight Aviary in 1960 following major modifications which commenced in 1978. The elliptical arched section which terminates in a magnificent dome when approached from the main avenue has been retained, but the internal segments have been removed to link the six interior cages into one large aviary.

Within the Aviary naturalistic planting has been established to create three naturalistic ecosystems characteristic of the south-eastern Australian landscape: rainforest, wetland, and scrubland. An internal elevated walkway allows the public to move through the habitats and have close contact with the birds which move freely throughout the structure.

From the mid-1930s until the 1960s the general construction program at the RMZG underwent a period of consolidation. No new aviaries were reported to have been constructed until the display aviaries for parrots were built early in 1967. This was to be the first of several new display aviaries (ZB of V, 1966:4).

The Bird Department submitted a report to the 1973-1974 "Annual Report" of the Zoo (MZG, 1974:14-15) in which it stated that one of the main improvements of the year had been the "decoration of several old cages" to transform them into "multi-species bird enclosures". The breeding of birds in 1973-1974 was considered difficult due to the fact that "forty percent of all old bird cages have been demolished to make way for new developments". Therefore, it seems probable that 1973-1974 was the period in which many of the earlier aviaries at the RMZG were finally removed.

In the early 1970s, a 52-square metre off-limit bird isolation and acclimatisation building to service the Great Flight Aviary was constructed, and in 1974 several bird enclosures on the eastern
approach to the Great Flight Aviary were renovated (RMZG, WZP & SCMFP, 1979:10).

**DISCUSSION**

With the enthusiastic programme of acclimatisation that occurred in Victoria in the latter half of the nineteenth century it seems that from its inception there has always been a large and varied display of birds at the Royal Melbourne Zoological Gardens.

The first aviaries at the Royal Melbourne Zoological Gardens, constructed c.1861, were essentially facilities for the acclimatisation movement's liberation of exotic birds into the Victorian countryside.

The aviaries erected between 1870 and 1900 were often little more than functional structures established for breeding purposes. However, some aviaries, in particular, the Song Bird Aviary, the Large Aviary and the Parrot House, featured the highly ornamental details typical of the architectural style of the Victorian era.

From the turn of the twentieth century the design of many of the aviaries at the RMZG displayed the influence of developments in German zoos. No longer purely ornamental structures, they contained a simulated landscape setting within the enclosure; their design also allowed the inhabitants a greater degree of freedom of movement. This change in the design of aviaries was also due in part to the increasing awareness of the general public for the welfare of birds and animals in captivity. A notable exception was the 1928 Octagonal Galah House which housed a colourful collection of ornamental birds and other species that could 'talk'. Its function was primarily for display and entertainment purposes.

The reconstruction and modification of the Great Flight Aviary, a product of a series of developments between 1908 and 1980, is indicative of the change in the philosophy of the RMZG towards the
display of birds and animals. Its contemporary landscape setting aims to replicate the habitat of the various birds, and an elevated walkway enables the visitor to experience the birds in a naturalistic environment at close range.
Figure 2: Song Bird Aviary, Royal Melbourne Zoological Gardens, c.1908.
Figure 3: Flight Aviary, Royal Melbourne Zoological Gardens, c. 1908.
Figure 4: Flight Aviaries, Royal Melbourne Zoological Gardens, c.1939.
Figure 5: Great Flight Aviary, exterior, Royal Melbourne Zoological Gardens, 1985.

Figure 6: Great Flight Aviary, walkway, Royal Melbourne Zoological Gardens, 1985.
Figure 7: Great Flight Aviary, interior, Royal Melbourne Zoological Gardens, 1985.
Figure 8: Octagonal Galah House, Royal Melbourne Zoological Gardens, 1928.
Figure 9: Octagonal Galah House, Royal Melbourne Zoological Gardens, c.1979.

Figure 10: Octagonal Galah House, Royal Melbourne Zoological Gardens, 1985.
CHAPTER 8: REGIONAL BOTANIC GARDENS

INTRODUCTION

The development of Victoria’s regional botanic gardens, which occurred in nearly every country town and city of any consequence, was a remarkable phenomenon. These botanic gardens were usually established following local public pressure rather than representing official policy determined by government (Watts, 1983:57).

By the 1860s botanic gardens had been established in Castlemaine, Colac, Portland, Warrnambool, Ballarat, Daylesford, Williamstown, Kyneton, Malmsbury, Ararat, Koroit, Geelong, Bairnsdale, Alberton and Port Fairy (Watts, 1983:57). By the end of the 1860s gardens had also been recorded in Hamilton, Camperdown, Maryborough, Buninyong and Beechworth (Watts, 1983:54).

Within the regional botanic gardens items of garden architecture were common in the nineteenth and early twentieth century. Structures such as aviaries, summerhouses, ferneries and bandstands were both ornamental and functional features offering places of rest and entertainment for the crowds who visited the botanic gardens.

The Ballarat Botanical Gardens contained a comprehensive range of garden architecture in the 1880s, including an enormous and elaborate lattice fernery, a glasshouse and conservatory, and a maze with a lookout tower (Watts, 1983:70). Another fine example of a garden building was the large timber fernery constructed in 1885 at the Geelong Botanic Gardens. It was one of the acknowledged attractions of Geelong, and an illustration of the fernery appeared in the Illustrated London News on 4 May 1889 (Aitken, 1980:93).
Another feature common to many of these gardens in the late nineteenth century were collections of native and exotic birds and animals. The ornamental and singing birds were usually housed in an aviary or some other form of enclosure.

This chapter contains information on those regional botanic gardens either known, or thought to have, included an aviary or enclosure for birds.

The terms 'botanic' or 'botanical', where used in the title of these gardens, have been used in accordance with the terms used in *Historic Gardens of Victoria* (Watts, 1983). Though the majority of botanic gardens today use the shorter form, several Victorian country gardens still call themselves botanical gardens.

**SOURCE MATERIAL**

As the history of these regional gardens is poorly documented, it was only possible to speculate on the occurrence and design of a number of these aviaries. The information in this chapter is heavily reliant on the work of Hattam (1976) and Watts (1983).

**BALLARAT BOTANICAL GARDENS**

The Ballarat Botanical Gardens were gazetted in 1858, and planting began later that year, but the origin and date of their design are not known (Watts, 1983:70).

George Longley was the curator of the Gardens from 1858 until his retirement in the 1890s. During this time the Gardens were renowned as the most splendid in Victoria (Watts, 1983:70).

In the mid-1870s, Longley was forced to establish a rudimentary zoo, known as the Ballarat Zoological Gardens, when a pair of deer and several native birds and animals were donated to the City
(Jacobs, Lewis, Vines and Aitken, 1981:75). The zoo was situated within the north-west corner of the Ballarat Botanical Gardens.

The Ballarat Branch of the Acclimatisation Society, established in 1863, is known to have released sparrows, blackbirds and thrushes into the Gardens from its inception until the 1870s (Jacobs et al., 1981:75). Therefore, it seems likely that the first aviary was constructed in the Gardens between 1863 and 1870.

In 1888 Sutherland, in his book *Victoria and its Metropolis*, mentioned that the Gardens possessed an aviary, but the details of the design and the date of construction of the aviary were not given.

In 1900, the "Mayor's Report" stated that a new path had been formed from the bird cages to the fernery (Jacobs et al., 1981:75). However, it is not known to which cages the Report referred, or whether these were cages which had been constructed for acclimatisation purposes.

A parrot cage was constructed in 1908 (Jacobs et al., 1981:76).

A second period of construction of animal and bird enclosures occurred after 1914. This followed the advice of Mr Dudley Le Souef, then Director of the Melbourne Zoological Gardens, that Ballarat should house a fauna collection specializing in Australian examples (Jacobs et al., 1981:76). The Australian Natives Association took a keen interest in the progress of the Ballarat Zoological Gardens, and applauded the decision to include as many native animals and plants as possible (Jacobs et al., 1981:76).

It is probable that the demise of much of the Zoological Gardens and its structures occurred in the 1950s.

In 1981, the 1908 parrot cage and an aviary remained extant, and were considered to be "an important reminder of the early style of local zoos" (Jacobs et al., 1981:76). The parrot cage is known to
have collapsed after a tree fell on it c.1982 (Aitken, pers. comm., 1985). The aviary is not extant (Wendy Love, pers. comm., 1986).

**CAMPERDOWN BOTANICAL GARDENS**

The area for the Camperdown Botanical Gardens was set aside and gazetted for that purpose in 1869 (Hattam, 1978:192). Little else is documented of the history of these Gardens, but an original landscape plan, prepared by William Guilfoyle, is held by the Camperdown Council. According to Watts (1983:137), Guilfoyle laid out the Gardens c.1868.

The existence of an “emu run” and a zoo of unknown date has been established (John Hawker, pers. comm., 1985).

An aviary, designed by Knight, was constructed in 1928 (Janet Hodgson, pers. comm., 1985) and is reported to have survived until the 1950s.

Another report (Dowdy, n.d.) noted the existence of an aviary which was built, along with glasshouses and plant houses, to complement the duck ponds.

**GEELONG BOTANIC GARDENS**

Daniel Bunce became the first Curator of the Geelong Botanic Gardens in 1857 when he assumed control from the committee of management who had guided its affairs since 1850. In 1859 Bunce occupied a cottage in the Gardens, and the planning and planting of the park began (Watts, 1983:65).

The first aviary was built in 1864, within the Garden’s nursery, as an attraction to promote the rearing of song birds. This followed the many requests and promises of donations of birds, chiefly
canaries, from local acclimatisers. Erected at a cost of £113 11s 7d (Brownhill, W., 1955:25) the aviary was sponsored and constructed by the Geelong Branch of the Acclimatisation Society, formed in 1863. The aviary was considered an elegant and commodious structure. On 1 February 1865 the Geelong Advertiser noted its approval.

