‘To create a world leading conservation and education facility designed to immerse, inspire and engage Australians.’

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I also warrant that my final report is original and does not infringe the copyright of any person, or contain anything which is, or the incorporation of which into the final report is, actionable for defamation, a breach of any privacy law or obligation, breach of confidence, contempt of court, passing off or contravention of any private right or of any law.

Signed: Matthew Fuller

Dated: Thursday, August 02, 2012
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INTRODUCTION

‘To create a world leading conservation and education facility designed to immerse, inspire and engage Australians.’

The 2008 IUCN Red List states that 16,928 species are threatened with extinction and are classified within the 3 highest risk categories used to assess wild animal populations, another 3,796 species are near threatened. With varying theories among conservationists on the critical threatening processes affecting these wild populations, one thing is certain, the greatest threat to the environment, biodiversity and the animal world as we know it is mankind.

The Taronga Conservation Society of Australia (Taronga) is a zoo based conservation organisation with a vision to ‘secure a shared future for wildlife and people’, and lives out this goal through the work of a number of multi faceted operations, the most prominent being its two zoos; Taronga Zoo – Sydney, and Taronga Western Plains Zoo – Dubbo.

Contained within these properties are a diverse range of operations, from dedicated animal research facilities undertaking ground breaking and sometimes world leading research, through to hospitality operations designed to immerse, inspire and delight visitors. Every aspect of both operations has one goal in mind, securing a shared future for wildlife and people, and to exist and succeed, for the wild.

My Churchill Fellowship focuses on the operation of Taronga Western Plains Zoo, Australia’s first open range zoo, and the first to undertake many of the functions it is made up of today. The objective, ‘to create a world leading conservation and education facility designed to immerse, inspire and engage Australians’. This broad ranging objective headlines the incredibly diverse range of operations that exist at Taronga Western Plains Zoo, put simply, the goal is to ensure a long term sustainable operation that will continue to prosper for the benefit of wild animal populations through the connection with, and education of, zoo visitors and the community.

To do this I have chosen to research three main areas of opportunity aligned with the future vision for Taronga Western Plains Zoo:

1) Zoo based or nature based safari style accommodation and hospitality operations
2) Sustainable animal collections considering options for cooperation and collaboration
3) Self drive exhibit design and operation, as well as other exhibit design and interpretation

It is intended that the recommendations from my fellowship study will validate existing theory and business planning, guide design and development of future capital investment, and create new partnership opportunities for the zoo at a global level.


Edited by Jean-Christophe Vie, Craig Hilton-Taylor, Simon N. Stuart
ACKNOWLEDGEMENTS

Although there are many people who have contributed toward the achievement of my fellowship, my travel itinerary and study, I must acknowledge and pay thanks to the following organisations and people who have been instrumental in helping me to achieve an ambitious program whilst learning such an enormous amount. I very much appreciate the immense support from the following people:

Mr Paul Tys – Chief Executive Officer
Ms Meg Gilmartin – National Office, Canberra
Ms Tracey Cain – Director NSW
Ms Lynne Challenor – Churchill Fellow and Volunteer Mentor
And the Churchill Trust generally for supporting me as a 2011 Churchill Fellow.

Mr Cameron Kerr – Director and Chief Executive, Taronga
Mr Zac Jones – Commercial Operations Manager, Taronga Western Plains Zoo
Ms Joanne Murphy – Executive Assistant, Taronga Western Plains Zoo

Ms Ros Wilkins – Executive Assistant, Tourism & Marketing
Mr Glenn Phillips – Managing Executive Tourism & Marketing
Mr Paddy Gordon – Manager Table Mountain National Park
Dr Markus Hofmeyer – General Manager Wildlife and Veterinary Services

Mr Chris Rumbell – Principal Consultant, Vision XS South Africa & Australia, along with wife Jenny Mills

Ms Robin Sawyer – Executive Officer, Conservation Centres for Species Survival (C2S2), USA

Ms Sonia Jennings – Campus Travel, Sydney

Bridgett and Annabelle Fuller, my incredibly supportive, loving and devoted wife and daughter...

Generally, I would also like to thank the large number of people who took time out to meet with me and share their insights and experience. I acknowledge and thank all of those listed in the attached program outline.
EXECUTIVE SUMMARY

Taronga Western Plains Zoo, Australia’s first open range zoo has become renowned the world over for its success with conservation programs for endangered wildlife. The zoo is now faced with two critical challenges for the future; the first, the decline in the regional domestic tourism market, requiring an innovative change in the ongoing business model to support its diverse conservation portfolio. The second, maintaining sustainable well managed populations of critical wildlife species within Australasian zoos.

The chance to undertake a Winston Churchill Fellowship has been an incredible opportunity which has exposed me to information that will have a profound effect on the future operation of Taronga Western Plains Zoo. Travelling to three continents, I have been able to learn and experience more in a six week period than would be possible over years in a normal operating environment. Thirty six formal site inspections, over four thousand kilometres of vehicle travel, and around six thousand photographs all combine to an immense amount of knowledge gain not possible without such an opportunity.

1; South Africa provided incredible insight into the operation of ‘Safari Style’ lodge accommodation as well as an increased understanding of the operating environment that large conservation organisations such as South African National Parks are faced with. The opportunities for collaboration and partnership are immense. 2; The United Kingdom gave me the opportunity to see first-hand one of the world’s most established and prominent open range facilities, Whipsnade Zoo, credited with influencing much of the initial design and layout of Taronga Western Plains Zoo.

Visits to the renowned ‘Safari Parks’ dotted throughout the UK provided the chance to appraise self drive through exhibits and their potential application in Australia. 3; The United States provided the chance to review some of the most renowned open range zoo facilities including San Diego Zoo Safari Park, another credited with influencing the establishment of Taronga Western Plains Zoo. These zoos, along with a visit to Walt Disney World’s, Disney Animal Kingdom, gave me the chance to see what many consider as some of the world’s greatest displays of African wildlife outside of Africa. The trip availed my attendance at the Conservation Centres for Species Survival conference in Ohio, including a workshop with the International Rhinoceros Foundation on the future management of the captive Southern Black Rhinoceros program.

For Taronga Western Plains Zoo, my fellowship travels and study have validated our existing business planning and inspired new thought on potential activities that the zoo can embark upon into the future. The best method to disseminate this information and learning to the broader Australian community is to enact upon the recommendations listed in this report, and in doing so, deliver exciting innovative projects on the ground within our operation, thus ensuring the continuance of critically needed wildlife conservation program participation.

Changes in the makeup of zoo revenue through to influence and consultation on legislation affecting our industry are part of the following report, made possible by the generosity of the Churchill Trust, who I would like to sincerely thank for their support, assistance and very warm welcome as a 2011 Winston Churchill Fellow.

Reference, Beauty and the Beasts Published by Surrey Beatty and Sons, Author Dr Ronald Strahan, former Director Taronga and Western Plains Zoos.
# PROGRAMME OUTLINE:

<table>
<thead>
<tr>
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<th>SITE</th>
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<td>Pretoria, South Africa</td>
<td>South African National Parks Head Office</td>
<td>Glenn Phillips – Managing Executive, Tourism &amp; Marketing</td>
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<td>Peter Nouvelle – Coordinator Conservation Services</td>
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<td>Joep Stevens – General Manager, Tourism Operations</td>
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<td>Ros Boyd-Monk – Executive Assistant Tourism &amp; Marketing</td>
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<td>National Zoological Gardens of South Africa, National Research Foundation, Pretoria Zoo</td>
<td>Dr Clifford Nxomani – Managing Director</td>
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<td>Dr Abeda Dawood – Manager, Collections &amp; Conservation</td>
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<td>Craig Allenby – Manager, Commercial Services and Business Development</td>
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<td>Prof Antoinette Kotze – Manager, Research &amp; Scientific Services</td>
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<td>Ulrich Oberprieler – Manager, Conservation Education &amp; Public Engagement in Science</td>
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<td>Dr Ian Espie - Head Veterinarian</td>
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<td>Dr Adrian S.W. Tordiffe – Clinical Veterinarian</td>
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<td>Johannesburg Zoo</td>
<td>Louise Gordon - Acting CEO</td>
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<td>Lorna Fuller – Senior Manager, Nutrition &amp; Environment</td>
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<td>Tshepang Makganye – Executive Manager, Animal Department</td>
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<td>Dr Brett Gardener – Associate Veterinarian</td>
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<td>Ann Van Dyk - Founder</td>
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<td>Singita Lebombo &amp; Sweni</td>
<td>Deirdre Opie – Head Guide, Singita</td>
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<td></td>
<td>James Harding – General Manager, Singita</td>
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<td>Dr Harry Biggs – Program Integrator: Adaptive Biodiversity Outcomes, Conservation Services Division, SAN Parks</td>
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<td>Dr Markus Hofmeyr, General Manager Wildlife Management facility SAN Parks.</td>
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<td>Table Mountain National Park Head Office, Orange</td>
<td>Paddy Gordon – Park Manager, Table Mountain National Park</td>
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<td>Zoological Society London - Whipsnade Zoo</td>
<td>David Field – Zoological Director, Nick Lindsay – Senior Curator, Whipsnade, Laura Friedman – Marketing Manager, Lee Sambrook – Assistant Curator Elephants, Veronica Watkins – Deputy Team Leader Asian</td>
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<td>David Field - Zoological Director, Owen Craft – Marketing Manager, Paul Pearce-Kelly – Senior Curator, Chair, WAZA Climate Change Taskforce</td>
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<td>Dan Beetem – Director, The Wilds</td>
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<td>Jack Grisham – Vice President Animal Collections, Saint Louis Zoo</td>
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<td>Evan Blumer – Principal, Osomono Ltd</td>
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<td>Wildlife, Habitat and Conservation Strategy</td>
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<td>Susie Ellis – Executive Director International Rhino Foundation</td>
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<td>Joe Christman – Animal Operations Manager, Disney Animal Kingdom</td>
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<td>Carmi Penny – Director of Collections</td>
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<td>Husbandry Science, Curator of Mammals</td>
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<td>Nicki Boyd – Behaviour Husbandry Manager</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Bob Cisneros – Animal Care supervisor, Collections Husbandry Science Dept</td>
</tr>
</tbody>
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REPORT SUMMARY

My Churchill Fellowship focuses on the operation of Taronga Western Plains Zoo, Australia’s first open range zoo, and the first to undertake many of the functions it is made up of today. The objective, ‘to create a world leading conservation and education facility designed to immerse, inspire and engage Australians’. This broad ranging objective headlines the incredibly diverse range of operations that exist at Taronga Western Plains Zoo, put simply, the goal is to ensure a long term sustainable operation that will continue to prosper for the benefit of wild animal populations through the connection with, and education of, zoo visitors and the community.

To do this I have chosen to research three main areas of opportunity aligned with the future vision for Taronga Western Plains Zoo:

1) Zoo based or nature based, safari style accommodation and hospitality operations
2) Sustainable animal collections, considering options for cooperation and collaboration
3) Self drive exhibit operation, as well as other exhibit design and interpretation

It is intended that the recommendations from my fellowship study will validate existing theory and business planning, guide design and development of future capital investment, and create new partnership opportunities for the zoo at a global level.

The decision to travel to three continents, South Africa, United Kingdom and the United States was to pursue the necessary information broadly established to undertake the following priority objectives in each country:

**South Africa**

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<tbody>
<tr>
<td>1</td>
<td>Visit South African National Parks national head office in Pretoria to develop an understanding of the overall landscape, both on the wildlife conservation side, and the commercial tourism aspect.</td>
</tr>
<tr>
<td>2</td>
<td>Kruger and Table Mountain National Parks, to experience Safari Style accommodation lodges and tented operations in a natural ‘authentically African’ environment.</td>
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<tr>
<td>3</td>
<td>Undertake visits to both Johannesburg Zoo, and the National Zoological Gardens Pretoria.</td>
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<td>4</td>
<td>Consider all partnership and collaborative wildlife research program activities that may be possible.</td>
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* Note: Initially my fellowship submission included time to be spent in Namibia pursuing similar objectives as the South African component. In the interest of time, distance, coordination and in many cases duplication, this was removed from the itinerary to allow the South African component to be more productive.

**United Kingdom**

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<tr>
<td>1</td>
<td>Undertake visits to both of the Zoological Society of London properties, London Zoo and Whipsnade Zoo.</td>
</tr>
<tr>
<td>2</td>
<td>Visit a number of the UK’s ‘Safari Parks’ with specific attention to the self drive through nature of their operation and exhibits. i.e. Direct available contact between the wildlife displayed and visitors</td>
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My fellowship concluded after 6 weeks around the world travel in three continents, conducting 36 formal site inspections, travelling over 4,500kms by motor vehicle, and capturing over 6,000 photographs. The following information is an account of the key components of this travel, and the high level key recommendations for consideration and implementation at Taronga Western Plains Zoo, or for the information of the broader Australian zoo industry and tourism visitor economy.

Throughout the following report, recommendations are placed adjacent to the first area where they were considered relevant and identified. To simplify and avoid duplication, I have not included like recommendations again in scenarios that may have warranted such. A number of properties will have produced similar learning and insight and although these may not have extensive recommendations adjacent to their review and comment, it does not in any way reflect on the quantity or quality of the experience gleaned from these sites.

