CHAPTER 1

ZOOS ARE FOR PEOPLE

Visitors at Taronga Zoo.

*Zoo*: an excellent place to study the habits of human beings.
Evan Esar – American humorist (1899-1995).
1.1 The zoo – a unique museum

One night in 1867, a famous London music hall artist, The Great Vance, sang the words:

Weekdays may do for cads, but not for me or you,
So dressed right down to the street, we show them who is who …
The O.K. thing on Sundays is the walking in the zoo.

(Brightwell, 1952:97).

The song, known as Walking in the Zoo on Sunday, became an immediate hit; a new word appeared in the Oxford English Dictionary and the world had its first ‘zoo’ (Hancocks, 2001:43). A contraction from the term ‘Zoological Gardens’, the word ‘zoo’ is now one of the most universal words used, and can refer to Zoologischer Garten (German), Ogrod Zoologiczny (Polish), Zoologiske Have (Danish), Parque Zoológico (Portuguese), Zoologicheska Gradina (Bulgarian), Zoologicka Zahradu (Czech) or Jardin Zoologique (French).

Like museums, zoos have become familiar institutions in the world and have been visited for many different reasons. Mark O’Neill (1994) argued that museums were ‘places where people go to think and feel about what it means to be human’. Museums are complex institutions which are not easy to define. The variety of definitions has become more highly structured with time, and significant variations in terminology have been brought about as history has recognised the many transformations that have taken place with the changing needs of the viewing public, particularly in the fields of education and recreation. In 1970 the International Council of Museums defined a museum as follows:

A museum is a non-profit making, permanent institution in the service of society and of its development, and open to the public which acquires, conserves, researches, communicates and exhibits, for purpose of study, education and enjoyment, material evidence of people and their environment (Birtley, 2001:6).

On 22 March 2002, Museums Australia formally accepted that:

A museum helps people understand the world by using objects and ideas to interpret the past and present and explore the future. A museum preserves and researches collections, and makes objects and information accessible in actual and virtual environments. Museums are established in the public interest as permanent, not-for-profit organisations that contribute long-term value to communities.
For the purposes of this definition, Museums Australia further recognised that museums embodied:

... institutions holding collections of and displaying specimens of plants and animals, such as botanical and zoological gardens, herbaria, aquaria and vivaria … (Museum National, 2002:3).

Because of the enormous variations that exist among zoological gardens, no concise definition for the term ‘zoo’ has been formulated. However, the World Association of Zoos and Aquariums has noted that these institutions all share two characteristics. Firstly, they possess and manage collections of wild animals that are easier to observe and study than in nature and secondly, they display these collections to the public (IUDZG, 1993:1.3). Historian Professor Edward P. Alexander (1979:99) wrote that the only difference between zoos and ordinary museums was that the objects displayed in zoos were alive. Regardless of how a museum or a zoo is defined, it allows for inter-generational transmission of knowledge which carries with it tremendous possibilities for developing understanding, forming a small part of lifelong learning (Kavanagh, 2000).

Although zoological gardens are clearly encompassed by the modern definition of the term ‘museum’, most visitors generally do not appreciate or identify them as such. Museums in the 18th century were founded on the principle of education for the general public. Stephen Weil noted that these ‘cabinets of curiosities’ were established to ‘…raise the level of public understanding, … to elevate the spirit of its visitors, … to refine and uplift the common taste’ (Weil, 1997:257). In the 21st century, zoos can still be recognised as places where the world of nature can be represented as a ‘cabinet’ and the wild animals as ‘curiosities’. These living animals help visitors to understand the world in which they live by using natural collections to interpret the past, depict the present and explore the future. As a ‘public garden’ these institutions provide visitors from all walks of life the opportunities for recreational and educational pursuits, which can not only inspire an appreciation of nature, but also stress the importance and need for conservation at the same time. Where historically, zoos once reflected the wealth and power of monarchs (Hoage & Deiss, 1996:21), their focus has now changed to one of care and conservation, with an appeal to the general populace.

It has long been recognised that zoological and botanical gardens are the most frequently visited types of museum in the world. Two of America’s leading authorities on marketing, Neil and Philip Kotler, emphasised this when they indicated that zoos ‘are visited by a broader cross section of their communities than are other museums’ (Kotler & Kotler,
Like museums, zoos offer their visitors unique and distinctive activities and experiences. Zoos are places where the perceptions of visitors can alter radically because of what has been observed and comprehended. They are locations where sightseers can wander leisurely, in a relaxed and pleasant atmosphere, to discover and appreciate some form of meaningful connection with the natural world. Today, zoos are at the forefront of worldwide attempts to save endangered species, protect ecological systems and preserve the biodiversity of the environment. The major concern of these institutions has been to maintain the biodiversity of life on Earth by means of various conservational activities, such as the breeding of endangered animals (Tudge, 1991). Zoos around the world have constantly made reference to their role in the future of conservation, a vision which was summarised by former director of the Bronx Zoo, William Conway:

Zoos’ vision for the 21st century should be to become proactive wildlife conservation care-givers and intellectual resources; to sustain animals which have lost their habitats and conduct campaigns to restore them; and to provide from our collections as many key species as possible to be the stimulus and centrepiece of conservation around the world (Conway, 1999).