A very interesting feature in the Nursery is a large and handsome aviary, well stocked with canaries, and in which we saw already a bird sitting on what was, we were informed, five eggs. In another department of the aviary are two turtle doves and a landrail, or corncrake. It is, however, intended for blackbirds and thrushes, as soon as they can be obtained.

The relatively lightweight structure required propping on one side according to early photographs, and in 1873 a grant of £50 was sought for its repair (George Jones, pers. comm., 1985).

It is possible that the aviary was demolished some time after 1888 as Sutherland (1888:150) recorded that the Gardens contained “a well-stocked aviary, and ponds and apparatus for the hatching of acclimatised fish”.

In 1890 a new aviary was built in the south-eastern corner of the Botanic Gardens with a crescent-shaped frontage of 60 feet (18 metres). It was constructed of wood and ornamental ironwork, was divided into five compartments, and rested on a stone foundation (Brownhill, W., 1955:217). It was demolished at an unknown date.

HAMILTON BOTANICAL GARDENS

The Hamilton Botanical Gardens were gazetted in 1870 and in the same year a design was prepared by William Ferguson, who was in charge of landscape and practical work at the Melbourne Botanical Gardens (Watts, 1983:79).
An extant zoo is located in a corner of the Gardens, but the date of its commencement is unknown.

Aviaries were mentioned in a report of 1910 where gas rings, presumably to supply heat, were requested and placed in “a trellised building behind the bird cages” (Huf, 1961).

Huf (1961) also reported that originally the aviaries were situated near the ornamental lake, “but were moved to their present position near Skene Street when the area for the emus and kangaroos etc. was extended” at an unknown date.

The *Souvenir Booklet and Programme* (1954) of the Hamilton Botanical Gardens referred to “a special enclosure covering quite a large area along the eastern side of the gardens [which] houses a number of peacocks, their hens and their families”; kangaroos shared this enclosure with their avifaunal associates.

As well as this enclosure, the *Souvenir Booklet and Programme* (1954) indicated that aviaries existed within the Gardens when it stated that “overlooking the beautiful expanse of smooth sloping lawns, there are cages containing ... native cockatoos, and various other birds and animals”.

The Hamilton Botanical Gardens contain an extant aviary and a cage containing small birds displayed within a flat-roofed shed divided into separate compartments. The aviary, constructed in 1981 with the assistance of the Australian Natives Association, is designed on the ‘walk-through’ principle popular in many contemporary aviaries. Parrots, pheasants, cockatoos, galahs and pigeons are able to move freely within this netting and pole enclosure.
HORSHAM BOTANICAL GARDENS

William Guilfoyle was associated with the landscaping of the Horsham Botanical Gardens which were designed c.1880 (Watts, 1983:58).

Thomas Brown, the Curator from 1892 to 1935, introduced an enclosure of kangaroos and emus at some time prior to 1900. A variety of birds were recorded as having been caged in the Gardens in the 1880s (Brooke & Finch, 1982:157).

The caretaker of the animals c.1900 was renowned for his tame brolga or native companion. Unfortunately, the bird suffered a sudden death when it reached into the eagle and hawk's cage to take some meat; a hawk pounced and severed the brolga's head (Brooke & Finch, 1982:157).

The aviary was demolished at an unknown date.

PORT FAIRY (BELFAST) BOTANICAL GARDENS

In 1858 the site for the Port Fairy Botanical Gardens was secured and Henry Hedges was appointed the Superintendent. He submitted a plan for laying out the Gardens which are now only identifiable by a large cypress tree but at one time contained "tree-shaped serpentine walks, paved with sea shells" (Hattam, 1978:203).

An aviary containing peacocks was located near the East Gates (Hattam, 1978:203), but the dates of construction and demolition are unknown.
WARRNAMBOOL BOTANICAL GARDENS

A botanic garden was established in Warrnambool in the 1850s, but it was soon abandoned as the locality chosen was unsuitable (Watts, 1983:77). The site of the present Warrnambool Botanical Gardens was fenced in 1866 (Watts, 1983:77).

It is generally understood that William Guilfoyle, then Curator of the Botanical Gardens, Melbourne, prepared the landscape plans for the Warrnambool Botanical Gardens which were adopted in 1877 (Hattam, 1978:199).

It is known that a collection of native and exotic birds and animals attracted visitors to the Gardens between 1870 and 1900 (Janet Hodgson, pers. comm., 1985), and that there were "decorative water birds" on the lake (Hattam, 1978:199).

The Weekly Times (1896) in a feature on the Gardens commented on the plantings at Warrnambool and mentioned the existence of a fernery, rockeries and the aviary: the "aviaries of birds are exceedingly interesting".

A letter dated 25 April 1897, written by the Warrnambool Town Clerk, informed the Victorian Secretary for Lands of recent improvements to the Warrnambool Botanical Gardens. These included the erection of a large fernery, summerhouses, an artificial lake, and an aviary (Watts, 1983:57).

Early in the twentieth century William Donald, who was appointed Curator in 1906, gradually dispensed with the menageries and replaced them with floral displays (Watts, 1983:73).
WILLIAMSTOWN BOTANIC GARDENS

First gazetted in 1856, the Williamstown Botanic Gardens were fenced and opened to the public by January 1860 (Watts, 1983:71). The designer of the Gardens was William Bull (Aitken, 1986).

Aitken (1986) has established that a triangular aviary was located in the path system on the eastern side of the Gardens c.1894.

According to Mr Barry Heath, Superintendent of Parks and Gardens at Williamstown, a number of simple timber structures containing birds existed in the 1960s (Barry Heath, pers. comm., 1985).

DISCUSSION

A number of the regional botanic gardens in Victoria in the nineteenth and twentieth centuries showed evidence of having contained aviaries or some form of enclosure for the display of ornamental and song birds.

Collections of native and exotic birds and animals, in the form of a small zoo or menagerie, were relatively common features of many of the regional botanic gardens in Victoria. This was often the result of pressure from the local branches of the Acclimatisation Society.

Two examples verifying the close involvement of the Acclimatisation Society with the establishment of aviaries within regional botanic gardens occurred in the cities of Ballarat and Geelong. At Ballarat the Society is known to have released birds into the Ballarat Botanical Gardens in the 1860s, and one or more aviaries were constructed there between 1863 and 1870. The Geelong Branch of the Acclimatisation Society was responsible for the funding and the construction of the first aviary in the Geelong Botanic Gardens in 1864.
The earliest aviary recorded within a regional botanic garden was the ornamental structure built in 1864 at the Geelong Botanic Gardens. A number of aviaries were constructed in the Ballarat Botanical Gardens between 1863 and 1870, but the other aviaries and enclosures that were recorded or thought to have been constructed within regional botanic gardens were all constructed somewhat later, principally between 1880 and 1900.

A comparison between the recorded date of commencement of each of the regional botanic gardens and the first recorded date for the existence of an aviary or enclosure within these gardens indicated a significant time delay.

Looking at the Geelong Botanic Gardens, it can be seen that the delay between the commencement of the Gardens and the existence of an aviary was five years. In the case of the Ballarat Botanical Gardens, the delay between the establishment of the Gardens and the date of construction of the aviary was also five years. In these examples evidence exists for the date of establishment of both the Gardens and the aviaries.

A similar comparison for the other regional botanic gardens which contained an aviary indicated delays of between two and fifty nine years, although it has generally been difficult to establish the precise date of construction of the aviaries.

These delays indicate that the presence of aviaries in regional botanic gardens was not a phenomenon that can be linked to a distinct historical period. The number of aviaries constructed in the twentieth century would indicate that the desire for aviaries was not purely a nineteenth century peculiarity.

Historical material concerning the aviaries constructed within the regional botanic gardens was scarce, however some comments regarding the transition in styles is appropriate.
The earliest aviaries, those at the Geelong Botanic Gardens in 1864 and 1890 and the Ballarat Botanical Gardens between 1863 and 1870, were all ornamental structures, as concerned with the aesthetic appeal of the aviary itself as with their ornamental inhabitants. The design of the structures indicated little understanding, awareness or concern for the needs of the birds. While this lack of concern for the habitat of the birds is also evident in the structures constructed at a later date, the aviaries themselves were considerably less ornate in appearance than the examples constructed in the Victorian era.

Of the eight regional botanic gardens which contained an aviary at some stage, only one, Hamilton Botanical Gardens, has an extant aviary. One possible reason for the decline in the occurrence of aviaries was the decline in the presence of collections of birds and animals within regional botanic gardens.
Figure 11: Aviary, Ballarat Botanical Gardens, c. 1861.
Figure 12: Aviary, Ballarat Botanical Gardens, c.1920.
Figure 13: Parrot Cage, Ballarat Botanical Gardens, c. 1981.
Figure 14: Aviary, Geelong Botanic Gardens, c.1868.
Figure 15: Aviary, Geelong Botanic Gardens, 1870.
Figure 16: Aviary and glasshouse, Geelong Botanic Gardens, c.1880.
Figure 17: Netting and pole enclosure, Hamilton Botanical Gardens, 1985.
Figure 18: Plan of Gardens including triangular aviary, Williamstown Botanic Gardens, c. 1894.
CHAPTER 9: AMUSEMENT AND PUBLIC PLEASURE GARDENS

INTRODUCTION

One of the major contributions to urban life made during the Victorian era was that of the public park. Parks and open spaces had, of course, existed for many centuries and even in Roman times gardens were laid out for public use.

Chadwick (1966:19) believed that the creation of useful landscapes within the town, for the use and enjoyment of the public, was essentially an idea which occurred in the Victorian era that resulted from two important social factors. The first of these was the phenomenal growth of industrial towns which created the need for open space and caused concern over air pollution. The second factor was the later Victorian zeal for reform.