### United States of America

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<td>1</td>
<td>Attend the ‘Conservation Centres for Species Survival’ (C2S2) annual conference in Ohio.</td>
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<tr>
<td>2</td>
<td>Undertake a site visit to Walt Disney Worlds, Disney Animal Kingdom and the Animal Kingdom Lodge in Orlando Florida.</td>
</tr>
<tr>
<td>3</td>
<td>Undertake site visits to three major world renowned open range facilities, San Diego Zoo Safari Park, Fossil Rim Wildlife Centre, and The Wilds in Ohio.</td>
</tr>
<tr>
<td>4</td>
<td>Consider all partnership and collaborative wildlife research program activities that may be possible.</td>
</tr>
<tr>
<td>5</td>
<td>Consider all commercial business opportunities within the range of properties, particularly zoo based accommodation activities.</td>
</tr>
</tbody>
</table>
REPORT PART ONE – South Africa

Before reflecting on my time in South Africa, I must acknowledge and thank Mr Chris Rumbell of Vision XS – South Africa and Australia, who was instrumental in providing contacts and assistance for the planning of the South African leg, as well as travelling with me through the duration. His contacts, particularly in South African National Parks, as well as his experienced provision of local knowledge allowed me to cover much more ground than would have been possible alone. Chris, along with the support of his wife Jenny Mills, contributed greatly to the success of the South African leg of my fellowship studies. It is greatly appreciated.

The primary objective for my time in South Africa was to learn about the overall operating environment within which South African National Parks works, as well as to spend time in the parks and their respective operations. With Taronga Western Plains Zoo frequently referred to as the closest thing to an African Safari within Australia, it was key that I understand what the authentic African Safari experience is, and what has been created in terms of infrastructure, business planning and operation to enable visitors to undertake their own African adventures.

South African National Parks:

The first day in South Africa, aptly was largely taken up with a visit to the national office of South African National Parks (SAN Parks), meeting with key senior executive team members in the tourism and marketing department, as well as conservation services. Just prior to my visit, the release of SAN Parks 2022 future tourism business model and vision was publicly released which had created much public comment, seemingly with some sections of the public against plans to develop larger scale eco tourism hotel like facilities within the confines of Kruger National Park.

The meeting provided mutual opportunity to present on the operations and future directions of both Taronga Western Plains Zoo, and South African National Parks. Quite surprisingly this highlighted many similarities in both organisation’s core business, and overall strategic plans. SAN Parks three strategic focus areas - Conservation, Tourism, and Constituency Building, align similarly with the operation of many modern day zoo based conservation organisations.

Other meetings with senior management of SAN Parks were undertaken over the two week visit, across various sites and operations across Africa encompassing a broad range of activities from Veterinary and Wildlife Services, Conservation Services, and Tourism and Marketing. A total of nine days was spent reviewing SAN Parks operations across three key locations, the Pretoria national head office, Kruger National Park, and Table Mountain National Park.

It was evident that one of SAN Parks key strategic objectives is to increase the participation within parks and within the black South African community. Currently this market segment only accounts for around 25% of domestic visitation, but interestingly only 8% of overnight visitation. I was informed that SAN Parks consider their role within the tourism operations, is to provide accessible accommodation and value added components that enable participation across the broadest range of the domestic population. The international market place is largely handed to the privately owned concessionaries who operate within or near the National Parks.
The below table provides an overview of the key commercial operating statistics for SAN Parks:

<table>
<thead>
<tr>
<th>Summary of key commercial operating statistics ³</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 million Visitors 2010 – 2011 Financial Year to National Parks</td>
</tr>
<tr>
<td>Currently around 1.4 million visitors per year to Kruger National Park</td>
</tr>
<tr>
<td>85% of operating budget achieved via self generated revenue streams</td>
</tr>
<tr>
<td>Operating Budget of approximately R919 million (Approx $109 million Aus – July 2012)</td>
</tr>
<tr>
<td>Salaries and Wages account for R516 million (Approx $61 million Aus July 2012) or 56% of expenditure.</td>
</tr>
<tr>
<td>Approximately 3725 Permanent Employees, 647 Contractors.</td>
</tr>
<tr>
<td>Income breakdown 56% Accommodation, 26% Park Admissions, 9% Concessions, 7% Hikes and Game Drives, 2% Ancillary Retail</td>
</tr>
<tr>
<td>78% Domestic visitation by South Africans</td>
</tr>
<tr>
<td>22% International visitation</td>
</tr>
<tr>
<td>Occupancy rates achieved across accommodation venues 69% and campsites 46%</td>
</tr>
</tbody>
</table>

³ South African National Parks Overview presentation delivered by Mr Glenn Phillips Executive Manager Tourism and Marketing.

- An area of key interest to me was the SAN Parks model of operating PPP’s, or Public Private Partnerships. SAN Parks have operated this business model since the year 2000, and in this time have established 11 concession lodges, 21 retail shops, and 17 Restaurant facilities throughout their national park areas. Concession Lodges are operated generally on a 20 year build, operate and transfer (BOT) model often referred to as a BOOT Scheme in Australia (Build Own Operate and Transfer). Other operations under license within SAN Parks facilities, such as Tigers Eye – operator of Retail stores, and Compass Group for the provision of food and beverage operations.

Generally PPP’s are considered beneficial to SAN Parks due to the receipt of approximately R360 million (almost $43 Million Aus - July 2012), and an additional estimated R340 million (estimated $40 million Aus – July 2012) of capital infrastructure creation. The transfer of risk to the operating partner, and the socio economic benefits that come with the creation of these additional business operations are also very valuable. It is also beneficial that these operations are able to provide a service level equivalent to world standards and appeal to the key markets of SAN Parks business operation, installing visitor and investor confidence.

Another key benefit to SAN Parks of these partnerships is the enforcement of best practice environmental management practices undertaken within the allocated concession areas, thus ensuring that the impact on the natural environment and resident wildlife populations are minimal if any.

- Visitation to Kruger National park has grown from a base of around 100,000 people per year in the post war period to around 1.4 million visitors per year today. The incorporation of PPP’s into the SAN Parks business model has enabled the development of facilities to assist in catering to this growth.
RECOMMENDATIONS & LEARNING: (Page 15)

- With future plans to develop further commercial operations at Taronga Western Plains Zoo (TWPZ) it may be pertinent to explore Public Private Partnership opportunities in the event that the zoo is not able to raise suitable capital for these developments, or the zoo does not have the in house capacity to operate these in a market competitive manner.

- Taronga Zoo key management to confer with SAN Parks senior management on the contract model in which food and beverage services are undertaken to ascertain if any shared learning availability, given that both organisations currently utilise the services of a consistent third party contractor to this end.

- Provide information and contacts to NSW National Parks and Wildlife for the opportunity to explore similar suitable PPP arrangements within NSW Parks, and the development of nature based tourism facilities across the State. Australia's Nature Based Tourism industry is worth in excess of $24 billion annually4.

- The creation of sensitive regional tourism destination development within National Parks would assist NSW in attracting a greater share of nature tourism visitation and increase the overall contribution to the NSW visitor economy.

- Another key project for SAN Parks responding to the strategic objective of Constituency Building is the membership program or ‘Wild Card’. The Wild Card has been created to offer a value proposition for repeat or regular visitors to National parks. The program currently has 85,700 members generating approximately R31.5 million (approximately $3.725 million Aus – July 2012) in revenue. Similarly to many zoo based membership programs, the Wild Card offers reciprocal benefits at other participating properties such as Swaziland Game Parks.

SAN Parks key target market accounts for approximately 75.4% of domestic visitors to National Parks and is made up of predominately English or Afrikaans speaking Caucasian families. This group also makes up 92% of overnight visits to parks, making it the key market to attract into parks across South Africa, and one which SAN Parks is heavily reliant upon for the success of its operations.

Not dissimilar to Taronga Western Plains Zoo, SAN Parks key marketing objectives include methods to attract this key market segment, but are quite limited in scope to tactical advertising, relying heavily on public relations and promotional goodwill via supporters, and utilisation of the membership database.

- It appears that like NSW and other areas across Australia, there is a strong push to create destination or experience oriented clusters for the marketing of, and other initiatives relating to tourism business attraction. Areas such as ‘Western Cape’ or ‘Kruger’ are utilised most successfully in attracting visitors, and tourism activity seems well serviced via airport infrastructure at the major gateways. Representation by local tourism organisations in some of these in tourism related areas, such as the Kruger Mpumalunga International Airport, the gateway to Kruger National Park for air travellers, and Capetown International Airport.

- Continue to engage with Inland NSW Tourism and Dubbo City Council to undertake a destination management plan for the Dubbo region.
- Experience based visitor marketing (ie; the promotion of a complete experience over individual components) will be key to the ongoing success of the Dubbo visitor economy and visitation to Taronga Western Plains Zoo.
- Continue to pursue ways in which to link the visitor experience of Dubbo and the region to the zoo as the major attraction. Initiatives such as interpretive installations and the support of themed events, among others, can play a role in creating an overall immersive experience.

- On the wildlife front, discussions turned to Rhinoceros poaching and the dramatic increase in the numbers of animals being slaughtered across South Africa. Thus far in 2012, (July 2012) more than 250 rhinos have been poached, adding to the 452 animals lost in 2011. Kruger National Park has suffered heavy losses of animals, particularly in the East within close proximity to the Mozambique border, the eastern boundary of Kruger. Rhino horn is sought after in many Asian countries for its perceived medicinal qualities, and with a burgeoning middle class across many areas of Asia, individuals with the financial means are adding to the demand for Rhinoceros horn and products derived from it. Research into the anatomy of the Rhino skull was also discussed, and will be undertaken in an effort to better understand the effects of de-horning of Rhinos, one method being undertaken in some areas to prevent the senseless destruction of the animals for their horn.

- Meeting with Dr Markus Hofmeyr – General Manager Veterinary and Wildlife Services, I was able to inspect his department base in Skukuza, Kruger National Park, including laboratories and the main game capture bomas. I was able to thank Dr Hofmeyr for his recent assistance and communication with the TWPZ Veterinary team relating to the mortalities of 4 Southern White Rhinos to an undiagnosed cause. Dr Hofmeyr was very complimentary of the approach taken by TWPZ Veterinary Manager Dr Benn Bryant and his team in dealing with this issue and provided some insight into recent similar undiagnosed mortalities in wild populations of Warthog, Cape buffalo, and recently White Rhinoceros. Dr Hofmeyr theorised that he believes it is likely that these events could have been brought on by a virus which is very friable and hence undetected to date under laboratory investigations.

Dr Hofmeyr is keen to increase links with Taronga and Taronga Western Plains Zoo, particularly through Dr Benn Bryant and his role as the Chair of the Zoo and Aquarium Association (ZAA) Veterinary Specialist Advisory Group for

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5 Rhino Statistics – International Rhino Foundation Website, Africa Regional Program outline 2012.
Ungulates. SAN Parks has previously provided animals to Taronga Western Plains Zoo including five Southern White Rhinoceros in 2003, coordinated by Dr Hofmeyr.

RECOMMENDATIONS & LEARNING: (Page 17)

- Continue to support the International Rhinoceros Foundation (IRF), and hence, its efforts to curb the illegal poaching of Rhinoceros species in both African and Asian continents.
- Maintain contact with Peter Nouvelle and Dr Markus Hofmeyr in order to ascertain if practical for TWPZ to assist current Rhino research initiatives undertaken by SAN Parks and its collaborators.
- Continue to inform and educate zoo visitors about illegal Rhinoceros poaching and support for prevention and security initiatives across Asia and Africa.
- TWPZ to continue to support both African Rhinoceros species and maintain or increase its critical holding of Southern Black Rhinoceros, consisting of almost 25% of the entire managed population of this species held between US and Australian partners of the International Rhino Foundation.
- TWPZ to continue to support attempts to undertake research into Assisted Reproduction methods with its collaborative partners for Rhinoceros species.
- Contact the following researchers / key contacts based in South Africa:
  * Mike Knight, SAN Parks chair of the IUCN Rhino Specialist Group for further information regarding African Rhinoceros species and potential partner / collaborating organisations.
  * Dr Roy Bengis, former SAN Parks Veterinarian regarding information and contacts relating to assisted reproductive research in African wildlife species.
  * Dr Morne Delarey, veterinarian contact provided by Dr Markus Hofmeyr regarding Embryo Transfer research.
- Continue to liaise with Dr Markus Hofmeyr, and other SAN Parks Veterinary officials regarding TWPZ 2012 White Rhinoceros mortalities in order to assess if similarities experienced in wild populations, and potential diagnosis support and collaboration.
- Provide contacts and assist itinerary for visit to South Africa by Dr Benn Bryant, TWPZ Veterinary Manager in July 2012.
- Expand communication with the Onderstepoort Veterinary Campus of the University of Pretoria, currently undertaking pathology work for SAN Parks in combination with the National Zoo and National Research Foundation, Pretoria. Contact Dr Richard Burrows, Head of Veterinary Science faculty, and Dr Johanne Stale, Veterinary Pathologist.

- A clear challenge for SAN Parks as a conservation organisation articulated to me is the dilemma brought about by the fact that more money is made from hunting initiatives than across all forms of traditional tourism activities. There is also a great deal of speculation that hunting has assisted the increase in numbers of some wildlife species across the African Continent, although I was unable to assess this in any way within the scope of my fellowship studies.

- SAN Parks are currently proposing to implement a restructure in order to address new strategic priorities across the organisation, particularly those related to environmental planning and capital investment delivery. Another new priority is philanthropy having just appointed a fundraising manager at the time of my visit.

- Inspection and review of multiple SAN Parks accommodation and camping operations across Kruger National Park and Table Mountain National Park revealed, for the most part, that design and construction methods of tented accommodation within the parks was the most beneficial aspect of these inspections. The best example I
encountered was Oran Ge Kloof tented camp situated within Table Mountain National Park and part of the extensive range of walking itineraries utilised by visitors to the Park. This camp is a well constructed blend of basic, but comfortable tented accommodation, unique bathroom facilities, and a well provisioned common area which was constructed very sympathetically into its surrounding environment.