Peter Mason (2000) concluded that zoos are important tourist attractions which are extremely popular. Each year, they attract 600 million visitors worldwide (de Courcy, 1995). In the early 1990s, Mexico City Zoo attracted over 12 million visitors each year and Beijing Zoo averaged 11 million visitors annually (van Linge, 1992). The world-famous zoo at San Diego in California received 3.3 million visitors in 1991 (van Linge, 1992) and in Europe over two million people visited Berlin Zoo each year in the period 1990-1994 (Shackley, 1996). In Australia, during 1995-96, almost eight million people paid admission prices to look at 65 zoological gardens and aquaria (Australian Bureau of Statistics, 1998). Significantly, nearly every Australian child passes through the gates of a zoo at some formative point of their education. Wild animals fascinate people, and their display and exhibition has been a source of satisfaction throughout human history (Baratay & Hardouin-Fugier, 2002). Humans in modern urbanised populations need to relate to the wild, and endlessly seek it out (Poplin, 1993:527). They are attracted by animals in captivity, and since the zoo is recognised as a safe and pleasant place to visit, a day spent watching animals ranks amongst the most popular of leisure activities. Although people choose to visit zoos for enjoyment and pleasure, because they can be visited with family and friends (Hood, 1983), for many people zoos are ‘their only contact with living biological diversity’ (Lewin, 1986:1073). Following research at Edinburgh Zoo, Louise Reade and Natalie Waran (1996a) concluded that one of the main reasons zoos experienced increased popularity towards the end of the 20th century was the convergence between the desire for knowledge and the desire for a reliable source of information. Zoos
symbolise a confluence of streams as they represent the meeting between animal and human, between nature and culture, between the wild and the civilised. They are associated with pleasant experiences and, like museums, they are places where lifetime memories are created, even for visitors whose primary attraction may not have been the animals on display.

Since they first opened to receive the visiting public, zoos have been the focus of family outings (Milan & Wourms, 1992; Whittall, 1992). They have always been recognised as a suitable place for a family leisure outing with young children, particularly since parents feel that it is important ‘for children to learn about animals’ (Andersen, 1993:134). Not only have people been attracted to animals, they carry lifetime memories of them. From an early age children develop a love for animals from stories such as *The Jungle Book* (Kipling, 1894), *Blinky Bill* (Wall, 1933) and *The Chronicles of Narnia* (Lewis, 1949-54). For generations, films such as *Bambi* (1942), *The Lion King* (1994) and *Finding Nemo* (2003) have used fantasy to appeal to human emotions. Animals have often been depicted as the heroes of popular culture. Because they look like small people in dinner suits, penguins have been popular in literature, cartoons and films. Norman Lindsay’s children’s classic *The Magic Pudding* (1918) featured a penguin named Sam Sawnoff. A penguin featured as one of Batman’s arch-enemies in Bob Kane’s and Bill Finger’s comic strip which first appeared in 1941. More recently the Swiss animated series aimed at children, *Pingu*, featured a family of penguins living at the South Pole. In 2005 *The March of the Penguins* won the Academy Award for the best documentary movie, and in 2006 *Happy Feet* highlighted a fictional story about an emperor penguin that was unable to sing like other penguins, but had the ability to dance.

The first zoo founded principally for scientific and educational reasons was the Ménagerie du Jardin des Plantes in Paris in 1794. Since that time the primary intent of zoos has been the study of animals. This objective was exemplified in the original purpose of the Zoological Society of London, indicated in its Royal Charter as ‘the advancement of Zoology and Animal Physiology and the introduction of new and curious subjects of the Animal Kingdom’ (Barrington-Johnson, 2005:15). This society became the model for many other zoological societies throughout the world. The Charter establishing the Zoological Society of Philadelphia in 1859 included the role of overseeing ‘the purchase and collection of living wild and other animals … for the instruction and recreation of the people’ (Philadelphia Zoo, 1999:1). During the 19th century the main emphasis towards the keeping of animals in zoos centred on the scientific studies of taxonomy and comparative anatomy. By the close of the
20th century, with wider opportunities for scientific enquiry, a number of societies had established specialised research institutions, such as the New York Institute for Research into Animal Behaviour, the Nuffield Institute of Comparative Medicine attached to the London Zoo and the comparative pathology Penrose Research laboratory at Philadelphia Zoo.

The methods used to display animals to the public changed noticeably during the course of the 20th century, although as researchers such as Lars Andersen (1989) and Michael Robinson (1989) indicated, much of this change occurred only during the last two decades. As emphasis has been lessening on exhibiting animals as objects, more prominence has been given to displaying animals in naturalistic environments that engage them in natural forms of behaviour (Seidenstickler & Forthman, 1998). Major developments were the transition from bare concrete enclosures enclosed by bars into settings reflecting natural surroundings, with the first naturalistic exhibits being opened at Woodland Park Zoo, Seattle, in 1978. For the first time, captive gorillas in zoos had trees to climb and a complex landscape to explore, introductions that saw an immediate change in the approach of people (Hancocks, 2001:135). Previously, no zoo had dared to exhibit gorillas in naturalistic looking enclosures, and many ‘experts’ predicted that the gorillas would soon destroy everything. In time, these critics were proved wrong as the gorillas no longer were the object of derision and the people of Seattle took pride in their zoo for the first time (Payne, 2000).