In the Australian context, Powell (1980:26-37) examined some of the formative notions of leisure in Australia prior to 1945. He discussed how the rapidity of urbanisation made urban dwellers seek out the benefits of city life, while minimising what they disliked about it, by vastly extending their range of social and cultural pursuits. Powell (1980:26) commented that:

the major function of leisure was not simply to provide regular relief to ensure the stability and productivity of the workforce, but . . . attempts were made to create enriching leisure experiences as part of the civilising process itself.

In his study of leisure and pleasure buildings in Geelong, Aitken (1980) discussed the notion of leisure in Australia, and believed that this was central to an appreciation of the reasons parks and gardens were designed and used in the Victorian era.
The civic leaders of many towns and cities throughout Victoria made provision for botanic gardens within their growing urban areas; they also made provision for public parks. These reserves were devoted primarily to beauty and recreation, in contrast to the more scientific role of the botanic gardens.

As well as the botanic gardens and public parks, the other landscape setting important for recreation and leisure activities in the nineteenth century was the pleasure garden.

There were several distinct types of pleasure gardens, which were distinguished by their activities as outlined below:

* the amusement and pleasure parks or resorts - e.g. Coney Island, U.S.A.; Vauxhall and Ranelagh, U.K.; Luna Park, Victoria;

* the health gardens connected with mineral springs - e.g. Sadler’s Wells, U.K.; Hepburn Springs and the springs at Daylesford, Victoria;

* the leisure gardens serving tea - e.g. Bagnolet Wells and White Conduit House, U.K.; Point Henry, Geelong; and Burnley, Victoria;

* the zoological gardens and menageries - e.g. Wombell and Bostock’s Wild Animal Show 1805, U.K.; Stellington (Hagenbeck’s) Zoo, Germany.

Zoological gardens and menageries were popular pleasure gardens in the seventeenth, eighteenth and nineteenth centuries, and their worldwide popularity increased markedly from the nineteenth century. The role and functioning of these gardens has so radically altered that today they are considered to be predominantly scientific and educational institutions, rather than places for the exhibition of animals for the pleasure of visitors.
Although little research has been undertaken in Australia documenting the history of pleasure gardens, the Australian pleasure gardens can be seen to have developed from their English antecedents.

However, in Australia the development of amusement and pleasure gardens occurred in parallel with that of public parks, botanic gardens and zoological gardens. Unfortunately, because most of the historic studies of gardens in Australia have been undertaken from a horticultural or landscape design bias, the significance of amusement and pleasure gardens, and their social role, has not been properly acknowledged or understood.

SOURCE MATERIAL

Material held at the State Library of Victoria and the La Trobe Library, which was concerned with entertainment and leisure, was researched for references to zoos, menageries, and displays of birds and animals within amusement and pleasure gardens.

As a consequence of the very limited research undertaken on these more social, and often commercial, garden settings, only two examples were located which included an aviary for pleasure and amusement.

CREMORNE GARDENS, RICHMOND

In 1852 James Ellis, the former proprietor of the Cremorne Gardens in London, came to Melbourne. His intention was to create a pleasure garden in Melbourne, modelled on his successful Cremorne Gardens in London.

The amusement park, which opened in 1853, was located in Richmond and was serviced by a ferry along the Yarra River.
A brief history of the Cremorne Gardens was covered by Savill (1980:25), who commented that "for the next ten years Cremorne Gardens was to be associated with many of the organisations and events which have been social or cultural influences in the development of our way of life".

The *Argus* of 12 December 1853 indicated the popularity of the Cremorne Gardens when it remarked that "we need not describe the 'Ellisian Retreat', as the spot is already familiar to everyone".

The Cremorne Gardens were laid out as a botanic garden. Part of the Gardens were devoted to a collection of Australian birds and animals, which, according to Jenkins (1979:60) and Powis (1968:26), was the first public display of fauna in Victoria. The attractions included an equestrian troupe, balloon ascents, nightly firework displays, a maze, monkeys and tigers (Powis, 1968:27). The Gardens also possessed an acclimatisation section containing English thrushes and other song birds, white swans, and goldfish (Powis, 1968:26).

In 1856 Ellis sold Cremorne Gardens to George Coppin and G V Brooke, who then acquired a number of foreign animals for the Gardens (Jenkins, 1979:60). In the same year the *Argus* described the improved delights of the Gardens, including the menagerie, stating that "an interesting collection of animals, mostly rare Australian specimens, as well as peacocks, monkeys and Australian birds may be seen" (Savill, 1980:32).

The enterprise closed in 1863 due to financial problems. The animals from Cremorne Gardens are thought to have been the "bankrupt circus" which was added to the early collection of the Acclimatisation and Zoological Gardens at Royal Park (Jenkins, 1979:60).
It seems likely that a venue of this size, which provided displays and exhibits of birds and animals for public entertainment, would have contained a range of ornate aviaries. However, no photographs or illustrations of aviaries have been found.

**KARDINIA PARK, SOUTH GEELONG**

The Kardinia Park reserve was established in 1865-1867. Originally known as Chilwell Flat, the grounds were levelled and tidied under the direction of Mayor R de B Johnstone. In 1872 the area was gazetted as Kardinia Park (Aitken, 1980).

A zoo was established in the Park by 1903, and a description of 1908 attested to its attractiveness (Brownhill, G., 1908).

Artificial ponds have been constructed where rare and beautiful waterfowl and other members of the feathered tribe disport themselves; numerous animals from various parts wander in the capacious enclosures; whilst in an aviary of attractive design, birds of gay plumage and sweet note charm the eye and enchant the ear.

The "very neatly designed and commodious" Edwardian aviary, mentioned above, was built late in 1903, as part of the Kardinia Park Zoo (Federal Record, 1904:23). It was erected to house canaries, goldfinches and other song birds, primarily for their ornamental value. Its construction reportedly entailed considerable expense.

Aitken (1980:102) described the aviary as having "a delicate feeling, largely due to the contrast between materials . . . and the diminuitive scale of the building".

Various illustrations of the aviary appeared in the *News of the Week* on 26 December 1907 and 4 November 1909, the latter date being the inaugural 'Bird Day' established by the Victorian
Education Department to promote interest in the economic value of birds (Education Department, 1910:21).

It is not known at what date the aviary was demolished.

DISCUSSION

The creation of public parks and pleasure gardens was a feature of the Victorian era. While public parks were created for their inherent beauty and for the provision of recreation, pleasure gardens were developed primarily for the purpose of amusement and entertainment.

In Victoria, a public garden at South Geelong and a pleasure garden in the Melbourne suburb of Richmond contained displays of birds for exhibition purposes.

The Cremorne Gardens in Richmond, which opened in 1853 and closed ten years later, were a classic form of pleasure garden. They were created as an amusement and pleasure park along the lines of their London antecedent. The presence of birds and animals in the form of a menagerie, which included native and exotic species, was one of the significant attractions of the venue, as was the acclimatisation section containing song birds.

By contrast, Kardinia Park in South Geelong was established as a public park. It is possible that the desire for a new source of entertainment or attraction within the gardens led to the later addition of the zoo and the Edwardian-style aviary housing ornamental and song birds.
Figure 19: Aviary, Kardinia Park, South Geelong, c.1907.
CHAPTER 10: SANCTUARIES

INTRODUCTION

The history of the development of sanctuaries and reserves for wildlife in Victoria and the associated transition in people's attitudes towards nature has been traced by Norman (1981) in his article "Sanctuaries for Wildlife in Victoria 1896-1976".

Norman (1981) highlighted the confusion in nomenclature which has been used to describe such areas as national parks, reserves or refuges, and sanctuaries, despite the existence of a legally defined terminology. The author of this research report has adopted Norman's practice, and used the term 'sanctuaries' to refer to those "areas specifically identified in gazettes as localities for the protection of game, native game or both" (Norman, 1981:85).

The reservation of land for birds and animals in the latter half of the nineteenth century was primarily a consequence of the acclimatisation movement. These reserves were established to further the objectives of the acclimatisation movement and served as game breeding areas. Reserves were located at Ballarat, Beechworth, Creswick, Kerang, Portland, Tower Hill, Quail Island, Wilson's Promontory, Phillip Island and Cape Liptrap.

Land within many of the regional botanic gardens was also used for the maintenance and liberation of foreign species.

Land had also been set aside for urban and regional parks and gardens, but the reservation of land purely for the protection of native fauna only became an issue towards the close of the nineteenth century as a consequence of a shift in community attitudes (Norman, 1981:84).

The burgeoning humanitarian movement of the late nineteenth century was one of the major forces which helped to change
community attitudes towards birds and animals. At this time many societies were formed internationally to reduce cruelty to animals and birds, and to extend humanity towards wildlife (Norman, 1981:97).

Some insight into the intellectual precursors of this new movement and the change in attitudes to the natural world which developed in England before the nineteenth century has been examined by Thomas (1983).

Humanitarian attitudes towards animals and birds remained latent until the mid-nineteenth century when the emergence of external social changes in Britain, resulting from industrialisation and urbanisation, triggered the concern for animal rights, and, consequently, the onset of the humanitarian movement.

Bolton (1981:23) examined the inheritance of British attitudes by Australians towards the natural world. He considered that the response of nineteenth century white Australians to their environment can be seen to be largely the result of "imported attitudes of mind".

In Australia the attitude to wildlife had been one of exploitation for food, apparel, sport, and, particularly in the case of the acclimatisers, as a result of misguided scientific interest. Towards the turn of the century increasing numbers within the community voiced humanitarian and even sentimental arguments in support of animals, especially the endemic species (Norman, 1981:83).

The evolution of the broad ecological movement in the latter half of the nineteenth century, also helped to change the attitudes of the community towards animals. This movement was not restricted to Victoria; a more general concern towards wildlife was becoming as prevalent in other states as it was internationally (Norman, 1981:84).
In particular, two new common attitudes emerged from the humanitarian and the ecological movements: these were the gradual realisation that many habitats had been, or were being, destroyed to the detriment of the species; and, secondly, that much exploitation had occurred in respect of the trade in local fauna (Bolton, 1981).