The overall experience provided by the SAN Parks operations allows a lot of freedom of choice in regard to activities and participation with very little structured activity included in accommodation facilities offered. Future plans for zoo based accommodation at Taronga Western Plains Zoo would include structured tours and itineraries for participation and education of zoo visitors.

**RECOMMENDATIONS & LEARNING:**
- Utilise extensive array of photos of African Safari lodges and unique nature based accommodation to influence and guide design and construction of accommodation facilities to be built or redeveloped at TWPZ.
- Ensure that the architecture of TWPZ developments is both sympathetic to the surrounding environment, as well as taking full advantage of its unique location within a zoo.

* Further recommendations for onsite accommodation to follow in review of private concessionaire operations.

**Safari Lodge Operations / Private Concessionaire Operators:**

Throughout my travel across Kruger National Park, South African National Parks had coor

1) Rhino Walking Safaris – Rhino Post Lodge
2) Hamilton’s Tented Camp
3) Wilderness Safaris – Pafuri Camp
4) Singita Lebombo

Privately operated concession lodges rely heavily on international visitors to the park and seemingly operate at around the 60 to 65% occupancy range. Being, generally a 20 year concession (Wilderness Safaris – Pafuri Camp excluded) with a ‘Build Operate and Transfer’ model of operation, emphasising the need to ensure a viable return within a defined timeframe. Survey information offered at a number of these lodges also suggested that 90% of
visitors were motivated by seeing the ‘big five’ (Leopard, Lion, Elephant, Buffalo, and Rhino) whilst in Kruger. All lodges operated around the same template format, with flexible arrangements offered by all, with Singita Lebombo the most highly flexible, but also the most expensive of the four inspected.

Upon arrival guests are lavished with porterage / welcome drinks and introductions to the guides and staff. Safaris are made available in the afternoon / evening following an afternoon of canapés and drinks with provision of sunset drinks at a favourite landmark or point of interest whilst on safari. Upon return a two or three course dinner is provided before retiring by the fire, or back to your lodge.

Early morning game safaris are offered following a light breakfast before returning to a larger well catered brunch. Leisure time is generally offered through the middle part of the day, or guests utilise this part of the day for personal travel between destinations within the park, or private game spotting in their private or rented vehicles.

This model of operation is standard across many lodges with some offering flexibility of tour options, such as walking safaris, or alternative meal arrangements for those who request privacy or a slower paced stay. If guests choose to participate in all activities then the days are long, with often a 4:30 or 5am start with return from evening game drives generally between 7:30 – 8pm followed by dinner.

Another similarity is the vehicle of choice for concession operators, generally being a Landcruiser, or Landrover derived 6 – 10 person open air game vehicle. The vehicles are certainly one element which really enhances the overall experience, allowing for very close proximity to wildlife of all kinds, from small ground dwelling critters through to large ungulate species and predators such as Lions and Hyena.

Overall tour guides ensure that the experience is not just about spotting the ‘big five’, with an extensive knowledge of fauna and flora, but impressively an enormous depth of knowledge regarding the native birdlife. Guides are well equipped with reference materials and guide books, as well as high powered binoculars. Additionally, in times of low frequency of wildlife sightings they ensure that they have a host a ‘stories’ in reserve to share with guests helping to build the overall experience. Reliance upon the sighting of large animals is cleverly reduced by the assurance that guests are provided with a quality guide with extensive knowledge and training.

All guides that I encountered had participated in training with Ecotraining South Africa, the company credited by them, as having the most thorough offering for their development. Ecotraining established an Australian arm a few years ago and their director and key management have stayed at Zoofari Lodge and provided our organisation with information, advice and assistance in the development of the Taronga Training Institute. It was pleasing to see their company held in such high regard throughout the park by professional guides, thus validating that our operations have in many ways, referenced best practice in their creation and operation.

Overall it is fair to say that lodges are very well appointed, in many cases despite their temporary construction methods.

**RECOMMENDATIONS & LEARNING:**

- Continue with plans to develop a range of wildlife experience based accommodation operations within Taronga Western Plains Zoo, and increase the commercial contribution by accommodation to closer to 50% of overall zoo revenue.

- Incorporate some of the key components of African Safari Lodges in the construction of the new Zoofari Lodge
product such as, generous outdoor deck areas, free standing bath, effective climate control, king size beds, indoor / outdoor showers, uninterrupted animal viewing from all tented lodges.

- Vehicle selection is an important influence on the overall experience provided to guests, particularly if offering an authentic African Safari experience.

- Investigate the cost and practicality of importing SAN Parks or privately owned Game drive vehicles for use in tour operations within the zoo, conducting a feasibility of required capacity for vehicle type and potential alternatives.

- Consider the implementation of sunset stops at a point of interest within the zoo for Zoofari Lodge where guests have the opportunity to be provided with drinks and canapés.

- Maintain dialogue with Ecotraining South Africa and consider the option of having zoo guides apply for suitable financial support to attend a course in South Africa, thus providing extensive training and knowledge development able to be passed on to other guides, as well as a strategic marketing advantage for the operation of TWPZ experience based accommodation products.

- Canvas colour is a key component in ensuring that a tented lodge feels warm, yet spacious and light. A lighter colour (beige, taupe etc) is the preferred option with tents consisting of green canvas promoting a feeling of being quite dark and cold. Ensure that canvas colour for future developments is a lighter colour for at least the majority of large walled areas and roof panels.

- Incorporate the inclusion of free ranging animals around zoo accommodation options such as Guinea Fowl, Wallabies etc as well as the incorporation of interpretation material for visitors on each species.

- Utilise natural colour palette as base for lodge construction, utilising natural materials as much as possible. Colour is promoted through the furnishings and accessories chosen for inclusion and allows for lodges to be updated and appear timeless in their construction.

- Utilise a modern contemporary method of design / fit out better reflecting a modern day African Safari experience.

- Consider attendance at the Indaba Travel Conference in South Africa, promoting links to operators and tourism wholesalers packaging safari style accommodation experiences, and further gathering tacit knowledge of the African Safari Industry.
The following is a brief summary of key facts for each concession lodge.

<table>
<thead>
<tr>
<th>Lodge Name</th>
<th>Operator</th>
<th>Concession Type</th>
<th>Lodges/Capacity</th>
<th>Location</th>
<th>Accommodation Type</th>
<th>Prices per Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhino Post Lodge Rhino Walking Safaris</td>
<td>Operated by Isibindi Safaris</td>
<td>20 year SAN Parks Concession</td>
<td>8 Lodges, capacity of 16 guests</td>
<td>Located southern end Kruger close to Skukuza, the main SAN Parks Kruger base.</td>
<td>Combination tented style / thatched roof semi permanent lodges and common areas.</td>
<td>Priced from R2,650 per person per night (approx $310 AU July 2012)</td>
</tr>
<tr>
<td>Hamilton’s Tented Camp</td>
<td>Operated by Imbali Safari Lodges</td>
<td>20 year San Parks Concession</td>
<td>6 Lodges accommodating 12</td>
<td>Located 46km from Orpen Gate in central area of the park</td>
<td>Canvas Tented constructed accommodation and all common areas.</td>
<td>Priced from R1,895 per person per night (approx $220 AU July 2012)</td>
</tr>
<tr>
<td>Wilderness Adventures Pafuri Camp</td>
<td>Operated by Wilderness Safaris</td>
<td>50 year Makuleke Reserve Concession</td>
<td>20 tented lodges – Capacity approx 55</td>
<td>Located far north Kruger NP</td>
<td>Situated on the Luvuvhu River</td>
<td>Canvas tent construction lodges with thatched semi permanent fly covering; common areas solid walled and thatched roofs.</td>
</tr>
<tr>
<td>Singita Lebombo</td>
<td>Operated by Singita Safaris</td>
<td>20 Year SAN Parks Concession</td>
<td>15 Suites capacity of 30 guests</td>
<td>Situated in northern central area of the park close to the eastern boundary to Mozambique</td>
<td>More Permanent construction with solid walled / steel and glass contained in both lodges and common areas.</td>
<td>Modern contemporary style inspired by sky... Lodges perched and covering inspired by bird nests</td>
</tr>
</tbody>
</table>
Ann Van Dyk Cheetah Centre – De Wildt, and Cheetah Outreach Stellenbosch:

Cheetah is a species that Taronga Western Plains Zoo has had great success with husbandry, management and breeding over the years. Having said that, and as one of the iconic African animals displayed at the zoo, it is intended that we expand our efforts in the display and management of these regal looking cats.

The Ann Van Dyk Cheetah Centre in De Wildt, outside of Johannesburg is world renowned as the providers of the most recognised methods of introduction and breeding in a captive environment. Ann Van Dyk and Allan Strachan are considered masters of Cheetah management and it was an enormous pleasure to meet them and to have been given a thorough inspection and tour of their facilities. This operation is also world renowned for its management and breeding of the African Wild Dog, the carnivore that has faced the most rapid rate of decline of any African predator species in recent years.

My interest in visiting this operation was to ascertain if ongoing supply into Australia of Cheetah was available from De Wildt, more specifically if genetically valuable Cheetah could be acquired, and to inspect and learn about facilities, display, interpretation and management of Cheetah. The other key part of the visit was to ascertain if the use of ‘ambassador’ animals, or hand raised tamed, or conditioned Cheetah could and should be utilised for educational display purposes at Taronga Western Plains Zoo. De Wildt has a number of tamed ‘ambassador’ animals, many having been sent to Annie Beckherling of Cheetah Outreach in Stellenbosch for raising and conditioning.

The use of these conditioned cats to engage in close contact encounters in a number of facilities around the world is an amazingly positive and powerful experience (see further later part of report – San Diego Zoo, and San Diego Safari Park) and greatly assists in educating people about Cheetah anatomy, behaviour, and its plight in its natural home range. Currently within New South Wales, it is not permissible to undertake close contact encounters, or to maintain hands on contact with a carnivore over 20kgs in size. An adult male Cheetah can be in the range of 40 – 50 kilograms and therefore not able to participate in a close contact encounter or presentation, despite this being allowed in many other states within Australia, and throughout the world.

The Ann Van Dyk Cheetah Centre will remain an invaluable source of information, experience, and a key partner in future Cheetah activities undertaken at Taronga Western Plains Zoo. I must sincerely thank Ann, Allan and the whole team at the centre for providing me with such a generous amount of their time, their hospitality, and access to all areas of the operation.

Cheetah Outreach in Stellenbosch, are renowned for their public education activities through close contact Cheetah interactions, as well as their extensive knowledge of hand rearing and conditioning Cheetah for this purpose. Additionally they also participate in a very practical method of Cheetah Conservation through their Anatolian Shepherd Dog Project in partnership with farmers throughout South Africa.

As well as further considering close contact encounters at Taronga Western Plains Zoo, I was eager to find out more about the Anatolian Shepherd Dog project, and the Cheetah Outreach teams experience in hand rearing animals. Founder, Annie Beckherling was incredibly generous with her sharing of knowledge and materials relating to all projects participated in by Cheetah Outreach. I was able to obtain all information relating to the hand raising protocols, animal encounters programs, public education, school education and conservation initiatives carried out by the facility. I greatly appreciated Annie’s time, as well as being inspired by her obvious passion and dedication to the protection of Cheetah in South Africa.
The close contact interactions that are undertaken by Annie and the Cheetah Outreach team are carried out both on premise, and in the community at large, travelling with Cheetah to schools, community groups, government and other public opportunities for education of Cheetah and other predator animals. These encounters have been a means of not only educating, but engendering enormous support for the ongoing operation of Cheetah Outreach, and also conservation programs such as that undertaken with the Anatolian Shepherd Dog project.

The Anatolian Shepherd Dog project carried out by Annie and the team involves the breeding, training and placement of dogs within flocks of domestic sheep or goats as first line defence of these herds against attack from predators such as Cheetah, Jackal and African Wild Dog. Shepherd Dogs live as one of the herd in this environment and become protectors of the herd when approached by predatory wildlife. The successful placement of these dogs within the commercial or community farming environment avoids the need for the farmer to actively hunt and destroy predatory animals that may threaten their domestic herds. This partnership also undertakes the critical element of educating farmers that there are other means of preventing attacks by wildlife predators, thus allowing them to exist alongside their operation.

RECOMMENDATIONS & LEARNING: (Page 23)
- Continue to engage Ann Van Dyke Cheetah Centre for the future acquisition of Cheetah into Australia.
- Genetically valuable founder animals, diverse from existing Australian held Cheetahs can be achieved through the Ann Van Dyke Centre due to the consistent arrival of new wild caught Cheetah into the facility.
- Engage with NSW Department of Primary Industries, Exhibited Animals Protection Agency Branch (NSW DPI EAPA Branch) to allow for public interaction with adult Cheetah. Current legislation does not allow for such within NSW despite this being available within other nearby states within Australia. (Including adjoining States ACT and Queensland)
- TWPZ, subject to approval by NSW DPI EAPA Branch, acquire and display ambassador Cheetah for close contact encounters and public presentations, increasing the effectiveness of the zoo’s public education of wildlife species.
- Consider Cheetah Outreach as a potential future recipient of Taronga Conservation Field Grants for the Anatolian Shepherd Dog Project.
- Upon developing a need (subject to NSW DPI EAPA approval) for public interaction ambassador animals, utilise Cheetah Outreach to hand raise and condition cats for their participation in such a program.
- TWPZ staff to participate in the hand rearing and conditioning of cats prior to their arrival, learning from Cheetah Outreach best practice methods of engaging in close contact encounters and presentations.
- Consider incorporating the display and interpretation of Anatolian Shepherd Dogs at Taronga Western Plains Zoo to compliment the display of Cheetah, and inform visitors of practical demonstrable conservation efforts for the
National Zoological Gardens / National Research Foundation, Pretoria Zoo and the Johannesburg Zoo:

A key element of my Churchill Fellowship travels and study was to undertake site inspections of some of the world’s great open range zoo facilities. Although the two South African Zoos visited were not of this style or makeup, they both pose potential strategic partnership opportunities in several areas. Both the National Zoological Gardens / National Research Foundation, Pretoria Zoo (Pretoria Zoo) and the Johannesburg Zoo are capable in assisting in the acquisition of African Ungulate species through their breeding and potential provision to Australian Zoos via the necessary twelve month quarantine requirement in an accredited New Zealand Zoo facility.