As the concept of naturalistic exhibits developed, the functionality of different zoo enclosures was also questioned by researchers such as Debra Forthman Quick (1984), resulting in the formulation of an ever-increasing range of new ideas and programmes. These programmes developed around the idea of providing artificial items, or ‘enrichments’, that might stimulate species-typical behaviours. Still very much in its infancy, this concept entailed different methods by which an environment could be modified for the benefit of the animals (Shepherdson, 1994). The integration of these new ideas to improve and enrich the lives of captive animals followed reasoned decisions made by zoo administrations and management, with apparently little, if any, exploration of views from the viewing public who, because of their very attendance, had been responsible for keeping zoos in operation. As changes have taken place, a strong ethical paradox has developed relating to the keeping of animals in captivity. In presenting an understanding of ecological education, along with an appreciation of the conservation of wild animals, zoos have attempted to motivate the interest of visitors in both the animals and the environment in which they live (Hanson, 2002). However, in these attempts, the wild animals have been confined to enclosures that are not
typical of their natural home, and their lives have been controlled to the extent that customer viewing is paramount. The different behaviours that visitors observe are limited by the conditions under which the animal is kept. Although modern improved enclosures are now markedly better for the welfare of the captive animal than previously, they continue to influence the visitor’s experience and appreciation of nature. Following her work in Adelaide Zoo, this apparent conflict led Kay Anderson to conclude:

If the message is conservational, it is paradoxically one that continues to rely for its meaning on animal captivity and rationalist conceptions of a human/animal divide (Anderson, 1995:291).

During the latter half of the 20th century, numerous wide-reaching advances occurred globally. One such major development was the technological revolution which saw the development of mass communications, in particular the introduction of colour television. Wildlife documentaries led to a heightened awareness of the diversity of the animal kingdom and subsequently increased understanding of the pressing needs for conservation of many endangered species. As international travel became more readily available to the general populace, in some quarters it was argued that major cities no longer needed institutions such as museums or zoos which offered visitors information about the different characteristics and attributes of zoology. This argument received further support with the advancement of computer systems, culminating in inventions such as the World Wide Web by Tim Berners-Lee in 1989. However, zoo supporters have been quick to counter-argue, suggesting that numerous benefits accrue in the fields of recreation and education, particularly in circumstances involving young children. Since the earliest of times, the passion for keeping wild animals has always overcome the problems associated with keeping them. As Vernon Kisling pointed out, ‘if there were no zoo, someone would invent one, and many have done so over the past 5,000 years, in various ways’ (Kisling 2001:1).

Zoos display unusual collections of living specimens, gathered from different continents, exhibited in specialised enclosures and presented in surroundings that are representative, as closely as possible, of natural environments. The diversity is matched only by the numerous thoughts and opinions people have in relation to the way in which zoos fulfil their environmental obligations (Mazur, 2001:3). As zoos provide a home for their collections, they provide a better place for the learning and enjoyment of their visitors, helping people to understand the world of nature and contribute long-term value to communities. They are unique museums (Plates 1.2, 1.3).
Plate 1.2: Educative sign in the old elephant house at Adelaide Zoo, outlining the developments and historical changes that have taken place in the Zoo since it first opened in 1883 – a unique museum.

Plate 1.3: The main entrance to Taronga Zoological Park, 2007. The original entrance survives as a reminder of the continued progress of the zoo since visitors were first welcomed to this unique museum.
1.2 The zoo – a niche for people

Zoos symbolise an amalgam of zoology, ecology and conservation in providing education and entertainment. Generally, they have been acknowledged as providing a reliable and authentic presentation of animals, as well as formulating ideas of different behavioural patterns. Despite this, some people strongly believe that there should be no zoos, maintaining that animals are kept imprisoned in cramped artificial conditions that bear no relationship to natural surroundings. Most recently, animal rights activists have objected to zoos as a matter of principle, seeing zoos as an extension of human domination over animals, and have decried their educational value as superficial (Malamud, 1998). There are some organisations, such as the Animal Liberation Front, Last Chance for Animals and Captive Animals’ Protection Society, whose members believe that an animal should not be kept captive for any reason and that all zoos should be closed. Conversely, other organisations, such as Free the Bears Fund (formed in Perth by Mary Hutton in 1993), have developed sanctuaries specifically to supply bears to zoos, particularly since these animals have become highly endangered following the activities of humans through poaching for the restaurant trade and through massive deforestation in Asia (Ware, 2003). From their very best to their very worst, zoos expose a perpetual dichotomy of public opinion. Whereas some opinions embrace the reverence that humans hold for the wonders of creation, others deplore the desire for complete domination. For example, some see the beauty of tigers as a reason for keeping them alive in the wild, although this only incites others to poach and kill them for their fur. When the London Zoo was faced with possible closure in 1991 due to financial difficulties, the number of people who were overjoyed included philosophers (Cooper, 1991), politicians (Hattersley, 1991) and even one zoo director (Hancocks, 1991). The concern shown by the public, however, reflected contrasting feelings, as attendances rose by 50% and considerable donations, one as small as a ten-pence coin stuck to a card, arrived with every postal delivery (Barrington-Johnson, 2005). As for their abolition, zoo director David Hancocks wrote, ‘the very strong roots of zoos as cultural attractions in our society make their forced closure an impossible goal’ (Hancocks, 2001: xv). Since the displays in zoos are easy to understand and require little interpretation, they provide their visitors with a source of logical and comprehensible information. As strange and remarkable creatures excite the interest and curiosity of viewers, they inspire visitors with a desire to learn more about both the animals and their behaviour.

