At Green & Dale Associates, we understand that zoo projects have complexities that are not like other complex projects. We understand the importance of the integration of both ‘zoological design, architecture, interpretation and landscape’ as much as we understand the importance of the whole exhibit design. Most importantly we understand the requirements of the integration of all design team consultant disciplines. Because of this, we are committed to a team approach and understand the importance of getting the most out of all consultants involved in the interest of achieving holistic project success.

Our commitment is always to produce a result that everyone involved with the project will be proud of.

Green & Dale Associates have achieved success and international recognition in Zoological and Cultural design projects which include the Trail of the Elephants at Melbourne Zoo; The Wild Asia Rainforest & Elephants Precinct, Backyard to Bush Discovery Precinct, and the Great Southern Ocean, at Taronga Zoo; the Alice Springs Desert Park; and the Rainbow Valley/ Tree Top Canopy Walk at Jurong Bird Park and the Singapore Zoo Master Plan. All projects have won design awards.
The team is committed to an effective and innovative approach to the proposed project and providing the visitor with an experience unrivalled in Australia.

Key projects completed by Green & Dale Associates:
- Platypus Presentation Area, Healesville Sanctuary, 2012
- Gorillas Calling, WORZ (open 2011)
- Hamadryas Baboon, Melbourne Zoo (open 2011)
- Tasmanian Devil Conservation Centre, Taronga Zoo (open 2010)
- White Cheeked Gibbons, Taronga Zoo, 2010
- Great Southern Ocean Taronga Zoo, NSW (open 2007)
- Orangutan Forest Sanctuary, Melbourne Zoo, Victoria (open 2006)
- Wild Asia - Asian Elephant Precinct Taronga Zoo, NSW (open 2005)
- Cambodia Wildlife Sanctuary Kingdom Of Cambodia, 2004 - 2012
- Rainbow Valley Lorikeets Jurong Birdpark, Singapore (open 2004)
- Trail of the Elephants Melbourne Zoo, Victoria (open 2003)
- Backyard to Bush Children’s Zoo Taronga Zoo, NSW (open 2003)
- Creatures of Wollemi Taronga Zoo, NSW (open 2003)
- Jungle Jewels Hummingbirds Jurong BirdPark, Singapore (open 1998)
- Langurs & Macaques Exhibit Taronga Zoo, NSW (1999)
- Birds of Prey Show Healesville Sanctuary (open 1994 - 2011)
- Australian Bush, Stage 1 Melbourne Zoo, Victoria (open 1998)
- Basalt Plains Victoria’s Open Range Zoo (open 1996)
- Alice Springs Desert Park, Alice Springs, NT (open 1996)
- Alice Springs Desert Park Alice Springs, Stage 2, NT
- Sumatran Tiger / Asian Otter Melbourne Zoo, Victoria (open 1994)
- African Gorilla rainforest Melbourne Zoo, Victoria (open 1992)
- Wetland Aviary Healesville Sanctuary (open 1990)
3.2 KEY PROJECT PERSONNEL

All people nominated as key personnel for this project will be assigned and committed to the project for its duration.

STUART GREEN
Principal of Green & Dale Associates
Zoological Exhibit Designer / Landscape Architect
BA Geography (Manchester Univ) Postgraduate PGDLA (Edinburgh Univ.) AAILA ARAZPA Associate Member

As a landscape architect and environmental planner, Stuart has been exclusively involved in the planning and design of parks and zoos for the past ten years. Key design elements include interpretive design, educational planning and site master planning.

Current and recent environmental and zoological projects include design and construction of The Trail of the Elephant, Melbourne Zoo, Stages 1 & 2; the Asian Elephant Precinct and Australian Coastline Precinct, the Wollemi Gorge Exhibit, and the Children’s Discovery Precinct - Backyard to Bush, at Taronga Zoo; and the Lory Loft - the Rainbow Lorikeet Aviary, at Singapore’s Jurong Bird Park.

Stuart has spent time working overseas, in particular South-Asia, as a Consultant in Landscape and Zoo design at Jurong Bird Park, Singapore Zoo and Beijing Zoo. Stuart is currently working on wildlife projects in Cambodia, and Indonesia.