These attitudes were also expressed by contemporary scientists in the journals of the natural history societies and in newspapers by the end of the nineteenth and early twentieth century.

It was a combination of these intumescent forces, the world-wide humanitarian movement and the ecological movement, which helped to bring about the establishment of sanctuaries and reserves in Victoria.

In 1896 amendments to the *Game Act* 1890 in Victoria reflected the resultant shift in community attitudes towards wildlife, and indicated an acceptance by the Government that the community wanted to create some areas for the protection of wildlife (Norman, 1981:96). The amendments established that in the defined areas it was unlawful for any person to kill any native game mentioned in the proclamation.

In 1887 the Government of Victoria set aside land at Fern Tree Gully which became a notable sanctuary for lyrebirds and other birdlife (Bolton, 1981:107). Shortly after Wilson's Promontory was reserved as a national park in 1905, it became the first locality proclaimed under the *Game Act* which protected all native game for the whole year (Norman, 1981:86).

The location of subsequent sanctuaries was not restricted to national parks or country locations; there was also a strong desire for reserves in inner urban areas, as residents envisaged entire "cities of refuge" for fauna, and saw the preservation of wildlife as a "duty to the country and to posterity" (Norman, 1981:89). This desire had become so strong by the 1880s that suburban residents
were often the most insistent in calling for the conservation of those distinctive features of the Australian environment which could no longer be found in the suburbs (Bolton, 1981:99).

By mid-1927 some 160 sanctuaries existed in Victoria. Between 1898 and 1976 some 357 sanctuaries, constituting 2.9% of Victoria's land area, were or had been part of the public system of sanctuaries and reserves (Norman, 1981:90).

By the 1950s the government designation of public and private lands reserved under the sanctuary system, initially established with such public acclaim and support, had significantly declined.

Norman (1981:94) outlined some of the possible reasons for the decline; he acknowledged that while many of these reasons were not readily identifiable, the gradual realisation of the importance to fauna of their habitat, a previously neglected component, made a review of the sanctuary system inevitable.

By the mid-1950s, the Fisheries and Game Department appreciated that the greatest fallacy in the establishment of the sanctuary system was that, although the fauna was nominally controlled by the Fisheries and Game Department, the Department had absolutely no control over land-use, and thus habitat preservation, whether on crown or private land (Norman, 1981:94).

At the same time, the Fisheries and Game Department officially recognised that the intended conservation purposes of the sanctuary system had not been adequately realised, and that some sanctuaries which were "created in the past contribute nothing to the awakening of public opinion nor do they make any appreciable contribution to the conservation of fauna" (Norman, 1981:94).

Consequently, the Fisheries and Game Department began to establish policies to redress the earlier deficiencies.
The revised proposals of the Fisheries and Game Department emphasised a restructured sanctuary system which designated sanctuaries for educational and scientific purposes; sanctuaries to prevent the excessive shooting of waterfowl or to provide special protection for certain birds; and refuges for waterfowl (Norman, 1981:95). Since the 1950s the restructured proposals have been introduced.

The Royal Australian Ornithologists Union, formed in 1901, acknowledged the new direction in 1953, when it noted that the "emphasis of the conservation movement had shifted from restrictions imposed on shooting to the maintenance of habitat" (Norman, 1981:97).

By 1964 the conservation concept had developed to the point where a three-tiered system was implemented to include sanctuaries or wildlife reserves under Departmental control, other 'ordinary' sanctuaries which were no-shooting areas, and educational and scientific sanctuaries.

In the 1970s only two forms of sanctuaries, game sanctuaries and educational sanctuaries, were recognised. By this time a separate system of wildlife reserves had been established (Norman, 1981:96).

SOURCE MATERIAL

The material for this chapter was obtained from records held in the Library of the Royal Melbourne Zoological Gardens, and photographs and publications held by the State Library of Victoria.

Details regarding the inauguration of most of the early sanctuaries and reserves in Victoria were not available, due in part to the discrepancies in nomenclature for sanctuaries, reserves and other protected areas such as national parks (Norman, 1981:85).
The following section contains information on aviaries known to have been constructed within sanctuaries or reserves.

**SIR COLIN MACKENZIE ZOOLOGICAL PARK, HEALESVILLE**

The Sir Colin MacKenzie Zoological Park, commonly known as the Healesville Sanctuary, was established in 1921 by Sir Colin MacKenzie as an animal research station for the study and breeding of Australian fauna. In the 1920s the sanctuary was officially classified as a B class zoo.

By 1927 the Sanctuary was recognised as being one of the finest collections of fauna in the world, but with the departure of MacKenzie to Canberra in 1928 many of the animals were sent to the Royal Melbourne Zoological Gardens. Naturalists, worried by the changes, unsuccessfully proposed that the area be permanently reserved as a national park.

In 1932 the Chairman of the Council of the Royal Zoological Society supported the proposal to upgrade Healesville's zoo status to a sanctuary, as he felt that a sanctuary would be a useful place in which to give the animals from the Royal Melbourne Zoological Gardens a change of air. The Healesville Sanctuary was officially opened on 30 May 1934.

The Sanctuary's contemporary brochure (Sir Colin MacKenzie Zoological Park, n.d.) describes Healesville as "a Zoological Park devoted to the wildlife of Australasia, displayed in a natural bushland setting . . . Where possible, exhibits have been designed to allow you close access to the animals".

The first aviaries and other enclosures constructed in the 1930s were built as the result of donations from companies and individuals.
A plan of the Sanctuary in the 1940s included many smaller cages and aviaries for birds. The more significant aviaries are listed below:

* the Argus Aviary containing eagles;
* an aviary containing the brush turkey and Major Mitchell cockatoos;
* the General Motors Aviary containing bitterns, Mallee fowl, and parrots.

In 1963 construction of the best known of the enclosures the large Lyre-bird Aviary was completed. It was built by donations from the Royal Automobile Club of Victoria. When completed it was 200 feet (61 metres) long, 100 feet (30 metres) wide and 42 feet (13 metres) high at its highest point, and covered half an acre (0.2 hectares), making it the largest cage of its kind in Australia. Trees and shrubs were planted and logs of wood scattered about to create a bushland environment.

The construction of the Lyre-bird Aviary allowed the public to walk through the covered enclosure among the birds, and see them at close range in a naturalistic environment. Pescott (1974b:7) considered the 'walk-through' aviary to be one of the most striking features at Healesville. He claimed that this naturalistic type of construction was first developed at Healesville and later adopted in many sanctuaries throughout the world. The Lyre-bird Aviary was opened to the public in April 1965, and remains a popular attraction (Pescott, 1974b:8-9).

**FERN TREE GULLY NATIONAL PARK**

In 1882, 166 hectares (412 acres) of land was reserved at Fern Tree Gully as a site for public recreation. With the passing of the *National Parks Act* on 30 December 1956, Fern Tree Gully assumed national parks status (Bardwell, 1982:55).
An aviary was erected in 1936 near the kiosk. In the same year a zoo, housing both native and exotic animals, was opened in the park.

The zoo had expanded by 1940, but by 1956 it was closed and dismantled. The aviary remained an attraction for many years until the mid-1970s when it too was demolished (Bardwell, 1982:55).

**DISCUSSION**

The efforts of the acclimatisation movement between 1860 and 1870 resulted in the reservation of land for birds and animals. These reserves served as game breeding areas.

By 1900 the social changes caused by industrialisation and urbanisation had triggered the development of humanitarian attitudes towards animals. In Australia, associated with the emergence of national pride, was a particular concern for the reservation of native fauna.

The interplay between the humanitarian and ecological movements and the developments in science and scientific theory gave rise to a concern for the conservation of fauna. A direct consequence was the establishment of a system of protected reserves and sanctuaries which, ironically, allowed the restricted shooting of game.

By the 1950s scientists and the public recognised that the preservation of a species and its habitat were of equal importance. As a result, the role of the restructured sanctuaries system became one concerned with the preservation of habitat and species rather than one concerned with the restriction of shooting.

The 1936 aviary erected in the Fern Tree Gully National Park, although constructed within a protected reserve, did not display in its design any of the enlightened influences of the sanctuaries movement. It was a structure for the exhibition of birds and its
design reflected the exhibition mentality that characterised the associated zoo.

By contrast, the Lyre-bird Aviary, constructed at Healesville Sanctuary in 1963, provided a naturalistic setting which reflected an understanding of fauna conservation and humanitarian concerns of the public.
Figure 20: Lyre-bird Aviary, interior, Healesville Sanctuary, 1985.
Figure 21: Lyre-bird Aviary, exterior, Healesville Sanctuary, 1965.
Figure 22: Argus Aviary, Healesville Sanctuary, 1985.
CHAPTER 11: PRIVATE AVIARIES

DEFINITIONS

The three types of aviaries discussed in this chapter have been defined below.

* External aviaries

The term 'external' aviary refers to free-standing aviaries or enclosures which were constructed as a separate entity to the house.

* Portable and internal aviaries

The term 'portable' aviary refers broadly to those ornamental aviaries which were intended to be moved to various parts of the garden to create visual interest and where the birds would provide pleasant song. It does not include traditional bird cages which could be moved from room to room within a house.

'Internal' aviaries were those that restricted the free movement of their inhabitants. They were usually designed as part of a larger entity, often a conservatory or the residence proper, rather than being a solitary structure.

The terms 'portable' and 'internal' aviaries have, therefore, been used to describe those aviaries that were "extensions of the bird cage and the birdroom" (Hibberd, 1857:190).

Generally, these aviaries were not constructed for the larger species of birds but were intended for the display of "song birds chiefly and for daily resort and entertainment, far more than for scientific study or mere display" (Hibberd, 1857:190).
* Trade catalogue aviaries

In this group were those aviaries that were described in manufacturers' or trade catalogues.