The International Union of Directors of Zoological Gardens was founded at Basel, Switzerland, in 1935. Although this organisation ceased to exist during World War II, in
Rotterdam (the Netherlands) in 1946, a new group, the International Union of Directors of Zoological Gardens (IUDZG), was formed. Renamed in 2000 as the World Association of Zoos and Aquariums (WAZA) this ‘umbrella’ organisation for the world zoo community reflected a more modern and global institution. In recent years, one of the most important events to influence zoos was the publication in 1993 of the World Zoo Conservation Strategy, a 76 page document conceived by the International Union of Directors of Zoological Gardens (IUDZG/CBSG, 1993). For the first time, this strategy provided a common philosophy for all zoos around the globe, as a single document defining both the responsibilities and the opportunities needed for the international zoo community to be involved in the conservation of nature. This publication emphasised the enormous potential of zoos to contribute an understanding of the world of nature to the knowledge of visitors. It pointed out that worldwide, over 1,000 zoos in organised networks annually received more than 10% of the entire world population; exceptionally high figures that were unequalled by any other similar institutions (IUDZG/CBSG, 1993: 3.2).

Zoological gardens draw their visitors from all walks of life. In Germany, zoos entertain more visitors than do museums, theatres or sports stadiums (Baratay & Hardouin-Fugier, 2002). In Canada, zoo attendances in 1989 were double those of museums and triple those of libraries (Baratay & Hardouin-Fugier, 2002). In North America alone, 122 million people pass through the turnstiles of accredited zoos and aquaria each year, a figure which exceeds that recorded for all the professional sporting events combined (Benyus, 1998). In its publication, the Australian Bureau of Statistics estimated that during 1996-97 approximately half the Australian population visited zoological gardens and aquaria, supporting an industry that generated an income in excess of $140 million (Australian Bureau of Statistics, 1998). This continued patronage of large Australian zoos, together with associated government funding, has been dependent upon the presence of satisfied visitors.

Carol Scott, writing in Museum National, noted that ‘there is disquieting evidence that museum attendances world-wide are beginning to decline’ (Scott, 1999:20). Scott further indicated that in Australia, visitor attendances to traditional museums declined by 12% in the decade commencing 1991. This downturn in attendances at museums was confirmed by Peter Costigan (2000:13), who cited an Australian Bureau of Statistics publication to point out that attendance numbers at Australian museums fell by 8.9% between 1995 and 1999. However, statistical data recorded in annual reports indicated that this phenomenon of decline in museum attendances was not observed in the numbers visiting zoos. During the same period,
Sydney’s Taronga Zoo experienced an increase in visitors in the order of 40%, with its annual attendance rising from 826,992 in 1989-90 to 1,162,794 in 1999-2000 (Zoological Parks Board NSW, 1990, 2000). Attendance figures for the two financial years (2000-01 and 2001-02) show that this trend has continued, supporting data from AMARC indicating that Taronga Zoo was clearly the most popular ‘museum’ in Sydney (AMARC, 2002) (Figure 1.1).

![Attendance Chart](image)

**Figure 1.1 : Annual attendance at four selected museums in Sydney.**


*Source: Australian Museum Audience Research Centre Visitor Numbers Database.*

(AMARC, 2002)

Similar patterns were observed at Adelaide Zoo where attendance figures reflected an increase of 23% for the period 2000-01 to 2003-04, which culminated in the zoo receiving an award as South Australia’s most outstanding tourist attraction in 2004 (Royal Zoological Society of South Australia Inc., 2004).
Zoos have always attempted to display the animals in their care in such a manner that visitors can view them as clearly and as closely as possible, an objective which has often had a higher priority than the care of the animals. In 1864, the glass walls of the monkey house at London Zoo provided visitors the opportunity to see the animals ‘reproduce as nearly as can be the circumstances under which these animals live in their native haunts’ (Edwards, 1996:27), although the health of the animals was affected by the lack of sunlight and fresh air. A new lion and tiger enclosure opened at Adelaide Zoo in 1896 was lined with white tiles to ‘furnish an excellent background for visitors, including natural history students and artists’ (Anderson, 1995:283).