TIM BURT
Landscape Architect
MLA Landscape Architecture (Melbourne University)

Tim oversees the management and development of the office IT resources and CAD documentation of projects. Tim has experience in team documentation for the Platypus Presentation Area at Healesville Sanctuary, and the Meerkat Exhibit at the Royal Children’s Hospital, Melbourne.
GREEN & DALE ASSOCIATES ZOOLOGICAL AWARDS

- Trail of the Elephants, Melbourne Zoo
  - The National Award for Excellence for Heritage Interpretation, 2003 - awarded by the Interpretation Australia Association.

  The project has achieved the ambitious vision of giving a taste of life in south-east Asia within the constraints of acceptable zoo practices........the project makes a rich background for the spoken word projects. An excellent project

- Trail of the Elephants, Melbourne Zoo
  - AILA 2003 Landscape Architecture Award - Open Space and Recreational Facilities

  Clearly the Trail succeeds at all levels, providing exceptional elephant habitat, cultural and habitat immersion for visitors, engaging educational interpretation and a world-class experience
  - Landscape Australia 2003.

  The Exhibit Award is presented to Melbourne Zoo for Trail of the Elephants in recognition of excellence in the area of animal display and exhibit design for an animal display exhibit, or portion of an exhibit complex, opened to the public during the preceding year.
- **Trail of the Elephants, Melbourne Zoo**
  - Peter Todd ‘Toddy Award’ for Horticultural and Landscape Excellence - AILA and Flemings Nurseries, 2003

- ARAZPA Educational Awards 2004

The Education Award is presented to Taronga Zoo for Backyard to Bush Education Programs in recognition of outstanding achievement in educational programme design in an ARAZPA institution. Education programmes were judged on their ability to promote conservation knowledge, attitudes and behavior, show innovation, and measure success - ARAZPA 2004.

- **Alice Springs Desert Park, Northern Territory**
  - Australian Institute of Landscape Architects National Project Award - Open Space Category, 1998

The designed interpretive display environments demonstrate creative control of an extraordinary vocabulary in a purposeful recreation of everything from red sand dunes, to salt pans ........All these are related to the movement and interpretive systems that enable visitors to experience this often alien landscape and its inhabitants.

- AILA Awards Committee 1998.
- **African Tropical Rainforest and Lowland Gorilla Exhibit, Melbourne Zoo**
  
  Australian Institute of the Landscape Architects
  1992 National Award for Landscape design

  The success of the Gorilla Rainforest exhibit is that it creates the feeling of the African jungle – of all places- Melbourne. It is very convincing indeed in its ‘naturalness’

  - AILA Award Citation 1992

  The Gorilla Rainforest is the exciting first stage in the transformation of Melbourne Zoo along bioclimatic lines and is typical of the natural habitats to be created throughout the Zoo. The Gorilla rainforest opened in April 1990, with the intent to provide a natural environment which will encourage the gorillas to interact socially as a group and enhance the potential for natural breeding. The design for the enclosure has been an overwhelming success, for the visiting public as well as the gorillas.

- **Tasmanian Devil Conservation Centre**
  
  Taronga Zoo

  Interpretation Australia
  National Silver Award for Interpretation 2012.

  This project has created an immersive experience for visitors through demonstrating extraordinary capacity of good interpretive exhibits to evoke emotion in the audience.
The multi award winning design of Trail of the Elephants focuses upon developing empathy with the animals and their environment by communicating how similar humans and animal are, how important habitat is to preserving species diversity and how human culture is integral to conservation of the earth’s resources.

AILA 2003 Landscape Architecture Award - Open Space and Recreational Facilities

‘Clearly the Trail succeeds at all levels, providing exceptional elephant habitat, cultural and habitat immersion for visitors, engaging educational interpretation and a world-class experience.’
Green & Dale Associates provided specialist design for the Wild Asia Precinct, specifically in the area of Botanical/Zoological exhibit design, interpretation, landscape design and architectural theming, and infrastructure design. The project was undertaken in association with Jackson Teece Chesterman Willis, Architects. The project is a major part of Taronga Zoo’s redevelopment programme.