INTRODUCTION

By the eighteenth and early nineteenth century, the collection and display of birds had become an integral part of English society. Birds were not only pretty decorations for the salon, but they were also considered to be worthy of scientific study, and were immortalised in everything from pottery ornaments to music-hall songs and mechanical bird automata. Colourful, ornamental and song birds became the popular displays of specialist bird shows, travelling shows and menageries.

Bird owners in England during the Victorian era turned to the influential and popular gardening press for practical advice on birdkeeping and the design of suitable aviaries. In 1843 an anonymous contributor to the Gardeners' Chronicle wrote that:

the addition of an aviary to the amateur's garden increases the pleasure of horticultural labour, gives cheerfulness to the scene and well repays any attention to the comforts of the little songsters (Roberts, 1972:78).

The same writer firmly believed that:

the facility with which these birds can be preserved through the winter in the open air, the simplicity and cheapness of their food makes it desirable that no pleasure ground or garden should be without an aviary (Roberts, 1972:78).

Books, such as The Villa Gardener written by John and Jane Loudon and published in 1850, included a discussion on aviaries and birds suitable for aviaries in London. The Loudons considered the ideal
aviary to be a "small rustic structure with an enclosed court covered with netting" (Roberts, 1972:78).

Another influential book written by the Loudons was their *Cottage Farm and Villa Architecture* which was revised by the widowed Jane Loudon in 1857. In this edition she added more detail to the section on aviary building and recommended that: "when the object is simply to hear the song of birds, it is found a more cleanly and effective plan to distribute a few cages up and down a conservatory or along a veranda [sic]" (Roberts, 1972:80).

The popular author, James 'Shirley' Hibberd, first published his *Rustic Adornments for Homes of Taste* in 1856, almost at the height of the fashion for birds in England. While the first edition of this work contained extensive notes on birdkeeping, the later 1870 edition replaced them with instructions on how to organise a marine aquarium (Roberts, 1972:86). This exemplified how the 'collector mentality' persisted despite the decline in the fashion for birdkeeping and was transformed into an alternative passion.

As well as the general gardening press, many books were devoted specifically to the topic of birds and aviaries. One of the earlier popular works which adopted a more specialist approach to its subject was J M Bechstein's *Cage and Chamber Birds*. It was first published in 1794 and revised editions continued up until World War I (Roberts, 1972:49).

In 1862 Miss E A Maling published *Song Birds and How to Keep Them*. Her book contained information on birds under sections such as "Birds in a Sitting Room", "The Room Aviary", and "The Out-Door Aviary and Birds for it". Maling thought that birds provided the greatest source of joy for garden owners and recommended that their inclusion, by either external, portable or internal means, was highly desirable. She considered that if displayed in:

a large conservatory, a little greenhouse full of shrubs and warblers, or even large cages, half-hidden among the orangetrees and camellias, [they] would be a charming adjunct.
There, protected from cold and provided against starvation, the birds would be happy, and their songs would be songs of joy (Maling, 1862:7).

The ownership of an "ornithological palace" (Roberts, 1972:77) during the Victorian era was seen as one of the hallmarks of middle-class culture in England. Many contemporary writers such as Hibberd (1857:160) encouraged the keeping of birds in a bird room: "a birdroom may be made a delightful feature of a Home of Taste". Hibberd (1857:179) also stated that:

you cannot rear healthy children in courts and novels, and even birds want breathing-room . . . better birds are bred in rooms, or in an aviary properly fitted for the purpose, than in any kinds of cages.

The design of these aviaries was open to interpretation and the subject of much discussion by the proponents of the fashion for birdkeeping. The aviary could be a separate house or room for birds situated inside or outside the owner's house. If inside, it might have constituted "part of a conservatory, or a disused greenhouse, with modifications, or part of a loggia or verandah may be employed" (Luke & Silver, n.d.:89).

For those more modest homeowners who did not have the space within their house to provide an internal form of birdroom the passion for birdkeeping could still be indulged in by the use of a portable ornamental cage; these could be used either internally or externally.

A number of the nineteenth century horticultural writers such as Hibberd (1857:183) enthusiastically endorsed portable aviaries: "the large aviary cage . . . forms an admirable home for a collection of showy foreign birds of small size, and if well furnished is a noble adornment for a drawing-room".
Loudon's *Encyclopaedia of Gardening*, first published in 1827, also included notes on portable aviaries. Loudon recommended that a moveable netted type of enclosure called a "Gallinaceous aviary" could be used not simply for domestic poultry but also for the display of song birds. Loudon (1827:347) suggested that the more delicate sorts of birds could be displayed in wire cages and distributed over a flower-garden or pleasure-ground. Loudon (1827:347) also advocated the use of portable ornamental cages which could be moved for dramatic effect within a picturesque garden setting.

In a flower-garden or pleasure-ground where the object is the singing of birds, much the most effectual mode is to distribute over it a number of common-sized cages containing different sorts of birds. They may be either hung on trees or fixed to iron rods.

The caging of birds, particularly native birds, became an issue of concern for many. However, imported birds were seen as inferior species which could, therefore, be subjected to harsher treatment. Hibberd (1857:197) voiced this sentiment when he declared that the attraction of the native (English) song birds in the countryside was so great "that if we must have birds in the house, foreign lands can better afford to supply them."

Although the morality of confining native birds, such as the lark, to cages was questioned by writers such as Hibberd (1857:187) and other self-styled arbiters of good taste, it seemed that exceptions could always be made in the interests of birdkeeping. Hibberd (1857:187) conceded that:

the caging of our native birds can only be justified by subsequent care of them. If they are caged to suffer, the world is robbed of their beauty and song to no purpose, and the attempt to gratify a private feeling culminates in a public wrong.
Hibberd's (1857:160) solution was to keep a collection of birds:

scattered about - a canary here, a lark there, half-a-dozen pets together in some other place, and perhaps a grand aviary cage filled with small foreign birds for the principal attraction in the dining-room or entrance-hall.

Total freedom could be granted to certain trustworthy birds: "one sulphur-crested cockatoo enjoyed for many years complete freedom in the house and garden and rarely abused the privilege by injuring anything" (Hibberd, 1857:168).

The morality of the Victorian era which denounced the confinement of birds to cages could also be readily cast aside in favour of the instructional ideals to be gained from the same practice.

A breeding-cage inhabited by a pair [of canaries] is as good a household toy as will be found amongst a thousand. The interest that young people take in their welfare should commend such a toy to the domestic circle, and the stern utilitarian might see in it an instrument in aid of education, the introduction to the fireside of a lively scrap from the book of nature, from which better lessons may be learned than from the best of Latin grammars or solemn treatises of physical science (Hibberd, 1857:197).

Roberts (1972:68) believed the all-pervasive caste system of the Victorian era applied not only to humans but also to their pet birds. The nineteenth century middle-class bird owners, whose primary interest was in the display of birds, were attracted to the foreign finches and the relatively newer novelties such as the Australian budgerigar. In contrast, the artisan birdkeeper's interest centred principally on permutations of the canary. However, Roberts stated that both classes shared an interest in the English native birds such as the goldfinch, linnet and the siskin.
Birdkeeping had attained its apotheosis in England by 1860, but in the period 1840-1870 England was gripped by a renewed passion for cage birds, which subsequently declined by the end of the nineteenth century.

From 1890 to World War I birdkeeping became more concerned with the rearing of birds for show purposes in contrast to the earlier fashion for the display of cage birds. The principal preoccupation of the fancy became the breeding of birds for desirable forms and colours (Roberts, 1972:86-89).

In Australia the passion for aviaries in private gardens was strong, although it is difficult to determine whether it ever reached the same heights as the English passion as this aspect of Australia's social history has hitherto received scant attention.

**SOURCE MATERIAL**

Detailed factual information concerning the existence of external, portable and internal aviaries in private gardens in Victoria is almost non-existent. In order to locate the examples discussed below, reference was made to those sources that were likely to contain information on other garden architectural structures, such as conservatories, which often fulfilled the same purpose as aviaries and were common features of 'homes of good taste'.

Many works documenting historic houses and gardens in Victoria were studied in order to find often obscure references to aviaries. Rarely were these references indexed to include aviaries and records of garden buildings were generally omitted. Unfortunately, because of the horticultural and landscape design bias of these pioneering studies, those aviaries that existed in gardens that were no longer extant or were not considered to possess historic or horticultural significance were not documented.
The collection of "Detail Plans" prepared by the Melbourne Metropolitan Board of Works (MMBW) from the 1890s onwards, when Melbourne was surveyed for a reticulated sewerage system, was one of the most valuable records of garden layouts. Even gardens associated with the most humble of houses were shown in some detail. Unfortunately after c.1910 the level of detail recorded diminished and outbuildings although located were not identified as to usage. Many thousands of plans existed and not all copies are held by any one department making it a difficult task to accurately examine each plan. The scale examined was usually the 40 feet to 1 inch series.

A systematic review of the MMBW "Detail Plans" of the early suburbs of Melbourne made it possible to ascertain the general frequency of aviaries that existed c.1890-c.1920 in the private gardens of the suburbs surveyed. It was hoped that once the location of these structures was established more detailed information could then be researched about either the owner, builder or architect. Reference was made to local historical and architectural sources and in some examples an on-site inspection was made.

An examination of the LaTrobe and State Library of Victoria's collections of trade catalogues and reference lists of suppliers covering the period 1860 to 1880 was undertaken to determine the extent and range of suppliers of both birds and aviaries. Trade catalogues were also studied for information on the design and construction of aviaries.

In the following section information is given for aviaries that are known to have been constructed in private gardens or on private land in Victoria or that were listed in trade catalogues.