Pretoria Zoo may also provide a long term partnership opportunity for the Southern Black Rhinoceros program, a key threatened species program of which Taronga Western Plains Zoo is a major stakeholder (see further information in International Rhinoceros Foundation Workshop section of report). Of course, their holding of, and proximity to large populations of endemic African wildlife also creates potential partnership opportunities given the extent of Taronga Western Plains Zoos African species, some of which are critical to world-wide conservation program partnerships.

These two zoos, although quite traditional metropolitan based zoos, both have the availability of large exhibit areas generally as they have access to quite large amounts of land within these major cities of South Africa. Both zoos also provide pleasant refuge from the busy city environments they are surrounded by, and achieve a lot despite their relatively limited access to revenue, predominately it seems, due to limitations on commercial revenue opportunities brought about by the necessity of price accessibility to the broader South African resident community.

Welfare animals are a challenge for both zoos balancing the needs of the zoos’ participation in key conservation breeding programs such as the Southern Ground Hornbill, with the allocation of space and resources required to assist welfare animals, both of the pet and wildlife varieties.

Both zoos achieve significant numbers of student visits, although their ability to provide access to curriculum based or formal programmed activities for students is limited due to access to funds and dedicated resource. In Australia, a key component and proven success of large zoo organisations such as Taronga, is the ability to deliver formal education programs through a range of primary and secondary school ages. The delivery of formalised education in a zoo environment is the key to future generational change and the development of awareness and understanding of the environment, the world’s wildlife, and the impact we as humans have on their existence.

Pretoria Zoo has indicated their intention to develop a vocational training facility or National Zoological Gardens Academy, and is interested to seek advice and information in regard to the development of the Taronga Training Institute, our organisation’s registered training organisation.

The development of formal records keeping of the zoos’ animal collections is something that has been developed in recent years. In the past the ability to assess formal records of animal genetic heritage may have hindered the ability for Australian zoos to partner more readily with the major South African Zoos. Efforts in this area will assist future dealings with international partners who are used to an established history and method of animal record keeping.
Both zoos maintain additional properties, large in size to support the operations of the zoos and assist key breeding programs and conservation activities. Although these are currently closed facilities there is intent that the Pretoria Zoo may develop one of their two additional facilities into a publicly available open range style zoo facility.

Whilst both zoos participate extensively in wildlife veterinary and other general research, the Pretoria Zoo, under its National Research Foundation mandate, is very focused on the publication of peer review papers and other research material, hosting a large number of students across a range of research activities. The Pretoria Zoo - Conservation Science Centre, is also one of the major providers of veterinary pathology services to South African National Parks, in conjunction with the University of Pretoria. A genetics laboratory has also been established in this centre in recent years.

Overall, I was encouraged by the opportunity that presents in relation to ongoing communication and knowledge sharing with the two major South African zoos, particularly through their Veterinary and Research teams. I was also humbled by the attention and hospitality I received at both properties and my thanks must go to Dr Clifford Nxomani, the Managing Director of Pretoria Zoo, and acting CEO, Louise Gordon at Johannesburg Zoo, and their teams.

RECOMMENDATIONS & LEARNING: (Page 25)
- The long standing effective relationship established between Taronga and the NSW Department of Education is a key component in the successful delivery of Education programs across Taronga’s two zoos. The current delivery model of formal education programs at both properties is critical to the zoos’ strategic objectives in relation to conservation outcomes and should be maintained.
- Promote the success of Taronga’s two zoos environmental education centres more broadly, particularly the involvement in such a diverse portfolio of activities and programs. Programs such as support to indigenous youth, juvenile justice, disadvantaged schools, mainstream public and private education, community conservation, outreach programs, and school holiday programs. This will ensure that public and stakeholder awareness is high and appreciative of the world standard that is achieved, as well as encouraging other potential partner opportunities.
- Taronga Training Institute staff to engage with NZG / NRF Pretoria Zoo to assist in the development of an ‘NZG Academy’ accredited vocational training and education provider.
- TWPZ continue to communicate with the NZG / NRF Pretoria Zoo on its plans to develop an open range facility, whilst considering if formal methods of assistance or support may be offered.
- Foster relationship with key staff within both South African Zoo facilities Veterinary and Research departments to assist the availability of information across a range of African species and the associated research being undertaken within Australia.
- Formalise an arrangement with Johannesburg Zoo for the acquisition and import of Nyala and other potential ungulate species thereafter.
- Dr Benn Bryant, Veterinary Manager, TWPZ to visit both zoos Veterinary and Research teams during 2012, as well as the Veterinary Medicine faculty of the University of Pretoria, Onderstepoort Campus July / August 2012.
- Contact South African Veterinarian Paul Bartels via the Johannesburg Zoo in relation to Assisted Reproductive Technology research planned at TWPZ.
- Refer the International Rhino Foundation to Pretoria Zoo as a potential future partner in the Southern Black Rhinoceros program with the planned development of their second facility as an open range zoo facility.
REPORT PART TWO – United Kingdom

The United Kingdom itinerary of my Churchill Fellowship would provide a rather stark contrast to that just experienced in South Africa. The first visit to one of the great open range zoos of the world, the Zoological Society of London’s Whipsnade Zoo promised to be a highlight, particularly as it is credited with much of the inspiration for the development of Taronga Western Plains Zoo. The other primary objective, to undertake inspections of some of the renowned Safari Parks of England, developed around the Aristocracy’s manor homes and established in the late sixties and seventies under the guidance of the English circus family, the Chipperfields.

The United Kingdom would also provide a chance to inspect newly developed zoo based accommodation at both Whipsnade Zoo, and the Aspinall Foundation property – Port Lympne Wild Animal Park. These unique accommodation operations and other complimentary commercial activities were a priority to investigate and experience first-hand, providing learning and information that would assist in the future development of Taronga Western Plains Zoo.

Despite all the meticulous planning and preparation for the trip, a spectacular highlight occurred completely by chance. During our visit to Whipsnade Zoo, we were besotted by the opportunity to meet Sir David Attenborough. Our approach and introduction was warmly greeted by Sir David, and an instant connection with the Taronga organisation, and its work in wildlife conservation was generously recognised and acknowledged by him. Sir David has previously been to Taronga Zoo and had the opportunity to learn of the extent of our operations during his visit. As my wife Bridgett and daughter Annabelle joined me for the UK leg, a family photo with our chance encounter was a must.
Zoological Society of London (ZSL) - Whipsnade Zoo and London Zoo:

Whipsnade Zoo, located around an hour outside of London is probably the oldest recognised open range format zoo in the world opening its gates in 1932. In the seventies, its existence inspired the then Director of Taronga Zoo, Dr Ronald Strachan, to develop the Taronga Western Plains Zoo in Dubbo. Taronga Western Plains Zoo this year celebrated its 35th birthday, and is now considered by many as one of the great open range zoos of the world.

Due to its close proximity to London, Whipsnade enjoys a visitation level of around 500,000 annually, of which an impressive 40% plus, can be achieved through ZSL members. One initiative attributed to the success of the zoos membership programs is direct debit ability for member payment. The zoo allows a mix of vehicle and pedestrian traffic, although guest choosing to utilise a vehicle incur an additional charge of 17 pounds (approx $25 AUD July 2012). The zoo circuit although quite expansive would be easily congested with vehicle activity on any moderately busy day and does not allocate the same areas of roadway and parking as that offered at Taronga Western Plains Zoo. Complimentary transport options such as a circulating bus and a fantastic steam railway assist the movements of visitors.

A lovely element that is almost instantly recognised when you enter the zoo is the incorporation of a number of free ranging animal species. Patagonian Cavy, Wallabies, Small Deer and a number of bird species create a friendly immersive environment, particularly for children who regularly were taken by the exploits of these free ranging critters who they happened upon by chance. This is a great way to make a large open range zoo feel a more immersive and intimate visitor experience.

Newly established and proposed developments at the zoo were quite focused on visitor experience and commercial outcomes. The development of Lookout Lodge, the zoo’s first foray into a permanently constructed accommodation venue had been recently completed and in operation. Planning for an indoor play centre for young children was being undertaken as the next major development for the zoo. Obviously with such distinct seasonal and weather dependant visitation the advent of an indoor play centre was seen as a key strategy to provide an experience on wet, cold days, enhancing visitor experience and potentially visitation volume on these days.

Asian Elephant management at the park is quite renowned across the zoo industry with Whipsnade being one of very few zoos with the ability, legislative approval, and management of an Elephant walking program throughout public areas of the park. They have also bred many calves over time with great success in the management of their Asian Elephants. Walking activities include cows and calves and are undertaken daily, dependant on keeper resources and visitation. Utilisation of back of house areas occurs when unable to carry out public zoo circuit walking.

Whipsnade are required to manage their Elephants indoors for much of the year, similar to many European and North American Zoos, and therefore their barn considers this and contains common area housing to allow interaction between the herd. The separate bull facility adjacent to the family group area allows for protected
contact management. Gates and slides in the facilities are generally manual, and require manipulation by keeping staff, as a result, conditioning and training of animals is a critical component to safe operation.

Whipsnade also has a long history in the breeding and management of Greater One Horned, or Indian Rhino. The zoo has achieved many successful introductions and births of the species. The facility is not dissimilar to that of TWPZ with similar number of central back of house facilities and larger exhibit or holding areas for animals.

Whipsnade contains one self drive through exhibit area consisting of predominately Deer species enabling visitors to drive their own vehicle in with, and alongside the animals within the area. The area is stocked predominately with Chital (or Axis Deer) which largely avoid contact with public, due to their often timid persona, and lessens the potential of the experience (see further information on self drive through exhibits under the Safari Parks section of report).

Overall Whipsnade Zoo is quite a traditional zoo in its makeup with many of its programs having been established for many years. Recent initiatives such as the development of a permanent accommodation offering and the future development of an indoor play centre will assist in diversifying its business model and the experiences offered to visitors.

ZSL’s London Zoo is also diversifying its core business and incorporating activities that promote a better experience for zoo visitors, or a chance to engage with key target groups through extracurricular activities. My time spent at London Zoo was largely taken up with exploring and reviewing these initiatives. One such initiative is the ‘Zoo Lates’ program. ‘Zoo Lates’ is an after-hours seasonal evening activity aimed at under 30’s and provides evening entertainment within the zoo as a launching pad into nearby night spots around the Camden Town area. This summer operation has become incredibly popular and often patronage is in excess of 6,000 people per night, and run Fridays and Saturdays during the summer months of June and July.

Other initiatives conducted at London Zoo with relevance to Taronga’s operations were the running of family festival days, seasonal activities such as Santa’s Grotto, Taxi Driver and Concierge promotional activity titled the ‘Voices of London’, and online ticketing (approx 30% of visitation) and membership activity. The London Zoo retail souvenir offer was also the most expansive and highest quality of the parks I visited in the United Kingdom. The inclusion of community aid merchandise from areas such as Africa and South America was popular with visitors, as well as the branding of plush toys, either by zoo animal name, or zoo exhibit area a very popular option and lead seller.

One very effective, popular and seemingly cost effective exhibit was the walk through Squirrel Monkey exhibit, where visitors wander through a well landscaped exhibit area containing climbing structures and ropes overhead and around. Numerous Squirrel Monkeys were seen actively playing and interacting around guests, whilst volunteers manned the area to ensure the safety and wellbeing of the animals, including preventing them from being fed by public. Small primate walk-throughs were present at other facilities also. New or soon to be developed exhibits at London Zoo include Penguin Beach and the Sumatran Tiger and Asian Forest Exhibit under construction.

RECOMMENDATIONS & LEARNING: (Page 29)
- Taronga to expedite the implementation of direct debit purchase for Zoo Friends Memberships attributed with increasing retention of members at ZSL properties.
- Free Ranging animals provide an immersive / friendly environment in an open range zoo allowing multiple opportunities for up close chance encounters with safe wildlife species as visitors wander the zoo grounds.
- **Create a Free Ranging Animal Collection Policy for TWPZ with the aim of placing a range of suitable species in a free ranging environment of the zoo grounds.**

- **TWPZ accommodation projects need to be themed and linked to an experience that is unique to the zoo environment and provide a key point of difference from other accommodation product offered, in order to assist in the development of the zoo as a destination in its own right.**

- **Engage with NSW Department of Primary Industries Exhibited Animals Protection Agency to enable TWPZ to develop self drive through exhibits for appropriate species.**

- **Develop self drive through exhibit area/s at TWPZ for greater interaction between visitors and animals.**

- **Considered species selection is required for self drive through exhibit areas, and essential that a number of species are chosen to provide effective display.**

- **Seek approval for and implement protected contact Elephant encounter activities at TWPZ, such as behind the scenes barn access or Elephant painting encounters.**

- **TWPZ Rhino management team to engage with Greater One Horned Rhino Keeping staff at Whipsnade Zoo to provide advice and information in the lead up to the first introduction and breeding attempt of TWPZ’s animals.**

- **TWPZ to provide Whipsnade Zoo with information relating to the operation of electric hire vehicles.**

- **TWPZ to provide Whipsnade Zoo with information relating to the creation of an open public access area of the zoo such as the Savannah Visitor Plaza at TWPZ.**

- **Whipsnade Zoo to be considered as a potential partner in Southern Black Rhinoceros Program and to be approached on behalf of the International Rhino Foundation to this end.**

- **Online ticket purchases to Taronga Zoo and Taronga Western Plains Zoo to be followed up by CRM strategy relating to zoo membership offer and conversion.**

- **TWPZ to conduct an annual familiarisation promotion to taxi drivers, hotels and other visitor economy businesses.**

- **TWPZ to pursue the opportunity to develop a small primate (suitable species) walk through exhibit area adding to the mix of up close interactive exhibits, complimenting and contrasting with, the open large scale nature of the zoo.**

- **Taronga Zoo to research further the ‘Zoo Lates’ program to investigate suitable out of hours product development options.**

- **Taronga to trial animal or exhibit branded merchandise in its retail souvenir stores across both sites.**

## Woburn and Longleat Safari Parks:

The Safari parks across England provide a unique experience not generally rivalled by many zoos around the world. The ability for visitors to drive through a range of exhibits which house a variety of animals sets them apart from many traditional zoo operations. These parks were predominately developed in the late sixties and early seventies by the Chipperfield Circus family and were invented to support the operation and maintenance of a number of manor homes owned by British aristocracy.