As zoological gardens have undergone their advancement from menageries to elite centres of research in preservation and conservation, education has progressively become an increasingly significant feature in their approach to dealing with the constant source of visitors. Today the ever-increasing number of zoos provides visitors with thought-provoking and reflective experiences, many of which can be quite meaningful and long-lasting. As specialised institutions, they provide the ideal atmosphere for learning, a learning which allows individual visitors to develop personal understandings regarding the world of nature. Since learning is influenced by physical situations, the content and design of the different enclosures control what can be learned by visitors, although the specific nature of what knowledge is actually gained will vary greatly from person to person. From their visit to a zoo, visitors take with them information, memories and inspirations. The meanings that they develop from their experiences can be greatly prejudiced by prior knowledge, attitudes, sentiments and interests. As visitors wander through the zoo surroundings looking at the different displays, the complex interplay between the knowledge and experience they bring with them and what they take away provides an excellent opportunity for zoo visits to become highly personal experiences.

Throughout their stay, visitors can see, hear, smell or even be splashed upon by some of the world’s most endangered species. These viewers are provided the opportunity of being able to observe at close proximity a wide diversity of nature’s creatures and subsequently they can develop a better insight and appreciation of both the animals and their behaviours, together with an understanding of some of the intricacies of the world of nature. Elizabeth Hanson (2002) considered that to the human observer, one of the greatest pleasures derived from visiting zoological gardens was that, in a short period of time, it was possible to glimpse a vast spectrum of the inventions and creativity of nature in a pleasant and enjoyable setting.
that covered only a few hectares of space. However, many conclusions relating to visitors have been based on assumptions, particularly since little research has been carried out on the perceptions of visitors (Alfonsi, 2005).

For more than a century, the people of Adelaide and Sydney have enjoyed the traditional visit to the zoo (Plates 1.4, 1.5, 1.6). Despite changes in technology and fashion, visiting the zoo has remained one of the few recreational and cultural experiences which have continued to be popular. This thesis is predicated on the realisation that zoos are not merely collections of animals; that they are as much about the people who visit as they are about the animals on display. Fundamentally, zoos are a collection of animals, but just as importantly, they provide a place where visitors can experience the enjoyment of watching these animals; as they have been since they first opened, they are a niche for people.

Plate 1.4: Visitors approaching the hippopotamus enclosure and the elephant house in Adelaide Zoo, circa 1910.

(Photograph B 68970 courtesy of the State Library of South Australia)
Plate 1.5: Visitors waiting to enter Taronga Zoo on opening day, 7th October, 1916.

Plate 1.6: Zoo Director, Albert Sherbourne le Souef, accompanying some of the first visitors to walk in the grounds of Taronga Zoo on opening day. As it has always been, the zoo is a niche for looking at people.

(Photographs 0030 and 0031-kind permission Zoological Parks Board NSW)
1.3 The zoo – a niche for research

Many of the changes brought about by the technological revolution of the 20th century caused a re-evaluation of basic philosophies within the zoo, although it has only been in the last few years that zoos have been subjected to any form of rigorous critical analysis. Because of the increased interest in animal rights, and greater appreciation of conservation, zoo animals have been studied more closely than previously (Kelly, 1989). No longer has the management of wild animals within a captive environment been restricted simply to meeting basically essential husbandry requirements. This process now requires the development of more naturalistic enclosures along with a new approach to the keeping and care of captive animals. The explosive shift in animal behavioural research came about following the passage of welfare legislation (AWA, 1985) and the development of the innovations of Hal Markowitz (1974, 1978), who proposed the idea of behavioural engineering. Although this new concept provided a learning potential for visitors, zoo professionals were concerned that the term might be interpreted as engineering the behaviour of the animal rather than engineering the environment to improve the animal’s welfare (Markowitz, 1982).

In 1973, when the Nobel Prize in Physiology and Medicine was awarded to Karl von Frisch, Konrad Lorenz and Niko Tinbergen, the citation stated that they were the chief architects of the new science of ethology (Eisner & Wilson, 1975:6). As the study of wild animal behaviour, ethology had been slowly developing and expanding since the beginning of the century, but it was not until after World War II that it advanced adequately to be systematically applied for improving the conditions of captive animals. Increasingly, ethology has been used by zoo curators and psychologists to develop new and different techniques to encourage natural behaviours and benefit captive animals. One of the main aims of these new developments has been to eradicate neurotic and stereotypical patterns of behaviour, which have often been observed by visitors and commented upon unfavourably, even if mistakenly (Frede, 2003). It was anticipated not only that these new methods would benefit the animals, but that the potential existed to further develop a better understanding of the patterns of animal behaviour amongst the viewing public (Mazur, 2001). Within the zoo community an increased consciousness developed of the interests of the viewing public, and of visitors’ expectation that everything surrounding the animals should be presented in a noticeably more natural and visitor-friendly manner (Bitgood, 1999). Consequently, the fundamental components of the zoo changed, with the development of settings and enclosures being
followed by innovations and improvements relating to the care of the animals on display. By the 1980s, zoos were no longer regarded solely as institutions that existed simply for keeping and displaying animals found in the wild. Zoos had expanded to embrace aspects of conservation and research, and at the same time it was apparent that they had also incorporated the most important roles of education, learning, and communicating with the visiting public. Despite the large amount of animal-based research that has taken place in zoos around the world, references to zoo audiences have been based upon assumptions rather than on detailed findings.