The examples of aviaries constructed in private gardens were subdivided according to the three types of aviaries for which information was obtained. Within each type of aviary the examples were arranged alphabetically according to the location.
EXTERNAL AVIARIES

The following format has been adopted to present the material in this section.

Suburb or town:
Address or location:
Date of aviary construction (or earliest reference):
Current status of aviary:
Reference (source of information on aviary):

The information presented for each location includes a brief description of the history of the ownership and development of the garden and the aviary where this information was available. In some examples the only information available was that recorded on the relevant MMBW plan therefore these descriptions are minimal.

Balwyn

Suburb or town: Balwyn
Address or location: 'Idylwylde', 25 Yarbat Avenue
Date of aviary construction: late 1920s
Current status of aviary: demolished 1985
Reference: Age, 9 September 1978

Oliver Gilpin, a wealthy chainstore owner of the 1920s and 1930s, developed the house and property known as 'Idylwylde' during the late 1920s.

The extensive gardens included a rose garden, orchard, conservatory, igloo-like shelters for deer, an intricate system of lakes and a fish hatchery, and an impressive aviary complex (Age, 1978).

The extensive aviary for exotic birds was located within a walled garden, and comprised a geometrically organised 35-cage structure.
Each cage consisted of a concrete base, timber framework with wire mesh, and a timber shingle roof.

The system of aviaries at 'Idylwylde' are believed by this author to have been the most extensive of any constructed within a private garden in Victoria. They were demolished in 1985.

**Blythevale**

Suburb or town: Blythevale  
Address or location: near Streatham  
Date of aviary construction: erected by 1869  
Current status of aviary: unknown  

Mr John Ritchie of Blythevale had turtle doves in his garden in November 1869. There was also a large cage of canaries, but unfortunately "all the blackbirds and thrushes died" (Balmford, 1978:237-247).

**Bulla**

Suburb or town: Bulla  
Address or location: 'Woodlands', Gellibrand Hill Park  
Date of aviary construction: original aviary c.1898-1917;  
reconstructed aviary 1964  
Current status of aviary: original aviary demolished;  
reconstructed aviary extant  
Reference: National Parks Service, Department of Conservation Forests and Lands, 1986

'Woodlands' homestead was established in 1843. In 1889 William Croker, a prominent solicitor, bought 'Woodlands'. The Crokers used 'Woodlands' as a country house rather than as a permanent residence, and it became a centre for Melbourne's hunting
fraternity. 'Woodlands' was sold in September 1917 to Benjamin Chaffey and his wife, Cowra, who remained the owners until 1937. In 1919 extensive alterations were made to the house, particularly to the front verandah. In 1977 'Woodlands' was purchased by the State Government, reserved under the National Parks Act in 1981, and restoration of the house, outbuildings and garden was undertaken in 1983–1984.

The restoration included the reconstruction of an aviary that had been built in the central courtyard. The original octagonal aviary is believed to have been built in the 1890s or 1900s during the ownership of William Croker.

**Castlemaine**

Suburb or town: Castlemaine
Address or location: 'Buda', corner Urquart and Hunter Streets
Date of aviary construction: c.1860
Current status of aviary: extant
Reference: Watts, 1983:191

The house and garden known as 'Buda' was created by Ernest Levy, an Hungarian gold and silversmith, in the 1860s.

The garden featured an ornamental free-standing aviary. This decorative cast-iron structure was designed by Levy using iron that came from the local Thompsons Foundary (Watts, 1983:191). The aviary remains an elegant feature of the garden.
Elsternwick

Suburb or town: Elsternwick
Address or location: 'Rippon Lea', Hotham Street
Date of aviary construction: erected by May 1903
Current status of aviary: demolished
Reference: Sanderson, 1980:42,65

In her report, *Rippon Lea: The Development of the Garden*, Sanderson (1980:42) stated that "a circular aviary can be seen in the 1903 photographs . . . but no mention is made of it elsewhere, and it does not appear in any [other] available photographs of the garden".

Sanderson's (1980:65) research found that although some references were made in the family papers to "a love of birds", no mention was made of the aviary. It was apparently a "large circular structure" (Sanderson, 1980:65) which reflected the circular shapes of the other garden components, such as the orchard and many of the large floral beds.

According to Sanderson (1980:42) the structure was located near the house on the west lawn adjacent to the croquet lawn, and that the site where the aviary had been was still identifiable in 1980 as a raised terrace on the north side of the lawn.

Geelong West

Suburb or town: Geelong West
Address or location: 'Riversdale', 6 Bendigo Street
Date of aviary construction: erected by 1914
Current status of aviary: demolished

The house 'Riversdale' was built c.1864 and an Edwardian verandah added by 1907. A photograph of the garden in 1914
(Seaton, 1978:169) indicated three decorative garden structures: an elaborate conservatory, a remarkably ornamental summerhouse, and an aviary.

Although the photograph only showed a section of the aviary, it appeared to be constructed of brackets and panels of decorative trellisage similar to those that were used in the front elevation of the summerhouse (Aitken, 1980:118).

Note: Aitken (1980) incorrectly identified the conservatory as an aviary.

**Hawthorn**

Suburb or town: Hawthorn  
Address or location: 24 Lisson Grove  
Date of aviary construction: n.d. (c.1890–1920)  
Current status of aviary: demolished  
Reference: Watts, 1983:10

The front garden of this property contained a summerhouse, and a large fernery ran along the eastern side of the house. The back garden included an aviary.

Suburb or town: Hawthorn  
Address or location: 448 Burwood Road  
Date of aviary construction: erected by May 1903  
Current status of aviary: unknown  
Reference: MMBW 40'1" No.1544 May 1903

The MMBW detail plan of the garden showed a large octagonal summerhouse located at the rear of the house, and a very large rectangular aviary located on the eastern side of the house.
Kew

Suburb or town: Kew
Address or location: 'Butleigh Wooton', Glenferrie Road
Date of aviary construction: erected by April 1903
Current status of aviary: demolished
Reference: MMBW 40''1" No. 1577 April 1903

The house 'Butleigh Wooton' still stands on Glenferrie Road Hill, but
the circular aviary recorded on the c.1903 MMBW detail plan has
been demolished. The grounds c.1903, on the western side of the
house, contained a tennis court adjacent to which was a large
circular grotto and the circular aviary.

Suburb or town: Kew
Address or location: 'Algarna', Selbourne Road
Date of aviary construction: erected by May 1903
Current status of aviary: demolished
Reference: MMBW 40''1" No.1574 May 1903

A garden structure was recorded on the MMBW detail plan of 1903
as a "wire cage". Its considerable size suggested that it may have
contained a range of ornamental or game birds.

Suburb or town: Kew
Address or location: 'Kelso', 164-174 Cotham Road
Date of aviary construction: erected by May 1903
Current status of aviary: demolished
Reference: MMBW 40''1" No.1575 May 1903

The house and garden at 'Kelso' were serviced by a formal drive.
The MMBW detail plan showed that the grounds included two
trellised structures, one rectangular and the other a very large
cruciform-shaped building. An asphalt tennis court provided for
active recreation within the extensive gardens and a tennis pavilion provided shelter for spectators.

The garden at 'Kelso' also contained a free-standing rectangular aviary on the eastern side of the house within the formally arranged garden.

Suburb or town: Kew (now Hawthorn)
Address or location: 'Strathroy', corner Barkers Road and Kildare Street
Date of aviary construction: erected by May 1903
Current status of aviary: demolished
Reference: MMBW 40'-1" No.1560 May 1903

The ornamental garden at 'Strathroy' contained a number of structures for birds including an "avairy" [sic], a fowl yard and a duck pond. The aviary was located at the end of an elaborate drive at the eastern side of the house.

Suburb or town: Kew
Address or location: 'Madford', Wellington Street
Date of aviary construction: erected by June 1903
Current status of aviary: demolished
Reference: MMBW 40'-1" No.1576 June 1903

'Madford' was probably built in the 1880s or 1890s, but no details can be located of its owner, architect or builder. According to the MMBW detail plan, the ornate garden featured an asphalt tennis court, a large fernery, and a large conservatory complete with a furnace room. To cater for visitors three summerhouses were provided for rest and a fountain for visual delight.

A rectangular aviary was constructed adjacent to one of the summerhouses, and both structures were serviced by a formal system of paths and steps that led to the house.
Suburb or town: Kew
Address or location: ‘Ordsall’, corner of Cotham Road and Charles Street
Date of aviary construction: erected by June 1903
Current status of aviary: demolished
Reference: MMBW 40′=1″ No.1576 June 1903

‘Ordsall’, originally known as ‘Southesk’, was built in 1867 by John Halfey, a builder and leading figure in Melbourne. It replaced an older building which dated from 1858. The MMBW detail plan showed that the grounds were extensive, and that the picturesque garden contained a number of garden buildings and ornaments. These included a conservatory, a summerhouse, a large semicircular fernery adjacent to a fountain, and other sheds and garden buildings.

An aviary was a feature of the garden, as were large ‘fowl yards’ which may have contained pheasants and other domestic birds. The aviary was a triangular structure built against two walls of the house and sheltered beneath the extensive verandah.

Suburb or town: Kew
Address or location: ‘Reno’, St. Johns Parade
Date of aviary construction: erected by June 1903
Current status of aviary: demolished
Reference: MMBW 40′=1″ No.1576 June 1903

‘Reno’ has been recognised as one of Kew’s oldest houses (Rogers, n.d.:39). The builder, Mr Cocking, was an architect. The grounds included a large paddock, orchard, and picturesque gardens which contained a summerhouse, fernery, fountain and a circular aviary placed immediately in front of a circular grotto of approximately the same size.
Suburb or town: Kew  
Address or location: 'Hazeldene', corner Sackville Street and Balmoral Avenue  
Date of aviary construction: erected by June 1904  
Current status of aviary: unknown  
Reference: MMBW 40’=1” No.1563 June 1904

The garden at 'Hazeldene' contained a number of garden buildings: a rectangular bamboo structure, a very large conservatory which was constructed of bamboo, this being a building material in vogue at the turn of the century, and an aviary. Unfortunately no details of the materials of construction of the aviary were recorded, but it was an hexagonal free-standing structure located between the house and the large conservatory.