Although there are many zoos globally that have guided drive through exhibit areas, there are fewer which contain self drive through exhibits (whereby visitors drive their own vehicles in with the animals), and almost none that contain such a range of taxonomic groups. The display of large ungulate (hoof stock) species such as Rhinoceros, through to primates and dangerous carnivores such as Bears and Big Cats, sets these parks apart from traditional zoo operations.

The ability for visitors to drive at their own pace amongst African Lions, Primate species such as Macaques, Wolves, Bears, Tigers and a large range of hoof stock such as Rhino, Giraffe, Deer, Antelope to name a few, is an experience which enables visitors to have incredibly close encounters with an enormous range of animals.
The key purpose in visiting these parks was to evaluate self drive through exhibits, and to familiarise myself with the operational requirements of these, particularly relating to animal welfare, visitor and staff safety. These parks varied quite a lot in their procedural management and were both incredibly forthcoming and helpful in allowing me to understand the way in which they operate. Very generally speaking, the hoof stock areas of these parks on review appeared to be the easiest to establish, maintain and operate safely. Herd species in mixed group exhibit areas certainly seemed to display well, animals appear to be socially content, and interact casually with visitor vehicles moving through the facilities.

At both sites I visited, the use of an exhibit ranger or monitoring vehicle was in operation in the majority of exhibit areas, particularly those with dangerous animals contained within them. The Ranger or monitor, would patrol an exhibit area and ensure that interactions between visitors and animals were undertaken safely as well as providing constant monitoring and assessment of the animals health, welfare and social interactions with other members of like species or otherwise. In some cases these were complimented with, or replaced by manned stationary outposts.

Although there is intent on our organisations part to consider the development of self drive through exhibits, it is accepted that there is likely to be restrictions on the types of exhibits and the range of species that would be granted approval by the legislative authority. Currently there are no such known exhibits within Zoo and Aquarium Association (ZAA) accredited facilities within Australia, although many undertake guided vehicle tours, as undertaken currently by Taronga Western Plains Zoo. The agreement of suitable species would create a starting point for further investigation and potential development at Taronga Western Plains Zoo of self drive through exhibit areas.

Despite the access to such a range of species, one property indicated that visitor surveys regularly indicate that two of the most popular exhibits are the Primate and Deer drive through areas. Deer, identified because of their ability to closely interact with visitors and participate in feeding of the animals. (feed sold upon entry to the exhibit) The popularity of the Longleat Safari Park Deer drive through exhibit has initiated the development of a walk-in Deer encounter area as another option for visitors to interact with their favourites. This area consists of a large Deer park like area, with smaller encounter round yard, where visitors of any age can interact with the animals through a stand-off fence. This was initially constructed to allow coach groups (with no ability to open windows) the chance to have a feeding opportunity. The area has proven to be very successful, popular with both mature age, coach bound visitors, and families alike, particularly those with children under the age of 14. Primate drive through areas, seemingly are so popular due to the wreckless antics displayed by the varied monkey species within these facilities.
towards visitors and their vehicles. Regular damage is done to vehicles that proceed into these areas, with UK law and suitable disclaimers abound the parks enough to avoid serious litigation of the operators it appears. Another feature of these operations is their extension into other commercial non animal operations, such as children’s indoor play centre and adventure ropes courses at Woburn, through to amusements and small rides at Longleat.

**RECOMMENDATIONS & LEARNING:**

- Engage with the Zoo and Aquarium Association (ZAA) to enable the consideration of inclusion of self drive through exhibit areas within the review of national exhibited animals general standard and guidelines.
- Develop an operations plan considering suitable identified species for self drive exhibit areas at TWPZ.
- Develop an exhibit area concept in preparation for the design and development of at least one drive through exhibit area at TWPZ.
- Deer walk-through / drive-through exhibits benefit by the display of multiple species such as Fallow and Red Deer for close up interaction and encounters with other more elusive varieties such as Chital (Axis Deer) forming a more spectacular backdrop.
- Drive through exhibit areas require constant attending by suitable staff or trained volunteer. Dependant on the size of the area, species selection, and the ability to maintain a field of view, this could be undertaken in a stationary outpost.

**Aspinall Foundation – Howletts Wild Animal Park and Port Lympne Wild Animal Experience:**

The Aspinall Foundation operates two properties in the Kent region of England. Howletts Wild Animal Park, the first of two properties acquired by the late John Aspinall and opened to the public in 1975, started life as a residence for the Aspinall family in 1957. Today, it is best known for its contributions to primate conservation, particularly Gorillas; in fact both properties now hold probably the largest collection of Gorillas in both family and bachelor groups. Port Lympne Wild Animal Experience was acquired in the early seventies and opened publicly a year later than the Howletts facility in 1976.

Port Lympne is a large more expansive property with open range areas as well as a mix of more traditional zoo exhibits. The park houses a large collection of Eastern Black Rhinoceros, some of which during my visit were being prepared for repatriation to Tanzania. The bulk of my time was spent reviewing Port Lympne, reason being as Bob O’Connor, Managing Director and his team are busily transforming Port Lympne to include a variety of accommodation offerings in a similar manner to that being undertaken at Taronga Western Plains Zoo. In fact, Bob indicated that until five years ago, the two properties were operating at a 4 million pounds per year deficit. With the change in business model and the inclusion of new retail, food and beverage, and now experience based accommodation the parks have been able to generate an operating surplus.

In recent times the addition of Livingstone Lodge began the foray into experience based accommodation activity with the addition of Livingstone Cottage and recently, Elephant Lodge. Both Livingstone Lodge and Elephant Lodge are tented experiences, the later larger self contained options targeted at families and larger groups. Livingstone Lodge offers an intimate replica African Lodge experience with tents nestled within the hillside overlooking the Serengeti area. Evening and morning tours by African guides as well as carefully considered African inspired meals and itinerary provide a great experience. Although this is a premium priced experience, the provision of separate shared amenities is the only available option. The new Elephant Lodge tents contain ensuites which will no doubt offer additional appeal to visitors, particularly during an English winter. It appears that the current stock of
accommodation will not be the last for Port Lympne with even more development planned for the coming twelve months.

Accommodation planning and development has been based on conservative business case estimates of 55% occupancy for Elephant Lodge and 40% for Livingstone Cottage. It appears that with the current occupancy of Livingstone Lodge around 85% that these will be achieved comfortably, given despite the rapid increase in offering, supply is still quite limited.

Below is a brief summary of main inclusions at each accommodation offer:

| Livingstone Lodge          | - 10 Canvas tented lodges  
|                            | - Fully Catered  
|                            | - External shared amenities  
|                            | - Central Lapa style common area where meals are served / lounge area  
|                            | - Contained within the park, guests cars remote in other area of park  
|                            | - Overnight Experience  
|                            | - Afternoon and morning guided safari tours included  
|                            | - Situated on hillside overlooking the Serengeti exhibit area and with views to the English Channel  
|                            | - Access to Port Lympne Wild Animal Experience included |
| Livingstone Cottage        | - Luxury Guest House style  
|                            | - Three double bedrooms and one twin catering for up to 8 people  
|                            | - Three bathrooms  
|                            | - Fully Catered  
|                            | - Private Guide and Tours provision – Evening and morning  
|                            | - Situated on hillside overlooking the Serengeti exhibit area and with views to the English Channel – Adjacent to Livingstone Lodge  
|                            | - Access to Port Lympne Wild Animal Experience included |
| Elephant Camp              | - Ten large (sleeping eight) canvas tented lodges  
|                            | - Self contained (Restaurant available)  
|                            | - Ensuite provisions  
|                            | - Central Lapa style Restaurant available as additional component to stay. |
- Designated access separate to the park.
- Multiple night experiences offered only – 3, 4 and 7 nights
- Evening safaris offered as additional component
- Situated atop the Elephant Exhibit and with views to English Channel
- Access to Port Lympne Wild Animal Experience included

RECOMMENDATIONS & LEARNING: (Page 34)

- A mix of accommodation options is necessary to reach different target audiences, but also to provide opportunities for repeat visitation across the range of experiences.
- An African themed experience should be the primary, or flagship experience.
- Premium priced product should contain the provision of private ensuited amenities.
- Open air vehicles offer a lot to an experience and are far more authentic, although vehicle fit out is an important part of the experience and should provide some creature comforts such as padded seating and some form of weather / climate control.
- TWPZ to continue to pursue the availability and provision of ex military vehicles through the Australian Defence Force for utilisation as tour vehicles due to their suitability in creating an authentic open air experience.
REPORT PART THREE – United States of America

Ultimately the itinerary and timing of my entire fellowship was constructed around my attendance at the annual conference of the Conservation Centres for Species Survival group, or C2S2, a consortium of five large scale open range format wildlife facilities;

- White Oak Conservation Centre
- The Wilds Ohio
- San Diego Zoo Safari Park
- Fossil Rim Wildlife Centre
- Smithsonian Conservation Biology Institute

My attendance at this conference, and itinerary for the USA leg was assisted greatly by Robin Sawyer, the Executive Officer of the C2S2 group. My thanks go to Robin for all her assistance and coordination. The itinerary for the States would take in three of the five C2S2 properties as well as a visit to Disney Animal Kingdom in Orlando, Florida. Along the way I would be joined by Taronga Western Plains Zoo Curator, Mr Nick Boyle who would attend the C2S2 Conference and the remaining site visits of The Wilds, Fossil Rim Wildlife Centre and San Diego Zoo and Safari Park.

Disney Animal Kingdom and Animal Kingdom Lodge:

My arrival at Orlando International Airport was the starting point for my ‘Disney’ experience. Greeted by the staff of the ‘Disney Magical Express’, arrangements were soon made to transport me to the Disney Animal Kingdom Lodge, my accommodation for the next three days. The extent of the Disney operation hits you almost immediately at this point when you encounter themed coaches servicing Disney tours, Disney Cruise Ships, Disney Parks and Disney Resorts. I soon found out that Walt Disney World Orlando covers an area in excess of 45 square miles and employs around 62,000 people, immense by any standard.

The Disney Animal Kingdom is one of four major theme parks within Walt Disney World, and the Animal Kingdom Lodge is its sister accommodation resort operation. Disney is renowned the world over for being the masters of design and interpretation, creating immersive environments that mimic natural world environments around the globe, like the African Villages and Kilimanjaro Safari, through to the foothills of Mount Everest and the Himalayas. The Animal Kingdom Lodge is no exception, with its impressive foyer instantly portraying the feeling that you have stepped into Africa, albeit a very lavishly appointed part of Africa.

Creativity, theatre and incredible detail are probably the words that would sum up a Disney experience, although Disney would choose ‘Magical’, the catch cry heard so often throughout any visit. Cast members, otherwise known as staff to us non initiated folk, continue the extension of the theme in whatever area they are located, from uniforms, greetings and terminologies, through to their training on how they deliver directions, never allowed to point with a single finger as it appears to be more aggressive than a full hand gesture. The experience is heavily scripted and intentionally consistent across the organisation.

The Animal Kingdom Lodge is an enormous hotel style resort facility with views over a constructed African Savannah area where Giraffes, Eland, Wildebeest and many other African species roam within the 4 Savannah areas over 45 acres, and where Flamingo play in the pool adjacent to that where guests enjoy their own water recreation. One
thing is instantly apparent and that is that Disney is a family experience. You do not see lone men wandering the resorts or theme parks, unless of course they happen to be there on a Churchill Fellowship!

The lodge is divided into two main village areas, the main lodge with hotel style accommodation and retail offers, whilst the second newer facility caters to the Disney Vacation Club, a time share like scenario where Americans purchase anything up to thirty years of holidays in advance throughout the Disney family of experiences.

The overlooked Savannah areas are very well constructed and managed, with visibility of animals almost twenty four seven. The animals are brought into back of house areas everyday for a maximum of two hours, generally in the early morning to ensure that guest have optimum viewing from their room, balcony or the many common areas of the resort that overlook these areas. With this comes some animal management challenges, particularly parasite control, brought on by the humid conditions and the fact that the ground is almost never spelled.