The Asian Elephant Exhibit/Wild Asia is a key feature of Taronga Zoo’s Tropical Rainforest. A key element was to demonstrate how species are ‘inter-connected’ with one another. This allows the design to be fully integrated with other exhibits through interpretation. The visitor experiences a variety of viewing points of the elephants, while having the opportunity to simultaneously view other animals that share its natural habitat.

Other species include tapirs, langurs, spider monkey, gibbons, barbirusa, fishing cat, asian otter, and bird avaries.
Green & Dale Associates, with CLP Design Architects undertook design and construction phases of the Orang-utan Forest Sanctuary, at Melbourne Zoo. This project completes the Trail of the Elephants, a Trail Through South East Asia Precinct.

It has very strong stories to tell in regards to Melbourne Zoo’s support of in-situ conservation initiatives in South East Asia and reinforces the interpretive messages in place in the existing Trail of the Elephants precinct.
The Backyard to Bush project is located in the Children’s Discovery Precinct at Taronga Zoo, Sydney, Australia. An award winning project in Interpretation, Education and Building awards. The Backyard to Bush project takes visitors on an exploration of the familiar environment of the home through a backyard, a farmyard and into the wilderness of the bush.

It’s a childrens zoo, but one which is original, interesting, exciting and fun! It is a distinctly Australian place where children and adults experience the natural world using all their senses, their imagination and their minds.

This is an experience which is increasingly becoming elusive in our highly urbanised society. Backyard to Bush invites children to explore, play, observe and reflect. It generates a commitment to the environment and provide examples of positive practice to promote individual environmental action.
The Tasmanian Devil Exhibit is an engaging and well-articulated submission which highlights a good understanding of the project challenges, for example, identifying the difficulty of exhibiting crepuscular animals, some of the hardest to exhibit successfully in a zoo and especially complex when the Devils are part of an important Australia-wide insurance breeding program. As a result of this knowledge two distinct habitats were displayed to contextualize the Devils’ story. This has created an immersive experience for visitors through demonstrating extraordinary capacity of good interpretive exhibits to evoke emotion in the audience - *Australian Interpretation Awards for excellence 2012*.

The design was developed in-conjunction with the Taronga Zoo Keeper staff and Education/Interpretation Department. Sustainability was a high priority in this project with the recycling and refurbishment of the existing Large Cats Dens structure.
Platypus

Tales from Platypus Creek

Green & Dale Associates were appointed to develop a platypus visitor experience that includes a ‘hands on’ presentation and to see platypus resurrected as an iconic flagship species for Healesville Sanctuary. In this unique hands-on experience visitors can experience being an animal keeper, with the opportunity to step into the shallow water of the ‘platypus pool’ where it’s normally the keeper’s job to play and feed the show’s platypus. Other species in the pools consist of eels, water rats and Turtles.

A key design component was to incorporate the existing BHP Billiton (now serving as a breeding facility) Platypus structure into the 3 exhibit pools and viewing arena. To provide shade for the reclusive platypus and its audience a giant shade structure protects the visitor and animals from direct sunlight.
The design for the Alice Springs Desert Wildlife Park presents the life of central Australia’s deserts via a Habitat Immersion concept. Visitors experience the habitats of the Park through a series of Habitat Scenarios. Each of the habitats reflects messages and themes of the Desert Zones, in displays of plants, fauna, ethnobiological elements and landform - ‘the ultimate zoological & botanical park’.

An essential theme of the Park and its exhibit habitats is the nature of this ancient landmass, which is seen by many as the dead heart. In fact, the Deserts of the Centre are diverse and rich. The Park was endorsed by Sir David Attenborough as the best in the world, during a visit in 1997, saying there is no museum or wildlife park in the world that could match it.

The designed interpretive display environments demonstrate creative control of an extraordinary vocabulary in a purposeful recreation of everything from red sand dunes, to salt pans......All these are related to the movement and interpretive systems that enable visitors to experience this often alien landscape and its inhabitants.