Suburb or town: Kew  
Address or location: 'Ballark', Heyington Street  
Date of aviary construction: erected by 1905  
Current status of aviary: unknown  
Reference: MMBW 40’=1” No.929 1905

The garden at 'Ballark' included an aviary.

Suburb or town: Kew  
Address or location: 'Finhaven', Stevenson Street  
Date of aviary construction: unknown  
Current status of aviary: unknown  
Reference: MMBW 40’=1” Map Collection State Library of Victoria

The garden at 'Finhaven' contained an hexagonal aviary.
Suburb or town: Kew  
Address or location: unknown  
Date of aviary construction: erected by September 1886  
Current status of aviary: unknown  
Reference: Kew and Hawthorn Express, 3 September 1886:2

Mr Remfry of Kew was apparently an avid collector of birds, and a description of his collection and aviary featured in the Kew and Hawthorn Express in 1886. Mr Remfry was known to be a large exhibitor at most of the Melbourne bird shows. His surplus song birds were sold through a Mr Hooke's auction rooms in Hawthorn.

The local newspaper article described Mr Remfry's canary aviary: it measured 17 feet (5 metres) x 8 feet (2.5 metres), and was a "specially constructed apartment with hollow walls packed with tan, to secure an equable temperature". The canary aviary provided space for forty breeding cages, twenty on each side.

Mount Macedon

Suburb or town: Mount Macedon  
Address or location: 'Hascombe', Alton Road  
Date of aviary construction: erected c.1930s  
Current status of aviary: demolished  

A large rectangular aviary with a thatched roof was constructed below the entrance drive at 'Hascombe'. It dated from the 1930s when the owner of the property was Stanisforth Ricketson. An illustration of the aviary c.1930 is included in the Lewis et al. report.
Prahran

Suburb or town: Prahran
Address or location: 37 Williams Road
Date of aviary construction: erected by February 1898
Current status of aviary: unknown
Reference: MMBW 40°=1” No.1005 February 1898

Situated in the garden of this property were a number of garden structures. There was an immense conservatory, which must have been the feature of the garden; an outdoor billiard room; a larger hexagonal trellis structure, which was probably a summerhouse or shade house. An aviary was also indicated on the plan.

South Yarra

Suburb or town: South Yarra
Address or location: 'Bona Vista', Kensington Road
Date of aviary construction: erected by 1896
Current status of aviary: demolished
Reference: MMBW 40°=1” No.917 1896 State Library of Victoria

A doctor built 'Grantham' in the late 1840s, but renamed it 'Bona Vista' for the outlook it commanded of both the Yarra River and Port Phillip Bay. The house was made larger and grander by a subsequent owner in the 1850s.

The 'Bona Vista' garden contained a fernery and an aviary, but their date of construction is unknown.
Suburb or town: South Yarra
Address or location: 'Como', Como Avenue
Date of aviary construction: 'Pigeon Cage' c.1860;
    'Cage/Aviary' c.1860
Current status of aviary: demolished
Reference: MMBW 40'-1" No.942 December 1895; Allom, Lovell
    and Associates, 1982

The report by Allom, Lovell and Associates (1982) identified two
aviaries that were constructed on the 'Como' property before the
end of the nineteenth century.

The earliest of these was an aviary referred to as the 'Pigeon Cage'
which was probably constructed before 1864. This outbuilding was
located on the 1895 MMBW detail plan about 15 metres south of the
billiard room. The Allom et al. report (1982) described the
appearance of the 'Pigeon Cage'.

It was an octagonal building, about 3 to 4 metres in diameter,
probably clad in timber. The roof was pointed, with a separate
pitch corresponding to each wall plane and appears in the
photograph as slate. The photograph shows four openings in
the south west wall with a timber platform below them
presumably for its function as a dovecote. It is possible that
this building is the 'aviary' referred to in the 1864 auction
notice.

This aviary was demolished either after a subdivision of 1911 or
c.1950.

The second aviary recorded at 'Como' was also probably constructed
before 1864, as it was probably the aviary referred to in the 1864
auction notice. It seems that the same structure, which abutted
the centre of the west face of the stable/coach house block, was
named a "cage" on the 1895 MMBW detail plan. The 'Cage/Aviary'
was a timber structure about 3 metres wide and 5.5 metres long
(Allom et al., 1982). It was demolished at an unknown date.
PORTABLE AND INTERNAL AVAIRIES

The same format that was used in the previous section has been adopted to present the material in this section.

Fitzroy

Suburb or town: Fitzroy
Address or location: 84 Freeman Street
Date of aviary construction: erected by May 1901
Current status of aviary: unknown
Reference: MMBW 40'=1" No.1257 May 1901

The 1901 MMBW detail plan of the garden of this relatively simple cottage described an interesting range of garden structures. These included a fernery, a conservatory, two glasshouses, a pond, and an aviary.

The plan indicated that the aviary may have formed a bird room which opened directly into the house.

Kew

Suburb or town: Kew
Address or location: ‘Karring’, Selbourne Road
Date of aviary construction: erected by May 1903
Current status of aviary: unknown
Reference: MMBW 40'=1" No.1574 May 1903

The MMBW detail plan suggested that the garden at 'Karring' must have been quite an ornamental pleasure garden at the turn of the century. Garden buildings and ornaments on this property included a bamboo house, a fernery, a wire plant house, a large summerhouse, and very large fish pond. The site plan showed an
"avairy" [sic] which formed a 'birdroom' connected to the verandah and house.

**Melbourne**

Suburb or town: Melbourne  
Address or location: Cole's Book Arcade, Bourke Street  
Date of aviary construction: c.1880  
Current status of aviary: demolished  
Reference: Cole, 1974

Although the aviary in the Cole's Book Arcade was not constructed within a private garden, it has been discussed in this section as it was typical of an internal form of aviary.

At the time of the great land boom in Melbourne in the 1880s, the Cole's Book Arcade was developed by Cole, the proprietor of the Cole's Stores. It was created by the conversion of a right-of-way (from Bourke St to Little Collins St) into a bower of green plants and rustic benches. From the Arcade one could enter Cole's Fernery. This was a fragrant pretty glade where friends met for a chat, could eat a cut lunch and provided a rendezvous for sweet hearts. A feature of the Cole's Book Arcade, the Fernery became a popular feature of Melbourne.

At the far end of the Fernery a vast aviary was built which contained a collection of ornamental and talking birds. Cole was enthusiastic about cockatoos and in the 1880s talking birds were an interesting and amusing phenomenon that the general public enjoyed (Cole, 1974:115). The aviary was initially stocked with native species of parrots and cockatoos and later exotic varieties of birds were gradually introduced. Cole obtained the birds from various parts of the world as a result of extensive inquiries by local aviarists, on his behalf, for talking birds of outstanding ability. The birds' colourful plumage contributed to the beauty of the Fernery, while the talking birds chatter provided the unique and
characteristic Cole's Book Arcade fun. The birds' keeper, Harry Gay, was reputedly instructed by Cole to spend an hour a day teaching the birds to say: "I love reading Cole's Funny Picture Book". Several of the imported birds were reported as having possessed great powers of mimicry and achieved such sentences as "Come on now, boys, tuck in for your feed" (Cole, 1974:15).

The aviary and Fernery continued to be popular attractions for many years, and the Arcade was advertised, by the somewhat biased Cole, variously as "the prettiest sight in Melbourne" and "the Palace of Intellect" (Cole, 1974:181).

After the death of Cole in December 1918, the nature of the business dramatically altered under the appointed Trustees. Even before his death the Health Department had not fully approved of the presence of monkeys in Cole's Arcade (Cole, 1974:181). In c.1920, shortly after the death of Cole, the talking birds in the Fernery along with the monkeys were removed. The best specimens were accepted by the Royal Melbourne Zoological Gardens while the rest were destroyed. Finally, the Fernery was converted into a stationery department, but not without considerable public protest, for there was still no other public resting place in the heart of the city that offered the delights of the unique Cole's Book Arcade (Cole, 1974:181).

TRADE CATALOGUES

Sands and McDougall's Sands and McDougall's Commercial and General Melbourne Directory of 1873 contained four persons listed under the occupation of "Bird Fanciers and Importers"; by 1878 the number had increased to eight. Another occupation listed in this directory of trades and businesses was that of "Wire Workers".

One such business was that of Henry M'Intosh of 9 Post-Office Place. In his Illustrated Catalogue of Plain and Ornamental Iron and Wire Work and Wire Goods of Every Description, published in
Melbourne in 1877, Mr M'Intosh described himself as a wire worker and weaver. M'Intosh's catalogue was the only trade catalogue found which contained designs specifically for bird cages or aviaries.

M'Intosh's catalogue offered designs for horticultural hardware including "strong ornamental wire guards" such as the Gothic plant guard (being highly ornamental and intended for pleasure-grounds). Other iron goods were bordering for croquet grounds, ornamental wire bordering, and iron and wire for arbours. However, the pièce de résistance was M'Intosh's array of designs for aviaries. The cover page offered, for the boudoir or drawing room, a most ornate structure which combined an aviary, aquarium and flower stand.

This stand, when covered with a few choice flowers, shrubs and ferns; gold and silver fish in the Aquarium, with one or two fine singing birds in the Aviary, makes a very handsome ornament to any Drawing Room. (M'Intosh, 1877:1)

This highly ornamental, tiered structure ranged in price, dependent on size, from 60 shillings to 100 shillings.