Disney are masters at disguise when it comes to animal containment, whether it be through the creation of heavy concrete rock faces, logs, trees or village ruins, through to simple and effective use of electrified wire grass. These methods have the greatest impact on every one of their animal exhibit areas, giving a sense of a wild environment or reserve like surrounding. Rarely do visitors see fences or artificial structures which do not tie to a theme of its surrounds. The Animal Kingdom Lodge is probably the greatest exception, with clear views of fencing and some animal management areas, it does not have the same degree of concealment as those of the park. Obviously this level of cladding and design requires an enormous budget to carry out convincingly, although many zoos - our own included, have carried out other more cost effective ways of removing visual barriers between visitors and wildlife.

Within the park, enormous expense has gone into creating themed areas of the world as we know it, and even prehistoric time. The central landmark for the Disney Animal Kingdom is the ‘tree of life’, an enormous man made tree which contains a 4D cinema within the base of its trunk. The centre point is an intentional design inclusion in each Disney Park allowing guests to orientate themselves of a central reference point.
The Disney park experience is a fast paced station to station experience with guests sometimes more focused on what to see next, than allowing themselves to enjoy where they are at that moment. One example is the Kilimanjaro Safari; a fantastic tour through the wilds of an African landscape, is completed within 20 minutes. For visitors this means that glimpses alone can be had of the wildlife, and enormous very expensive exhibit areas are passed by in under a minute, stopping only infrequently for the obligatory photo. I was astounded that there is no other ability for guests to view the likes of Elephant, Rhino, Giraffe or other African ‘Mega Fauna’ than that provided by the safari tour.

In recent years Taronga Western Plains Zoo has spent considerable time orchestrating the zoo experience with a key objective to slow visitors down and ensure that they have the ability to not only enjoy the greatest experience possible, but also that there is meaningful, educational communication about the wildlife the zoo has in its care. The Disney experience is rather counter intuitive to many other wildlife parks and facilities. Having said that, there is no question that Disney goes to extreme lengths to cram as much into each component in regards to animal sightings, educational commentary by guides and variety of experience and landscape, albeit in record time. Despite brief sightings and encounters, enormous lengths are taken by the operation to ensure that the display of all animals is in as natural an environment as possible. Disney operate 24 hour keeper shifts, with the third shift responsible for largely assisting the maintenance team with animal movements and supervision, whilst exhibits are replanted, maintained and presented in a pristine fashion. No maintenance work is undertaken throughout normal operating hours that can be seen by any member of public.

During my stay I was given full access to all back of house areas and inspected many of these. Due to development standards under local environmental planning, the Animal Kingdoms facilities would have to be the most heavily fortified I have ever experienced, with enormous built structures for the housing of many animals, particularly Elephants and larger species such as Rhinoceros and Hippo. Again, it appears that absolutely no expense has been spared in the creation of the park and its animal facilities.

RECOMMENDATIONS & LEARNING: (Page 37)
- Wherever possible utilise existing moated containment method, or sympathetic design for exhibits at TWPZ.
- Utilise clever phrasing in signage and interpretation within the zoo, such as ‘Out foraging, please visit my friends’ as opposed to Exhibit Temporarily Empty or similar.
- Incorporate the use of music prior to certain presentations to build anticipation and ambience.
- Future accommodation developments to be constructed in a low impact style of development with low level construction and layout preferred in creating a natural landscape.
The Wilds, Ohio:

The Wilds, in Zanesville Ohio played host to the Conservation Centres for Species Survival Conference (reviewed later in this report) which gave us a chance to not only experience a lot of this beautiful 10,000 hectare property, but stay in two of the four accommodation offerings the facility has onsite. In recent times The Wilds has come under the management of the Columbus Zoo, a major metropolitan zoo in nearby Columbus Ohio. The property was a former strip mine and key features of the property are the remaining water bodies and rolling hills of grassland, as remnant and rehabilitated forest areas re-establish.

The Wilds is quite unique in that it is not only a very large parcel of land, but is quite remote from surrounding cities, although these are only within around 1.5 to 2 hours distance from the property. A range of activities are carried out at The Wilds during the warmer months, with sometimes heavy snow fall closing the zoo for extended periods throughout winter. Tours and VIP animal encounters are carried out in a range of guided formats, a zip line attracts the teenage and early adult market, whilst luxury ‘yurt’ or ‘ger’ accommodation with a fully catered overnight experience offered to those with a more leisurely ambition.

The facility participates in a number of key conservation breeding programs for species such as Pzrewalski’s Horse and Greater One Horned Rhinoceros, as well as housing a range of large ungulates from around the world as the key feature to the rolling grassland exhibits.

A stand out of the management in this facility and other open range facilities seen across the USA was the use of tamer devices and portable or fixed yarding for conditioning, management and veterinary treatment. Although these are utilised in Australia, their use was extensive in the States for animal management, and the tamers or crush systems were readily available through contractors, preventing the need to scope, design and build to specification with the obvious benefit of cost reduction. Extensively (largely hands off) managed properties rely on these setups to herd animals into and avail keepers and veterinary staff access to animals at close range. Alternately animals, because of their predisposition to vehicles within exhibit areas, are easily tranquilised for treatments or closer inspection. The Wilds has also undertaken extensive work in the management of various species in bachelor groups, assisting the management of herd species, and attempting to avoid the isolation of single animals such as Stallion Pzrewalski’s Horse.
Like Taronga Western Plains Zoo, The Wilds has recognised that for a regionally located open range format zoo a key part of its future success would be through experience based accommodation. The Wilds has four main offerings in this regard:

- **Nomad Ridge:** An Asian ‘yurt’ or ‘ger’ styled accommodation facility offering fully catered overnight experience incorporating wildlife tours.

- **The Lodge:** A self catered lakeside bungalow accommodating small groups up to twelve with its own private lake and water recreation equipment such as fishing boats, canoes and fishing tackle.

- **Lakeside Cabins:** Offer a self catered option of timber log styled cabins with lofts for families up to six.

- **Conservation Education Camp:** Catering to school groups in shared ‘yurts’ that double as sleeping quarters and common area provisions.

The range of accommodation is similar to plans for our zoo offering fully inclusive options such as Nomad Ridge, through to Self Contained options for families and groups. It was pleasing to see this range working so well in an environment that has many similarities to Taronga Western Plains Zoo.

**RECOMMENDATIONS & LEARNING:** (Page 39)

- TWPS to purchase and implement a mobile tamer and yard system for the effective management of small to medium hoof stock.

- TWPS to trial the implementation of bachelor group holding of select species and to maintain contact with counterparts in the USA who have initiated successfully already.

- A range of accommodation should be offered in a regional location and should include, fully inclusive experience based product, and self contained options for families and groups.

- TWPS to consider the inclusion of a larger guest house or bungalow for large groups in future development beyond the current planned options.

**Fossil Rim Wildlife Centre, Texas:**

The Fossil Rim Wildlife Centre in Glenrose, Texas has had a long standing relationship with Taronga Western Plains Zoo and Taronga as a whole. Dr Pat Condy, the Director of Fossil Rim, sits on the board of International Rhinoceros Foundation (IRF) with Taronga Director and Chief Executive, Cameron Kerr. Both our organisations played a key role in the establishment and development of the IRF and key partners in the Southern Black Rhinoceros program. I had the opportunity to pay a visit to Kusamona, the first Southern Black Rhinoceros calf born at Taronga Western Plains Zoo, who now resides at Fossil Rim.

A key feature of Fossil Rim is its extensive 1800 acre drive through layout, allowing guests the opportunity to drive their own vehicle through two main valleys that play home to a number of species of largely exotic wildlife. Close encounters are frequent as the property allows guests to feed animals (utilising selected food available upon entry), one of very few which allow this activity for the majority of species. Guests are requested to feed by offering food on the roadside by their car with the exception of Giraffe, where guests are invited to feed these magnificent animals by hand, which frequently makes for some spectacular photos of Giraffes inquisitively probing in through sunroofs or windows (see image next page).
The extensive nature of the property means that animals are largely required to be tranquillised for veterinary treatment or close inspection. Like The Wilds in Ohio, Fossil Rim utilises both fixed and temporary yarding and tamer apparatus to assist in day to day management of largely various antelope and deer species. Again the predisposition to vehicles because of the everyday interaction, allows wildlife to be pursued relatively easily for corralling or tranquillising for further treatment. We attended several procedures to ascertain how the team go about their approach, followed by treatment and monitoring of animals. The Fossil Rim team have become experts in game capture and field veterinary work and it was excellent to witness their skills in practice. The team have also learnt to work with different drug combinations, as some of those available in Australia have restricted or no access in the United States.

Fossil Rim also contains two key forms of onsite zoo based accommodation, with a safari camp style tented lodge precinct and a main guesthouse with limited capacity. Again the flexibility of use of these properties further validates the decision to expand upon the Taronga Western Plains Zoo experience based accommodation product offer.

Another key similarity between Fossil Rim and the Taronga Western Plains Zoo operation is the way in which it manages some of its key conservation partnership programs for priority species. In this case, the Atwater Prairie Chicken, Southern Black Rhinoceros and Cheetah, with large back of house areas dedicated to the management and breeding of these animals, similar to those at Taronga Western Plains Zoo. Extensive space and resources are dedicated to these species, which generally are only frequented by VIP guests or onsite accommodation patrons.

The Fossil Rim Cheetah complex is one of the best planned and laid out facilities I have seen with a very effective system of centralised dens and conditioning areas. These constructed den houses and conditioning areas allow animals to be fed and managed in a consistently accessible area which over time conditions the animals to close contact interactions and opportunity to undertake medical examination etc without sedation. For the purpose of cubbing, some animals were still given access to remote den boxes within the facility and managed in a completely hands off manner, determined by the cat and its demeanour, and the impact this would have on successful breeding outcomes.

- **RECOMMENDATIONS & LEARNING**: (Page 40)
  - TWPZ to consider the development of central Cheetah dens and management areas within its current Cheetah facility, to assist in further conditioning of animals to close interaction and inspection.
San Diego Zoo and San Diego Zoo Safari Park - California:

San Diego Zoo and San Diego Safari Park are often referred to worldwide as the epitome of zoo operations and have developed a strong global reputation for both operations. Like the Taronga Conservation Society the zoo operates two properties, one a large 100 acre metropolitan based operation and the other, an 1800 acre open range format operation about 45mins outside of San Diego. Between them the zoos are patronised by around five million visitors per year, with the split around 3.75million at San Diego and 1.35million at the Safari Park. Additionally both zoos benefit enormously from philanthropy, with extensive recognition seen throughout both parks acknowledging their many donors and supporters. The most recent addition to San Diego Zoo, the Conrad Preby Elephant care centre and exhibit, (a $55 million development) benefited substantially from philanthropic support, including the major donor and namesake, Mr Conrad Preby.

In discussion with key senior management of San Diego Zoo, they attribute much of the organisation’s success to the fact that they operate within a temperate climate region, and therefore do not have the impost of large indoor facilities and fluctuations in visitation brought on by winter like many North American Zoos. They also credit the fact the zoo was featured in ‘Zoorama’ the first colour television production in the region, promoting the zoo heavily in the early years, particularly as this was the period when the Safari Park was under establishment.

San Diego Zoo, like our organisation has also undertaken considerable work to understand visitors, their requirements and the experience across both properties. A key challenge discussed was that of time, and the ability for visitors to be overwhelmed by the enormity of the product offering, sometimes influencing their decision not to visit at all. This was articulated as a large challenge for the Safari Park, given its size, product offer, and the ever increasing demands on the consumer market’s leisure time. It was indicated that the aquarium market across the US had experienced growth in recent years as it was able to offer a short experience (around 2 hours) which appealed to the time challenged US domestic visitor. Traditionally, in Australia we have seen demand for this type of product predominately from international visitors, particularly those from Asian countries, although it is certainly something to monitor with our domestic market. This philosophy was certainly consistent with how Disney presented the individual components of their attractions, acknowledging the desire to ‘tick off’ the visit on the list of things to see, as much as enjoying the attraction itself or part thereof.
Discussion also covered that management believe that capitalising on the peak periods of greater importance than year round promotion and marketing. The off peak periods are utilised for consolidation of membership activities and regular group business such as mothers groups and schools. Membership has responded well to themed initiatives such as veterinary learning days or animal themed events.

A significant feature of both San Diego operations is the extensive array of animal encounters or close personal interactions with particular species offered to visitors as additional purchase opportunities. Many suitable animals are conditioned to wear leads, collars, harnesses or halters to enable them to be utilised out of exhibits publicly, or within areas created for the purpose of interaction (see above photos of some examples). Additional experiences are sold to visitors and combined with Digital Photography which is a very popular component at both zoos. At the Safari Park, the ‘Caravan Safari’ is offered enabling up close encounters and feeding opportunities with some of the animals within the larger savannah areas such as Giraffe and White Rhino.

The flagship animal encounter offered at the Safari Park is combined with the daily Cheetah run, undertaken once a day for all visitors, although with additional components such as reserved viewing areas, and a VIP encounter experience made available to around 20 guests. The Cheetah run area is external to the Cheetah holding facility and enables guest to be positioned along a 100metre lure run area where Cheetah demonstrate their speed and agility within 10metres of guests lining the area. A Cheetah is held within an electric cart stationed at one end of the run and let loose to chase a lure to the other end of the run area, rewarded upon completion with food, before being tethered via collar by an animal keeper.

The nearby VIP area located adjacent to the run facility is visible to all guests and provides access to those that have paid extra to do additional animal encounters such as a Foosa (a cat like Madagascan Canivore), as well as meeting the Cheetah who has undertaken the run. A key feature of many of these encounters is the ability for other guests to see the encounter participants in the area where they are undertaking the experience. This not only allows other guest to feel as though they are almost a part of the experience, but acts as a natural demonstration or promotion of the experience to the other guests, generating a lot of awareness of these activities.