AILA National Project Award- 1998.
Green and Dale Associates, in association with Jackson Teece Chesterman Willis Architects, at Taronga Zoo, Sydney. The experience offers visitors an opportunity to connect the variety of animals with their habitats. The exhibit is a chance to encounter the Australian animals, birds and sea creatures that inhabit the coastal fringe. The key objective for the Great Southern Ocean is to help visitors understand our relationship to the ocean, coastline and the animals we share them with.

Key features are:
- An interactive surf beach is provided for young visitors to experience Australian Beach Culture - Shoreline beach with wave pools.
- The Seal Theatre Program and the Leopard Seal / Penguin Underwater Viewing Theatre
- Heathland Aviary with a large diversity of bird species, plants and pelican beach.
- The Australian Fur Seals and Sea Lions show the differences between eared and earless species. A series of pools show their ability to move both on the land and in the water.
The Japanese garden was opened in 1991, to mark the tenth anniversary of the sister-state relationship between Victoria and the Aichi Prefecture in Japan. Green & Dale Associates working in collaboration with Nakajima Ken and Nakane Shiro.

This garden (and an Australian garden in Nagoya, the capital of Aichi) were created to symbolise the strong friendship between the two states and to reflect the natural beauty of their respective landscapes. Three traditional garden styles are combined into one at the zoo. They are the ‘artificial mountain, wood, water’ style or ‘Sukiyama Rin Sanshiki’, the ‘circuit’ style or ‘Kaizu-shiki’ which involves strolling through the gardens to enjoy scenes from different viewpoints, and the ‘dry landscape’ style or ‘Karesansui,’ which often uses sands and gravels in Japan, but which at the zoo uses drought tolerant grasses.

It is one of Australia’s finest examples of a traditional Japanese stroll garden. The garden includes a traditional tea house, waterfall, stone bridges and the redevelopment of an existing ornamental lake to form a major feature of the garden, set amongst extensive plantings representative of the gardens of Japan.
The exhibit simulates a Tropical Australian Habitat, where the Rainbow Lorikeet dominates the forest tree tops.

The Lory Loft is designed to provide visitors an experience to view Lorikeets high in the upper canopy of a treed valley. Suspended walkways, 14 metres above the ground allow visitors the spectacular experience of viewing and feeding Lorikeets close-up.

Green and Dale Associates, worked in close collaboration with Jurong BirdPark, Singapore. Winner of Singapore National tourism awards 2003. GDA have been involved in a number of projects with the Park.
The Australian Bush, stage 1, featuring the Woodlands and Mallee Habitat, with the Victorian Koala and Southern Hairy Nosed Wombat, Echidna, Lace Monitor, and bird exhibits.

A key feature of the exhibit is free-ranging macropods and Emus, with the Wombats being displayed in a nocturnal environment, in the form of an underground viewing "burrow", incorporating "interactives and interpretive facilities."
The design of Jungle Jewels walk-in aviary creates an environment where visitors can observe at close proximity a fraction of the amazing diversity and complexity of the South American rainforest. High in the treetops live fruit-eating birds like the tanagers and cotingas. In the lower levels, honeycreepers and finches are more common. On the forest floor and streams live the waterbirds like teals and pintails.

The visitor centre of Jungle Jewels area displays hummingbirds in individual aviaries. Male and female hummingbirds are housed in specially designed breeding enclosures for viewing by visitors.

Green & Dale Associates provided theming of the Aviary and Visitor Centre, including interpretation, graphics and interactive features.
The Cambodia Wildlife Sanctuary was created to protect and conserve the unique animals and remarkable habitat of Cambodia. One million acres of this rich forest landscape and diverse wildlife population are now protected by the Cambodian Wildlife Sanctuary. The sanctuary is located in Kulen-Protep Wildlife Sanctuary in the province of Preah Vihear, Siem Reap and Oder Mean Chey, in the Kingdom of Cambodia and covers approximate one million acres. Green & Dale Associates are site planners for the project including zoological master planning and facilitation with government and community organisations.

In August 2011, the Sanctuary received final recognition from the Cambodian government with an official opening, joining forces with the Elephant Nature Park in Thailand, a successful elephant rescue and rehabilitation centre. Founder and director Sangduen “Lek” Chailert, well-known in the international elephant conservation and animal rights world, will manage running of the Sanctuary.