In analysing the many critical challenges faced by zoos, Nicole Mazur (2001) pointed out that many of the research projects conducted by Australian zoos have been exclusively biological studies that have primarily emphasised single species and have relied on highly technical information. Current thinking of researchers such as Steve Martin (1999), Adam Stone (1997), and Robert Young (1995) has proposed that captive animals need to be occupied for their well-being, and indeed their very survival, particularly since so many of the animals on display in the zoo are representative of some of the world’s most vulnerable and valuable species. Although the main topics of research in zoos revolve around the physiology and psychology of animals, as an incidental the uniqueness of these same animals provides countless hours of enjoyment and entertainment for viewers. Viewers, by their very attendance, provide the life-blood for the actual existence of the zoo in the public arena.

In developing an understanding of the characteristics of their audiences, it has been common for zoos to adopt museum findings, particularly in relation to visitor studies. Zoo administrators have welcomed the findings of researchers such as Beverly Serrell (1977) and John Falk et al. (1985), even if at times indiscriminately, on the assumption that their audiences were similar and that any techniques utilised would be common. Stephen Bitgood has carried out extensive research in museums, science centres and zoos where he studied the impact of exhibits by applying psychological principles. Bitgood indicated that data collected in zoos produced similar results to those collected in museums (Bitgood, 1999). This was supported by researchers such as Elaine Heumann Gurian (2006) who drew parallels between children’s museums and petting zoos. Bitgood et al. (1990) found that the impact of label placement on visitors was the same, whether from a zoo or a museum. Marilyn Hood (1984) transposed her findings relating to art museum visitors directly to the zoo environment. However, Lynn Milan and Mark Wourms (1992) pointed out that although many studies have successfully developed an understanding of the way in which visitors experience museum
settings, the results were not necessarily applicable to a zoo environment, since the audiences were not necessarily similar. They suggested that the validity of such transposition needed to be substantiated, but they did not query the methodological approach and used similar techniques in their research.

An important relationship exists between zoological parks and their adult visitors. The method of communicating with these viewers in a way that both educates and entertains is seen as being a most important requirement for the continued existence of such establishments. It is surprising, then, to find that Australian research in this area is almost non-existent. The annual reports for 1999-2000 for the two largest zoological boards in Australia, the Zoological Board Victoria and the Zoological Parks Board of New South Wales, reveal that visitor-related research represented only 4% and 2% of the total publications. Subsequently, four consecutive Annual Reports for New South Wales from 2001 to 2004 (Zoological Parks Board NSW, 2001, 2002, 2003) listed no publications of any form which related to visitor studies at either Taronga or Western Plains Zoo. The limited numbers of studies which have considered visitors in Australian zoos have involved only an extremely small number of respondents. Sasha Nelson (2003) discussed research which had involved a total of just six visitors and eight administrators in three small wildlife institutions in New South Wales and the Australian Capital Territory. Alison Murray (1998) surveyed only a few senior zoo administrators to gauge their thoughts and ideas as to what these officials generally considered reflected the perception of visitors, but made no contact whatsoever with actual visitors themselves. It is apparent that the limited numbers of visitor studies that have been performed by zoos have been motivated by market research, rather than being driven by academic or qualitative investigations. The major criticisms of these market research based investigations lie in the fact that the surveys have been purely quantitative and have reported only on the actual number of visitors attending a specific programme, with no regard for motivational reasons or educational outcomes.

Reade and Waran (1996a) pointed out that it appeared incongruous that despite the fact that zoos were unmistakably one of society’s most accepted institutions, the amount of recorded research which has examined the human experience and understanding of animals was completely lacking. Many current researchers have expressed concern regarding the lack of visitor research that has been carried out in zoos (Martin & O’Reilly, 1988; McPhee et al., 1998; Tofield et al., 2003), whilst the investigation of visitor reaction in the Australian context has been described as being ‘almost non-existent’ (Nelson, 2003:52).
investigation described in this thesis established an understanding of the use that visitors made of the zoo and provided crucial analysis relating to the diverse perceptions of visitors, together with their thoughts and attitudes towards the keeping of animals in the zoo.

In the editorial to her book, Gail Durbin, Head of the Schools Section at the Victoria and Albert Museum, reported that she had found it difficult to find published material on museum audiences, and that what was available was patchy (Durbin, 1996). Some ten years later this lack of material is even more apparent in relation to zoos. Audience research has a long history in museums (Loomis, 1987), where such work has been recognised as an essential key to understanding. Workers such as Bitgood (1994) have suggested that visitor studies should be integral in the planning and development of any institution, especially in situations engaging the visitor in understanding the impact of artificial features such as enrichment. Increasingly, zoo administrators have begun to realise that there is an urgent need to research and assess the public perception and educational impact of various programmes in zoos, particularly in regard to the amount of information learned by the visitor. In describing preliminary studies in relation to visitor perception carried out in Edinburgh Zoo, Reade and Waran wrote:

little is known about how the public perceive zoo animals, and probably even less is known about people’s understanding of the needs of animals and the difficulties of providing for them in captivity (Reade & Waran, 1996a:111).