Again this sort of close contact interaction, or off exhibit display, is not available within New South Wales due to the restriction placed on activity with carnivores by the Exhibited Animals Protection Act, administered by the NSW Department of Primary Industries. For Taronga Western Plains Zoo to embark on any similar activity, extensive
consultation will be required to demonstrate that these sort of compelling learning interactions can be undertaken safely, and with animal welfare as the paramount consideration.

The two San Diego Zoo properties offer one of the most diverse range of experiences of any zoo visited and certainly have spent a considerable amount on the development of these activities and the supporting resources required for their delivery. As well as animal encounters they also offer attraction type activities such as the Zip Line and Tethered Helium Balloon at the Safari Park. The Balloon operation was closed temporarily during the time of my visit.

A key feature of both properties was the elaborate facilities for Veterinary Care and Animal Management. Both properties contain expansive facilities for the capture and temporary holding of animals for pre and post transport, pre and post transfer quarantine, and Veterinary care. The Veterinary Hospital facility at the Safari Park is, without doubt, the most extensive and well fitted facility I have witnessed to date. The facility contains an enormous array of surgery areas for a variety of sized animals, intensive care, recovery and general hospital areas. Additionally the veterinary precinct also contains some of the most sophisticated laboratories located in any zoo operation. From veterinary parasitology and pathology, through to advanced reproductive research laboratories, these facilities are a key stand out, and incredibly valuable asset of the Safari Park, and San Diego Zoo.

**RECOMMENDATIONS & LEARNING:** (Page 43)
- Monitor trends in consumer behaviour and the ongoing impact of an increasingly ‘time poor’ market, and how this may influence product development within the zoo, and the way in which it is marketed. For Taronga Western Plains Zoo, short breaks will be an important element.
- Monitor the impact of attraction ‘bucket list’ and the desire for an emerging market segment who are predominately motivated by ticking off on a number of activities throughout their visit or stay. Social Media is appealing to this market, with posts etc of the activity, the photo opportunity an essential part of their visit.
- Consider implementing themed activity days for members, such as veterinary learning days with outstations through the zoo and demonstrations.
- When developing new animal facilities include opportunities for back of house areas to be made publicly available to promote these areas and the work undertaken by zoo keepers to visitors. Seek opportunities in existing facilities to enable back of house access to visitors to create opportunities to learn about keeper routines and animal husbandry.
- Create more animal encounters at TWPZ, both of a close contact smaller animal variety, and in vehicle – larger animal variety allowing visitors to gain closer access to animals and create compelling connections between visitors and their favourite animals. These have multiple level benefits for increases in visitor experience, learning outcomes, and commercial revenue opportunities.
- Animal encounter areas, wherever possible should be able to be witnessed (at a further proximity) by other general zoo visitors, allowing them to feel as though they are part of this experience, as well as acting as a promotional opportunity.
- Finalise the development of a comprehensive visitor experience and animal collection plan for Taronga Western Plains Zoo which will articulate the future vision for the zoo and guide future capital investment and development.

Conservation Centres for Species Survival Conference (C2S2) Annual Conference:

The Conservation Centres for Species Survival (C2S2) group is a consortium of five of the USA’s most well known and arguably, most successful open range or large scale zoo facilities. Fossil Rim Wildlife Centre, San Diego Zoo Global, Smithsonian Conservation Biology Institute, The Wilds – Ohio, and White Oak Conservation Centre make up the founding members of the group.

The C2S2 properties identified a need to combine their resources and tackle key conservation challenges related to some of the world’s endangered wildlife, whilst identifying how best to utilise zoological expertise and resources, to assist in innovative and effective ways to assist.

C2S2 cooperatively applies and develops its unique resources for the survival of threatened species that require special needs such as large areas, natural groupings or herd size and dynamics, and complimentary research undertakings that may assist the species ongoing survival. Additionally, the management of sustainable populations of animals within zoo care and management is a key feature, or enabler of zoos to undertake some of the research and understanding that is required for individual species.

These principles are consistent with the challenges faced by Australian Zoos, particularly the large open range format zoos such as Taronga Western Plains Zoo, Werribee Zoo in Victoria, Monarto Zoo in South Australia, and Orana Park Zoo in Christchurch New Zealand. As well as property and resource similarities, consistency of many of the species in the care of these facilities is also a common element, and hence the interest to attend this conference.

The conference was hosted by ‘The Wilds’ in Ohio, and was attended by other key US based conservation partners such as the IUCN, the US Fish and Wildlife Service, the Association of Zoos and Aquariums (AZA), as well as other zoos, academia, and conservation organisations such as the International Rhinoceros Foundation (IRF). I was joined at the conference, and the remainder of the USA leg of my fellowship, by TWPZ Curator, Mr Nick Boyle. Having identified the opportunity to ensure that we were able to have a broader understanding of C2S2 activities and components of the other site inspections, as well as offering another individual from our operation the development opportunity I was being exposed to.
Our attendance at the meeting allowed us to gain valuable insight into animal management principles that need to be adopted in Australia in order to create sustainable programs for species held in open-range zoos. These included ‘big-herd’ management of ungulate species, species specific program management such as Cheetah, breeding and reproductive research, practical animal management and restraint techniques, as well as important government department liaison.

An obvious benefit was having numerous key US based conservation partners in one location assisting our development of new relationships, and solidifying those that we already maintain. The conference agenda also accommodated my own presentation of Taronga Western Plains Zoo’s activities in conservation, research, education, species management, and commercial development. I would like to thank the considerable efforts of Robin Sawyer, the Executive Officer of C2S2 for her enormous assistance in our preparations and planning to attend this conference and other US locations.

RECOMMENDATIONS & LEARNING: (Page 45)
- Communicate outcomes of C2S2 Conference with Zoo and Aquarium Association (ZAA) for consideration of similar Australian based initiatives.
- Coordinate a meeting of Open Range Zoos within Australia with a view toward conducting regular site inspections of each property and allowing shared knowledge of similar operational challenges and initiatives.
- Review formal invitation by C2S2 to become a formal member of the consortium, the first international partner to be invited to this prestigious group, with the aim of seeking a practical suitable involvement level of that for an international participant.

International Rhino Foundation Southern Black Rhinoceros Workshop:

The Taronga Conservation Society and Taronga Western Plains Zoo are founding members of the International Rhino Foundation, formerly known as the Black Rhino Foundation (prior to 1993), and originally established to assist the conservation of Black Rhinoceros in Zimbabwe. These Rhinos are of the Sub Species Diceros bicornis minor, or the Southern Black Rhinoceros. At this time, Taronga Western Plains Zoo developed plans and established its own extensive commitment to this program with the construction of facilities to house, manage and breed this endangered species. Having done so now for around twenty years, Taronga Western Plains Zoo has collaborated with US based zoos in this program, and until recently, the species coordinator for Southern Black Rhinos was the American Zoo organisation the Zoo and Aquarium Association (AZA). The AZA Rhino Advisory group has recommended that AZA facilities focus on the more numerous sub species Diceros bicornis michaeli, or Eastern Black Rhinoceros population across American zoos.

The IRF, due to their extensive involvement in the Southern Black Rhinoceros had decided to take over the role of species coordinator and to ensure the ongoing support of partner organisations and the Rhinos, arguably the most at risk sub species due to the recent significant escalation in illegal poaching, across southern Africa.

Opportunistically, due to the attendance of many partner organisations at the C2S2 Conference in Ohio, it was arranged for other partners to join the group for a workshop regarding the sustainability of the Southern Black Rhinoceros program and to endorse the appointment of the International Rhinoceros Foundation as the species coordinator. From there, development of a sustainability program for the species was initiated with key outcomes including;
Southern Black Rhinoceros Mother – ‘Bakhita’ and Calf ‘Kufara’ at Taronga Western Plains Zoo.

RECOMMENDATIONS & LEARNING: (Page 46)
- TWPZ to continue to extensively support the Southern Black Rhinoceros program under the management of the International Rhinoceros Foundation as the Species Coordinator.
- TWPZ to enact upon breeding recommendations for its Southern Black Rhinoceros program participant animals.
- TWPZ to continue to work with the IRF on options for long term safe repatriation of animals in a suitable, secure environment in Southern Africa.

* Breeding recommendations for existing animals.
* Potential recruitment of new partner organisations.
* Repatriation objectives and long term opportunities.
* Commitments to ongoing ‘in situ’ conservation and research efforts.
* Required Government and Administrative liaison, particularly in relation to import / export restrictions and bio security considerations.
RECOMMENDATIONS & LEARNING

The below recommendations and learning have been uplifted from this report. They each contain a small page reference number for ease of navigation to the section where they were established and the relevant context.

Example of page reference detail below;

RECOMMENDATIONS & LEARNING: (Page 1)

- With future plans to develop further commercial operations at Taronga Western Plains Zoo (TWPZ) it may be pertinent to explore Public Private Partnership opportunities in the event that the zoo is not able to raise suitable capital for these developments, or the zoo does not have the in house capacity to operate these in a market competitive manner.
- Taronga Zoo key management to confer with SAN Parks senior management on the contract model in which food and beverage services are undertaken to ascertain if any shared learning availability, given that both organisations currently utilise the services of a consistent third party contractor to this end.
- Provide information and contacts to NSW National Parks and Wildlife for the opportunity to explore similar suitable PPP arrangements within NSW Parks, and the development of nature based tourism facilities across the State. Australia’s Nature Based Tourism industry is worth in excess of $24 billion annually.\(^6\)
- The creation of sensitive regional tourism destination development within National Parks would assist NSW in attracting a greater share of nature tourism visitation and increase the overall contribution to the NSW visitor economy.

RECOMMENDATIONS & LEARNING: (Page 15)

- Continue to look at expansion opportunities of Zoo Friends membership numbers offered at both Taronga properties and, particularly in the case of local area members, consider extending a range of value added benefits and offers which can be utilised year round or seasonally.
- Create an ongoing affordable local zoo friend membership offer specific to TWPZ in order to pursue a goal total 10,000 local area members by 2015.

RECOMMENDATIONS & LEARNING: (Page 16)

- Continue to engage with Inland NSW Tourism and Dubbo City Council to undertake a destination management plan for the Dubbo region.
- Experience based visitor marketing (ie; the promotion of a complete experience over individual components) will be key to the ongoing success of the Dubbo visitor economy and visitation to Taronga Western Plains Zoo.
- Continue to pursue ways in which to link the visitor experience of Dubbo and the region to the zoo as the major attraction. Initiatives such as interpretive installations and the support of themed events, among others, can play a role in creating an overall immersive experience.

**RECOMMENDATIONS & LEARNING:** (Page 17)

- Continue to support the International Rhinoceros Foundation (IRF), and hence, its efforts to curb the illegal poaching of Rhinoceros species in both African and Asian continents.
- Maintain contact with Peter Nouvelle and Dr Markus Hofmeyr in order to ascertain if practical for TWPZ to assist current Rhino research initiatives undertaken by SAN Parks and its collaborators.
- Continue to inform and educate zoo visitors about illegal Rhinoceros poaching and support for prevention and security initiatives across Asia and Africa.
- TWPZ to continue to support both African Rhinoceros species and maintain or increase its critical holding of Southern Black Rhinoceros, consisting of almost 25% of the entire managed population of this species held between US and Australian partners of the International Rhino Foundation.
- TWPZ to continue to support attempts to undertake research into Assisted Reproduction methods with its collaborative partners for Rhinoceros species.

- **Contact the following researchers / key contacts based in South Africa:**
  - * Mike Knight, SAN Parks chair of the IUCN Rhino Specialist Group for further information regarding African Rhinoceros species and potential partner / collaborating organisations.
  - * Dr Roy Bengis, former SAN Parks Veterinarian regarding information and contacts relating to assisted reproductive research in African wildlife species.
  - * Dr Morne Delarey, veterinarian contact provided by Dr Markus Hofmeyr regarding Embryo Transfer research.

- Continue to liaise with Dr Markus Hofmeyr, and other SAN Parks Veterinary officials regarding TWPZ 2012 White Rhinoceros mortalities in order to assess if similarities experienced in wild populations, and potential diagnosis support and collaboration.
- Provide contacts and assist itinerary for visit to South Africa by Dr Benn Bryant, TWPZ Veterinary Manager in July 2012.
- Expand communication with the Onderstepoort Veterinary Campus of the University of Pretoria, currently undertaking pathology work for SAN Parks in combination with the National Zoo and National Research Foundation, Pretoria. Contact Dr Richard Burrows, Head of Veterinary Science faculty, and Dr Johanne Stale, Veterinary Pathologist.

**RECOMMENDATIONS & LEARNING:** (Page 18)

- Utilise extensive array of photos of African Safari lodges and unique nature based accommodation to influence and guide design and construction of accommodation facilities to be built or redeveloped at TWPZ.
- Ensure that the architecture of TWPZ developments is both sympathetic to the surrounding environment, as well as taking full advantage of its unique location within a zoo.

* Further recommendations for onsite accommodation to follow in review of private concessionaire operations.

**RECOMMENDATIONS & LEARNING:** (Page 19)

- Continue with plans to develop a range of wildlife experience based accommodation operations within Taronga Western Plains Zoo, and increase the commercial contribution by accommodation to closer to 50% of overall zoo revenue.
- Incorporate some of the key components of African Safari Lodges in the construction of the new Zoofari Lodge product such as, generous outdoor deck areas, free standing bath, effective climate control, king size beds, indoor /
outdoor showers, uninterrupted animal viewing from all tented lodges.

- Vehicle selection is an important influence on the overall experience provided to guests, particularly if offering an authentic African Safari experience.

- Investigate the cost and practicality of importing SAN Parks or privately owned Game drive vehicles for use in tour operations within the zoo, conducting a feasibility of required capacity for vehicle type and potential alternatives.