M'Intosh offered designs for bird cages "in a great variety of elegant patterns" such as "The Pagoda" at 28 shillings, or the rustic Swiss-imitation model "The Châtelet", which sported a moose head trophy beneath the eaves, and cost 18 shillings for the white enamelled, richly ornamented version. Parrot cages, which ranged in price from 3 shillings to 30 shillings, were available in various patterns: round, square or octagonal.

Another ten wire workers were listed in the Melbourne Directory for 1873, but it is not known whether they manufactured aviaries as their catalogues were not able to be traced.

Aitken (1960:22) believed the aviary "apitomised the graceful and apt buildings so often included in Victorian and Edwardian gardens". The current status of the aviary is unknown.

**DISCUSSION**

Although little is recorded or documented on the history of birdkeeping in Victoria, the examples of aviaries that have been recorded in this chapter represent the three types of aviaries within private gardens: the external, the portable and internal, and those aviaries that were described in manufacturers' or trade catalogues.

It has not been possible to draw any conclusions as to the change in style, if any, of the design of aviaries in private gardens in Victoria as insufficient material exists on which to base a discussion of this nature. Many of the examples were recorded only in plan form and no elevation or photographs were located of these aviaries.

Because many of the examples of aviaries have been located by reference to the MMBW plans, this has limited the period of construction to that between c.1890 and c.1910. Therefore, few stylistic developments would have appeared in such a brief period.

The earliest external aviaries recorded in Victoria were the two aviaries constructed at 'Como', South Yarra and the one at 'Buda', Castlemaine, both of which date from c.1860.

The aviary at 'Buda' is significant not only because of its ornamental appearance but for the fact that it is extant and in good condition.

Of the twenty three external aviaries which were documented as having been constructed in metropolitan Melbourne and at a number
of country locations, the greatest concentration of aviaries occurred in the suburb of Kew which had eleven examples.

Whilst this can only be seen as a rudimentary survey of the historic material pertaining to external, portable and internal aviaries, it served its purpose in order to highlight the necessary areas for future research into aviaries in private gardens.

Although only a few extant examples were located, it seems more than likely that the occurrence of aviaries in private gardens in Victoria was relatively common, but unfortunately often unrecorded. More research would need to be undertaken in family and social history records and personal memoirs to determine more accurately the extent and design of these structures.
Figure 23: Walled garden, 'Idylwylde', Balwyn, 1985.

Figure 24: Aviary, 'Idylwylde', Balwyn, 1985.
Figure 25: Reconstructed aviary, 'Woodlands', Bulla, 1986.
Figure 26: Octagonal aviary, 'Buda', Castlemaine, 1905.
Figure 27: Plan of aviary, Hawthorn, c.1903.
Figure 28. Plan of circular aviary, Butleigh Wooton, Kew, c. 1903.
Figure 29: Plan of wire cage, 'Algarna', Kew, c.1903.
Figure 30: Plan of rectangular aviary, 'Kelso', Kew, c.1903.
Figure 32: Plan of aviary next to summerhouse, 'Madford', Kew, c.1903.
Figure 33: Plan of triangular aviary on verandah, 'Ordsall', Kew, c.1903.
Figure 34: Plan of circular aviary adjoining grotto, ‘Reno’, Kew, c.1903.
Figure 35: Plan of hexagonal aviary, ‘Hazeldene’, Kew, c.1904.
Figure 36: Plan of aviary and trellis garden building, Prahran c.1898.
Figure 37: Plan of Pigeon Cage, 'Como', South Yarra, c.1895.
Figure 38: Plan of internal aviary or birdroom, Fitzroy, c.1901.
Figure 39: Plan of aviary connecting verandah and house forming a birdroom, 'Karring', Kew, c.1903.
Figure 40: Internal aviary, Cole's Book Arcade, Melbourne, n.d.
II. Macintosh, Wire Worker & Weaver,

Boudoir or Drawing Room

Aviary, Aquarium, & Flower Stand, Combined.

This Stand is so made that the Aviary and Aquarium is easily lifted from the stand, so that they can stand separate, as Aviary, Aquarium, and Flower Stand.

This Stand, when covered with a few choice flowers, shrub, and ferns, gold and silver fish in the Aquarium, with one or two fine singing birds in the Aviary, makes a very handsome ornament to any Drawing Room. It occupies little space.

Japanned Green, Cream and White, and Gold, and highly ornamented.

Price, complete: From 60s. to 100s.

Works: Cremorne Street, Richmond.

Figure 41: Three-tiered combination aviary, aquarium, and flower stand, Melbourne, 1877.
Figure 42: Garden aviary, Malvern, c.1912.
CONCLUSIONS

Despite the recent interest in the study of historic gardens and the history and development of gardens in Victoria, the social and cultural aspects of gardens and landscapes have received little attention. This study has been undertaken in the belief that an evaluation and analysis of gardens from a social viewpoint would reveal some of the changes in society’s perceptions, social values, and cultural attitudes towards the landscape.

One type of garden building, the aviary, was selected for examination and analysis from a range of garden architectural elements.

The presence of aviaries within public gardens in Victoria in the twentieth century has declined significantly. Up to the middle of the twentieth century there were possibly as many as ten aviaries constructed within the eight regional botanic gardens studied. The Hamilton Botanical Gardens are now the only regional botanic garden to contain a large aviary. Due to the lack of documentation for the Royal Botanic Gardens and the Royal Melbourne Zoological Gardens it is impossible to know the exact number of aviaries that have been built. Nevertheless, it seems that at least twenty aviaries have been constructed at the Royal Melbourne Zoological Gardens in this time. Within other public gardens, such as amusement and public pleasure gardens and sanctuaries, the records show that at least seven aviaries have been built up until the 1950s. There are now no aviaries within amusement and public pleasure gardens. Apart from the Royal Melbourne Zoological Gardens, large public aviaries are now only to be seen at Healesville Sanctuary.

Due to the lack of information, historical and contemporary, concerning the number of aviaries in private gardens, it has not been possible to conclude that aviaries are now any more or less common than they were in the past.
The construction of the earliest aviaries, which dated from the mid-nineteenth century, was prompted by the desire for ornamental and song birds as a result of the widespread interest and enthusiasm for the acclimatisation movement. The aesthetic appeal of the structure and the birds, and the public’s desire for novel forms of leisure and entertainment within a garden setting were other factors which contributed to the popularity of aviaries in public and private gardens.

This report has highlighted some of the general changes in the design of aviaries. However, due to the randomness of the examples traced and the incomplete nature of the illustrations located, comparisons of aviaries within public gardens, private gardens, and between public and private gardens was not possible.

The design of the earliest aviaries epitomised the preoccupation of the public with the ornamental appearance of the aviaries. After the turn of the twentieth century, with the developing ecological and humanitarian movements, greater concern was given to the welfare and habitat of the birds. This led to a change in the design of aviaries such that the designs provided a more naturalistic environment. The contemporary design of aviaries is concerned primarily with the welfare of the inhabitants. Specifically the designs allow for an increased freedom of movement for the birds in a naturalistic landscape, while at the same attempting to provide the spectators with a greater involvement in an experiential setting.

The physical environment cannot be divorced or separated from the social environment. This analysis of aviaries and the associated social and cultural notions has revealed some changes in man’s attitudes to the landscape and in particular towards birds.

Consequently the documentation of aviaries as a component of the historic landscape in Victoria has provided insight into the development of attitudes towards the environment.
Aviaries are only one type of garden building. Similar research into other types of garden buildings, such as summerhouses, ferneries and bandstands, would provide a more comprehensive insight into the lifestyles, attitudes, and perceptions of a changing society towards the landscape, and enable some real conclusions to be made.
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**MAPS**


SOURCE OF ILLUSTRATIONS


Figure 2: Zoological and Acclimatisation Society of Victoria. 1909. 45th Annual Report. Facing page 8. (Royal Melbourne Zoological Gardens).

Figure 3: Zoological and Acclimatisation Society of Victoria. 1909. 45th Annual Report. Facing page 9. (Royal Melbourne Zoological Gardens).

Figure 4: Pictorial Souvenir of the Melbourne Zoo n.d. [c.1940] Publisher Unknown, Melbourne. (Copy in possession of R. Aitken.).

Figure 8: Herald 26 September 1928:13.

Figure 9: Richard Aitken, 1979.

Figure 11: Australasian Sketcher 22 October 1881:348.


Figure 13. Richard Aitken, c.1981.


Figure 15: Illustrated Australian News. 16 July 1870:141. (State Library of Victoria).


Figure 17: John Hawker, 1985.

Figure 18: MMBW Detail Plan No. 14. 1894. 160 feet = 1 inch. (Map Collection, State Library of Victoria).
Figure 19: *News of the Week* 26 December 1907.

Figure 27: MMBW Detail Plan No. 1544. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 28: MMBW Detail Plan No. 1577. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 29: MMBW Detail Plan No. 1574. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 30: MMBW Detail Plan No. 1575. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 31: MMBW Detail Plan No. 1560. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 32: MMBW Detail Plan No. 1576. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 33: MMBW Detail Plan No. 1576. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 34: MMBW Detail Plan No. 1576. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 35: MMBW Detail Plan No. 1563. 1904. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 36: MMBW Detail Plan No. 1005. 1898. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 37: MMBW Detail Plan No. 917. 1896. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 38: MMBW Detail Plan No. 1257. 1901. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 39: MMBW Detail Plan No. 1574. 1903. 40 feet = 1 inch. (Map Collection, Baillieu Library).

Figure 41: M’Intosh, H. 1877. Illustrated Catalogue of Plain and Ornamental Iron and Wire Work and Wire Goods of Every Description. Henry Macintosh, Melbourne:1. (State Library of Victoria).

Figure 42: Wunderlich. 1912. The Wunderlich Manufacturers Catalogue: Section IV Zinc Materials. Wunderlich, Sydney:21. (Copy in possession of R. Aitken.)