They also drew attention to the lack of research into visitors to zoos, noting that:

despite the recent growth in scientific attention focussing upon human-animal relationships, very little research has been conducted in relation to the human experience of, and relationship with, zoo animals (Reade & Waran, 1996a:109).

People visit zoos with an intention to enjoy themselves as they look at the range of exotic creatures and appreciate the wonders of the natural world (Plates 1.7, 1.8). They frequently express concern over what they envisage to be unnatural environments. They respond positively to enriched situations which stimulate what is often interpreted as natural behaviours (Tunnicliffe, 1995a). It is important that an understanding of these visitors and their interests in the different activities of animals be developed. The zoo and its visitors form an important combination; together they create an excellent place to study the behaviours of people; together they represent a niche for research.
Plate 1.7: Pelicans, swimming in their pool near the rotunda, an historic feature near the centre of Adelaide Zoo. Erected in 1884, the rotunda has provided a sheltered place for millions of patrons to have their lunch and relax, before viewing the different enclosures where they can develop an awareness of the importance of nature.

Plate 1.8: Adelaide Zoo – a place where visitors appreciate the wonders of the natural world – a zoo and a botanic garden. The magnificent landscaping throughout reflects over 125 years of horticultural care and attention.
1.4 Looking at visitors in the zoo – researching the niche

Where museums once placed emphasis on their collections or their research, they have now started to consider their audiences at the centre of their activities (Kotler & Kotler, 1998), and consequently audience research has become a prime objective. It is apparent that there is a need to understand the perception of zoo visitors and their appreciation of the different methods of display that are used within the zoo environment. Ellis Burcaw (1997) considered that many zoo professionals regarded their institutions as completely different from museums. In particular, this view developed once the modern professional zoo collection changed into something more than just an assemblage of animals. No longer interested in ‘postage stamp’ collections, world zoos have now become more involved in selective breeding, preserving endangered species and behavioural research.

Earlier research (Frede, 2003) revealed a little of the intricate nature of the connection between the visiting public and the animals that make up the zoo environment. That study examined the appreciation of visitors and their comprehension of enrichment devices used in different exhibits in a large metropolitan zoo (Taronga). Frede concluded that the amount of attention animals received from visitors was not only directly proportional to the visibility and activity of the animal, but that the ‘holding power’ of an exhibit was greatly influenced through the provision of visible enrichment items (Frede, 2003). Although initially visitors did not fully appreciate nor understand the use of enrichments, it became clear that animal interactions with the various devices kept visitors at exhibits for considerably longer periods of time. This resulted in a deeper appreciation by viewers, not only of the animal itself, but of the efforts being made by the zoo to improve the care and quality of life for captive animals. However, that research merely confirmed the need for further investigative studies to generate more information to develop a better understanding of the reactions of visitors in the zoo.

To make an informed contribution, this research focused on visitors in two different zoos. Both quantitative and qualitative approaches were utilised to target a wide range of visitors, in order to develop a better understanding of the perceptions of visitors to zoos, so that any conclusions reached were derived from factual information rather than formulated from ideas which had been based upon assumptions, as had been the situation previously. The overall aim of the work was to provide information that could be used effectively by zoo administrations in learning more about their visitors. The investigation developed a profile of the actual audience in the zoos, such as who the visitors were, where they came from, why
they visited and how often they came. Throughout the research, both objective and subjective measures were used to develop an understanding of the visitors. Objective measures, based on facts, provided demographic characteristics and participation data. Subjective measures, based on attitudes and opinions, provided personality characteristics such as attitudes, interests, motivations and perceptions. Armed with a greater understanding of visitors, zoos will be in a better position to develop new programmes and to market these more effectively, as they attract new and returning visitors and provide improved levels of knowledge and understanding of the living creatures that comprise these unique forms of museums.

To demonstrate the association between this current research and the overall field of study, some of the conclusions reached by previous researchers in the field of human experiences in zoological settings, which have been described in the literature, are discussed briefly in Chapter 2. Today, animals in the zoo represent more than just a shadow of our ancestral past – they are the last remaining ambassadors of a world that is rapidly becoming less wild. To track the changes that have taken place, there is a need to re-examine the creation of the first zoos over 4,500 years ago. Along with a brief review of the historical background of zoos, a broad view is presented of some of the changes that have taken place relating to the care, concern and welfare for captive zoo animals. Once primarily amusement parks, zoos are now the front runners in attempts to brighten the future for the rare animals in their keeping. This chapter outlines the ways in which the keeping and care of animal collections progressed from the haphazard organisation of menageries maintained solely for ‘the gratification of curiosity and the underlining of the magnificence and power of their owners’ (Hoage et al., 1996:125) to zoological gardens which were ‘understood to be places that privilege scientific endeavour and public education’ (Rothfels, 2002:19).