- Consider the implementation of sunset stops at a point of interest within the zoo for Zoofari Lodge where guests have the opportunity to be provided with drinks and canapés.

- Maintain dialogue with Ecotraining South Africa and consider the option of having zoo guides apply for suitable financial support to attend a course in South Africa, thus providing extensive training and knowledge development able to be passed on to other guides, as well as a strategic marketing advantage for the operation of TWPZ experience based accommodation products.

- Canvas colour is a key component in ensuring that a tented lodge feels warm, yet spacious and light. A lighter colour (beige, taupe etc) is the preferred option with tents consisting of green canvas promoting a feeling of being quite dark and cold. Ensure that canvas colour for future developments is a lighter colour for at least the majority of large walled areas and roof panels.

- Incorporate the inclusion of free ranging animals around zoo accommodation options such as Guinea Fowl, Wallabies etc as well as the incorporation of interpretation material for visitors on each species.

- Utilise natural colour palette as base for lodge construction, utilising natural materials as much as possible. Colour is promoted through the furnishings and accessories chosen for inclusion and allows for lodges to be updated and appear timeless in their construction.

- Utilise a modern contemporary method of design / fit out better reflecting a modern day African Safari experience.

- Consider attendance at the Indaba Travel Conference in South Africa, promoting links to operators and tourism wholesalers packaging safari style accommodation experiences, and further gathering tacit knowledge of the African Safari Industry.

RECOMMENDATIONS & LEARNING: (Page 23)

- Continue to engage Ann Van Dyke Cheetah Centre for the future acquisition of Cheetah into Australia.

- Genetically valuable founder animals, diverse from existing Australian held Cheetahs can be achieved through the Ann Van Dyke Centre due to the consistent arrival of new wild caught Cheetah into the facility.

- Engage with NSW Department of Primary Industries, Exhibited Animals Protection Agency Branch (NSW DPI EAPA Branch) to allow for public interaction with adult Cheetah. Current legislation does not allow for such within NSW despite this being available within other nearby states within Australia (Including adjoining States ACT and Queensland).

- TWPZ, subject to approval by NSW DPI EAPA Branch, acquire and display ambassador Cheetah for close contact encounters and public presentations, increasing the effectiveness of the zoo’s public education of wildlife species.

- Consider Cheetah Outreach as a potential future recipient of Taronga Conservation Field Grants for the Anatolian Shepherd Dog Project.

- Upon developing a need (subject to NSW DPI EAPA approval) for public interaction ambassador animals, utilise Cheetah Outreach to hand raise and condition cats for their participation in such a program.

- TWPZ staff to participate in the hand rearing and conditioning of cats prior to their arrival, learning from Cheetah Outreach best practice methods of engaging in close contact encounters and presentations.

- Consider incorporating the display and interpretation of Anatolian Shepherd Dogs at Taronga Western Plains Zoo to compliment the display of Cheetah, and inform visitors of practical demonstrable conservation efforts for the protection of wild species such as Cheetah and African Wild Dog.
RECOMMENDATIONS & LEARNING: (Page 25)

- The long standing effective relationship established between Taronga and the NSW Department of Education is a key component in the successful delivery of Education programs across the two zoos. The current delivery model of formal education programs at both zoos is critical to the zoos’ strategic objectives in relation to conservation outcomes and should be maintained.

- Promote the success of Taronga’s two zoos environmental education centres more broadly, particularly the involvement in such a diverse portfolio of activities and programs. Programs such as support to indigenous youth, juvenile justice, disadvantaged schools, mainstream public and private education, community conservation, outreach programs, and school holiday programs. This will ensure that public and stakeholder awareness is high and appreciative of the world standard that is achieved, as well as encouraging other potential partner opportunities.

- Taronga Training Institute staff to engage with NZG / NRF Pretoria Zoo to assist in the development of an ‘NZG Academy’ accredited vocational training and education provider.

- TWPZ continue to communicate with the NZG / NRF Pretoria Zoo on its plans to develop an open range facility, whilst considering if formal methods of assistance or support may be offered.

- Foster relationship with key staff within both South African Zoo facilities Veterinary and Research departments to assist the availability of information across a range of African species and the associated research being undertaken within Australia.

- Formalise an arrangement with Johannesburg Zoo for the acquisition and import of Nyala and other potential ungulate species thereafter.

- Dr Benn Bryant, Veterinary Manager, TWPZ to visit both zoos Veterinary and Research teams during 2012, as well as the Veterinary Medicine faculty of the University of Pretoria, Onderstepoort Campus July / August 2012.

- Contact South African Veterinarian Paul Bartels via the Johannesburg Zoo in relation to Assisted Reproductive Technology research planned at TWPZ.

- Refer the International Rhino Foundation to Pretoria Zoo as a potential future partner in the Southern Black Rhinoceros program with the planned development of their second facility as an open range zoo facility.

RECOMMENDATIONS & LEARNING: (Page 29)

- Taronga to expedite the implementation of direct debit purchase for Zoo Friends Memberships attributed with increasing retention of members at ZSL properties.

- Free Ranging animals provide an immersive / friendly environment in an open range zoo allowing multiple opportunities for up close chance encounters with safe wildlife species as visitors wander the zoo grounds.

- Create a Free Ranging Animal Collection Policy for TWPZ with the aim of placing a range of suitable species in a free ranging environment of the zoo grounds.

- TWPZ accommodation projects need to be themed and linked to an experience that is unique to the zoo environment and provide a key point of difference from other accommodation product offered, in order to assist in the development of the zoo as a destination in its own right.

- Engage with NSW Department of Primary Industries Exhibited Animals Protection Agency to enable TWPZ to develop self drive through exhibits for appropriate species.

- Develop self drive through exhibit area/s at TWPZ for greater interaction between visitors and animals.

- Considered species selection is required for self drive through exhibit areas, and essential that a number of species are chosen to provide effective display.

- Seek approval for and implement protected contact Elephant encounter activities at TWPZ, such as behind the scenes barn access or Elephant painting encounters.

- TWPZ Rhino management team to engage with Greater One Horned Rhino keeping staff at Whipsnade Zoo to
provide advice and information in the lead up to the first introduction and breeding attempt of TWPZ’s animals.
- TWPZ to provide Whipsnade Zoo with information relating to the operation of electric hire vehicles.
- TWPZ to provide Whipsnade Zoo with information relating to the creation of an open public access area of the zoo such as the Savannah Visitor Plaza at TWPZ.
- Whipsnade Zoo to be considered as a potential partner in Southern Black Rhinoceros Program and to be approached on behalf of the International Rhino Foundation to this end.
- Online ticket purchases to Taronga Zoo and Taronga Western Plains Zoo to be followed up by CRM strategy relating to zoo membership offer and conversion.
- TWPZ to conduct an annual familiarisation promotion to taxi drivers, hotels and other visitor economy businesses.
- TWPZ to pursue the opportunity to develop a small primate (suitable species) walk through exhibit area adding to the mix of up close interactive exhibits, complimenting and contrasting with, the open large scale nature of the zoo.
- Taronga Zoo to research further the ‘Zoo Lates’ program to investigate suitable out of hours product development options.
- Taronga to trial animal or exhibit branded merchandise in its retail souvenir stores across both sites.

RECOMMENDATIONS & LEARNING: (Page 32)
- Engage with the Zoo and Aquarium Association (ZAA) to enable the consideration of inclusion of self drive through exhibit areas within the review of national exhibited animals general standard and guidelines.
- Develop an operations plan considering suitable identified species for self drive exhibit areas at TWPZ.
- Develop an exhibit area concept in preparation for the design and development of at least one drive through exhibit area at TWPZ.
- Deer walk-through / drive-through exhibits benefit by the display of multiple species such as Fallow and Red Deer for close up interaction and encounters with other more elusive varieties such as Chital (Axis Deer) forming a more spectacular backdrop.
- Drive through exhibit areas require constant attending by suitable staff or trained volunteer. Dependant on the size of the area, species selection, and the ability to maintain a field of view, this could be undertaken in a stationary outpost.

RECOMMENDATIONS & LEARNING: (Page 34)
- A mix of accommodation options is necessary to reach different target audiences, but also to provide opportunities for repeat visitation across the range of experiences.
- An African themed experience should be the primary, or flagship experience.
- Premium priced product should contain the provision of private ensuited amenities.
- Open air vehicles offer a lot to an experience and are far more authentic, although vehicle fit out is an important part of the experience and should provide some creature comforts such as padded seating and some form of weather / climate control.
- TWPZ to continue to pursue the availability and provision of ex military vehicles through the Australian Defence Force for utilisation as tour vehicles due to their suitability in creating an authentic open air experience.

RECOMMENDATIONS & LEARNING: (Page 37)
- Wherever possible utilise existing moated containment method, or sympathetic design for exhibits at TWPZ.
- Utilise clever phrasing in signage and interpretation within the zoo, such as ‘Out foraging, please visit my friends’ as opposed to Exhibit Temporarily Empty or similar.
- Incorporate the use of music prior to certain presentations to build anticipation and ambience.
- Future accommodation developments to be constructed in a low impact style of development with low level
construction and layout preferred in creating a natural landscape.

RECOMMENDATIONS & LEARNING: (Page 39)
- TWPZ to purchase and implement a mobile tamer and yard system for the effective management of small to medium hoof stock.
- TWPZ to trial the implementation of bachelor group holding of select species and to maintain contact with counterparts in the USA who have initiated successfully already.
- A range of accommodation should be offered in a regional location and should include, fully inclusive experience based product, and self contained options for families and groups.
- TWPZ to consider the inclusion of a larger guest house or bungalow for large groups in future development beyond the current planned options.

RECOMMENDATIONS & LEARNING: (Page 40)
- TWPZ to consider the development of central Cheetah dens and management areas within its current Cheetah facility, to assist in further conditioning of animals to close interaction and inspection.

RECOMMENDATIONS & LEARNING: (Page 43)
- Monitor trends in consumer behaviour and the ongoing impact of an increasingly ‘time poor’ market, and how this may influence product development within the zoo, and the way in which it is marketed. For Taronga Western Plains Zoo, short breaks will be an important element.
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- When developing new animal facilities include opportunities for back of house areas to be made publicly available to promote these areas and the work undertaken by zoo keepers to visitors. Seek opportunities in existing facilities to enable back of house access to visitors to create opportunities to learn about keeper routines and animal husbandry.
- Create more animal encounters at TWPZ, both of a close contact smaller animal variety, and in vehicle – larger animal variety allowing visitors to gain closer access to animals and create compelling connections between visitors and their favourite animals. These have multiple level benefits for increases in visitor experience, learning outcomes, and commercial revenue opportunities.
- Animal encounter areas, wherever possible should be able to be witnessed (at a further proximity) by other general zoo visitors, allowing them to feel as though they are part of this experience, as well as acting as a promotional opportunity.
- Finalise the development of a comprehensive visitor experience and animal collection plan for Taronga Western Plains Zoo which will articulate the future vision for the zoo and guide future capital investment and development.

RECOMMENDATIONS & LEARNING: (Page 45)
- Communicate outcomes of C2S2 Conference with Zoo and Aquarium Association (ZAA) for consideration of similar Australian based initiatives.
- Coordinate a meeting of Open Range Zoos within Australia with a view toward conducting regular site inspections
of each property and allowing shared knowledge of similar operational challenges and initiatives.

- Review formal invitation by C2S2 to become a formal member of the consortium, the first international partner to be invited to this prestigious group, with the aim of seeking a practical suitable involvement level of that for an international participant.

**RECOMMENDATIONS & LEARNING:** (Page 46)

- TWPZ to continue to extensively support the Southern Black Rhinoceros program under the management of the International Rhinoceros Foundation as the Species Coordinator.
- TWPZ to enact upon breeding recommendations for its Southern Black Rhinoceros program participant animals.
- TWPZ to continue to work with the IRF on options for long term safe repatriation of animals in a suitable, secure environment in Southern Africa.
CONCLUSION

The undertaking ‘to create a world leading conservation and education facility designed to immerse, inspire and engage Australians,’ could in fact have various meanings for different people and stakeholder groups. For an open range zoo operation in a regional New South Wales location, it is probably best summed up as ensuring a long term sustainable conservation operation that will continue to inspire, educate, research, and prosper ‘for the wild’.

Throughout my travels across three continents, one thing has become very apparent. Australian zoos, and in particular the Taronga Conservation Society of Australia’s operations, ‘punch well above their weight’, to coin a phrase. Compared to some of the world’s great zoos, which may have access to three times our visitation levels, substantially more philanthropic support, or ranging support from governments of anywhere up to 85%, we have established ourselves as global powerhouses for the conservation of wild species. From participation in global conservation initiatives, through to unique and inspiring community based education programs, our zoos perform in the leading echelons of any on offer around the globe.

For Taronga Western Plains Zoo, my fellowship travels and study have validated our existing business planning and inspired new thought on potential activities that the zoo can embark upon into the future. The best method to disseminate this information and learning to the broader Australian community is to enact upon the recommendations listed in this report, and in doing so, deliver exciting innovative projects on the ground within our operation, thus ensuring the continuance of critically needed wildlife conservation program participation.

Projects such as Billabong Camp, (illustrated below) already under construction will form the tangible outcomes of this report and the work being undertaken by an incredibly dedicated team inspired to deliver an exciting nature tourism proposition that not only supports wildlife conservation globally, but contributes enormously to regional, State and Australian community and economic benefits.

Approved Concept for
‘Billabong Camp’ – Taronga Western Plains Zoo
Under development with project completion expected March 2013  
(Credit Maitland & Butler Pty Ltd Architects)