Any scientific research is a strategic exercise, and tactics are simply aspects of the strategy (Van Wagenen, 1991). The tactics used in this research are outlined in Chapter 3. An historical overview of the two Australian zoos studied draws attention to some of the similarities and differences that had an impact upon their viewing public. The different sampling techniques, the methods of data collection and the statistical procedures utilised to determine and analyse the quantitative and qualitative results are outlined. An explanation is provided of the way in which both objective and subjective measures were utilised to assess the patterns of behaviour of visitors and to determine their various levels of interest in both the animals and the displays.
The results obtained from these approaches, together with the significance of the findings, are discussed in the following four chapters. A demographic profile for the typical visitor to the zoo is developed in Chapter 4. This profile includes the age range of those who actually visited the zoo, with whom they came, whence they came, and the length of time spent visiting, together with their motivational reasons for visiting. The frequency of visitation is considered, along with an examination of the differences between frequent and infrequent visitors to the zoos.

Having developed the general profile of a zoo visitor, an understanding of the behavioural patterns of viewing is explored in Chapter 5. This chapter details the viewing times of visitors and examines some of the factors that influenced the length of viewing times at exhibits. A quantitative approach to the topic of ‘zoo fatigue’ and the way in which this influenced the viewing patterns of visitors was developed. The popularity of exhibits was explored, and the concept of the ‘half-life’ of viewing times at an exhibit was also developed.

An understanding of the perceptions of these visitors and their thoughts regarding the different components of the zoo is explored in Chapter 6. This chapter deals specifically with the appreciation of visitors for the aesthetics of different zoo enclosures and their perception of the different animals, particularly since ‘the aesthetics of the zoo enclosure, and particularly the environmentally enriched enclosure, is a subject that has not been adequately reviewed’ (Murray, 1998:53). Through examining these human experiences, an understanding of the perceptions of these visitors was established, particularly in relation to their likes and dislikes regarding the zoo and the animals on display. This section further ascertained how successful the various exhibits were when observed through the eyes of the viewing public.

Specific examples are discussed in Chapter 7, where the unique learning opportunities that exist within zoos are emphasised. This chapter looks at the usage made by visitors of exhibit signs, along with their awareness and appreciation of enrichment devices. The thoughts of visitors about the hypothetical feeding of live prey to certain carnivorous animals were assessed and the results compared with similar research work that had been carried out in Scotland.

A single research project, such as this, will not solve all of the major problems and questions relating to the people who visit the zoo. However any investigation should provide valuable information which may assist in progressing towards an informed and acceptable
solution founded upon factual detail, rather than one based on conjecture and supposition. Certain limitations are inherent in any research programme. In particular, it was obvious that the thoughts and perceptions of different visitors were governed by many different factors, only some of which had been considered in planning this research. This research revealed that a number of these factors related to attracting viewers’ attention, which significantly increased the amount of time visitors spent viewing exhibits. Consequently there is potential for increasing opportunities for learning, one of the key roles of the zoo mission.

The purpose of this research was to examine the thoughts and actions of people who actually visited the zoos. It was apparent that some meaning could be gained from the studies comprising this research, so that conclusions reached should be able to be regarded as significant in formulating ideas relating to the leisure patterns of people looking at animals in the zoo. These conclusions are outlined in Chapter 9. As zoos have increasingly placed more emphasis on different programmes, so too they have the potential to develop further an understanding of the positive reaction of visitors towards the zoo and its collections. The apparent lack of available information was considered sufficient to justify the significance and need for this research, which may, in some small way, redress the limited amount of recorded data.

Throughout time, the history of zoos has reflected many perplexing and unacceptable events that have revealed various relationships that have existed between humans and wild animals. Since they are not merely some recent aspect of human activity, it is important to consider an account of this unique human-animal history, so that by recounting part of these fascinating aspects of human history, a useful background for assessing the intrinsic worth and ethics of zoos may be achieved. This unique human-animal institution combination represents an area for research, even if only because in the past it has not received adequate attention. The historian Max Oelschlaeger summarised his thoughts thus:

The world becomes merely a stage upon which the human drama is enacted. The wild plants and animals, the web of life with which our humanity is bound and without which the human drama could not be enacted, become bit players (Oelschlaeger, 1991:7).

An appreciation of the accuracy of this statement can be developed by considering the different ways in which collections have been assembled throughout the centuries. Research into visitor perceptions can provide valuable information for developing an informed basis of programming developments, rather than one which has been based upon conjecture and supposition.
The World Zoo Strategy noted that zoos reach hundreds of millions of people all over the world, the majority of whom live in urban areas with little, if any, contact with nature (IUDZG, 1993). The strategy recognised that these people visit the zoo because in one way or another they have an interest in animals. Whatever that level of interest may be, the zoo has the potential to offer its visitors an experience with ‘an unequalled potential to heighten awareness of the importance of nature’ (IUDZG, 1993: 4.1). As zoos place more emphasis on understanding their audiences, there is the potential to develop a better appreciation and knowledge of the most important animal that frequents the zoo – the human visitor (Plate 1.9).

Plate 1.9: The most important animals in the zoo - human visitors at Koala Walk-about at Taronga Zoo