

The Winston Churchill Memorial Trust of
Australia

Report by Glenn Willmott
2003 Churchill Fellow

The Lamington National Park Churchill Fellowship to study access facility design within national parks to include disabled people in natural environment recreation in addition to assessing volunteer management programmes in New Zealand and the United States of America.

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Introduction and Acknowledgements

This report outlines my 2003 Lamington National Park Churchill Fellowship to:

- Study access facility design within National Parks to include disabled people in natural environment recreation.
- Assess volunteer management programmes.

This study took place within the United States and New Zealand over an 8 week period during April / May 2004.

There are many people to acknowledge for their assistance, encouragement and support, as without them this Fellowship opportunity and experience would not have been possible.

To the Winston Churchill Trust for rewarding me with the opportunity to enrich my knowledge and experience in my chosen subject, and Lamington National Park, especially Tony Groom of “interNATIONAL PARKtours” for the generous sponsorship allowing this Fellowship to be undertaken.

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Executive Summary

Name: Glenn Willmott
Position: Senior National Park Ranger, Department of Conservation and Land Management, Western Australia.

Work Address: 14 Queen St, Busselton WA 6280
Ph – 08 97525555
Email – glennw@calm.wa.gov.au

Home Address
14 Le Souef St, Margaret River WA 6285
Ph: 08 97573636
Email – Glenn.Sara.Willmott@bigpond.com

Project description:

To study access facility design within national parks with the aim of including disabled people in the natural environment as well as assessing volunteer management programs.

Fellowship Highlights:

United States National Park Service, Washington DC- Meeting with Accessibility Coordinator Dave Parkes. Establishing background on legislation, policies and standards the US National Park Service apply to recreational developments within National Parks. Learn of the National Accessibility Achievement Awards for National Park Service.

National Centre on Accessibility (NCA) and Bradford Woods Outdoor Centre, Indiana University, Bloomington. Meeting with Ray Bloomer, Director of Education and Technical Assistance. NCA is a program of Indiana University's Department of Recreation and Park Administration and focuses primarily on accessibility as it relates to parks, recreation and tourism industries. Bradford Woods is a unit of the University's Department of Recreation and Park Administration focusing on providing outdoor education, recreational and leadership opportunities for disabled community members.

Yosemite National Park, California – Meetings with Don Fox, Accessibility coordinator and Henk and Georgia Parsons, amazing volunteers with 7000 hours of time donated to USNPS, compiling an accessibility audit of Yosemite and volunteer work in various NPS locations.

Tongariro National Park, New Zealand - Witnessing the wonderful work of the volunteer organization of Tongariro Natural History Society.

Findings –

1. The integral role played by the National Center on Accessibility (NCA) has a monumental effect within the US National Parks Service due to their focus primarily on accessibility as it relates to parks, recreation, and tourism industries. Australia does not have a centralised body with the same responsibilities.
2. The success of volunteerism in national parks is the result of resource commitment through government agencies. Recognised resources may include financial and administrative support.
3. An increased awareness of employees involved in recreation site development and maintenance to implement universal access design principles through improved training in principles, philosophy and practice.
4. Natural environment recreation opportunities should be evaluated for accessibility, fostering independent use by people with disabilities.
5. Accessibility awards play a key motivational role for National Parks throughout the United States.

Implementation –

- Provide copies of Final report of “Recommendations for Accessibility Guidelines: Outdoor developed Areas (draft)” to key personnel within Dept of CALM.
- Attend Dept of CALM Parks and Visitor Services district meetings to distribute findings.
- Presentation at Dept of CALM annual PVS State workshop in Perth, September 2004.
- Contact local Government Authorities and meet with key staff members.
- Implement new knowledge into current and upcoming recreation development projects in the South West of Western Australia.

Programme

USA

- 5th – 6th April *Washington DC.* Meeting with David Parks, US National Park Services Accessibility Co-ordinator.
- 7th – 8th April *Bloomington, Indiana.* Meeting with Ray Bloomer, Director of Education and Technical Assistance National Centre for Accessibility.
Indianapolis, Fort Harrison, meeting with Ric Edwards, Director Safety, Training and ADA Coordination
Bradford Woods, Indianapolis, meeting with Meaghan Goolkasian, Coordinator of Relations and Services
- 13th – 14th April *Sequoia National Park.* Meeting with Paul Pfenninger, NPS, and site visits.
- 15th – 19th April *Yosemite National Park.* Meetings and site visits with;
Don Fox, NPS Universal Access Co-ordinator,
Tammie Power, NPS Volunteer Co-ordinator,
Henk and Georgia Parsons, US NPS Volunteers of the Year.
- 21st April *Lake Tahoe State Park.* Site visit.
- 26th – 30th April *Yellowstone National Park.* Meeting with Doug Madsen, Universal Access Co-ordinator and various NPS staff, site visits.

New Zealand

- 11th – 13th May *Auckland.* Meetings with Steve Simpson, Senior Ranger, Auckland Regional Council (South Region), and Tony Oliver, Principal Ranger ARC (South region) Bruce Andrell, Principal Ranger ARC (West Region) and site visits.
- 17th – 18th May *Taupo.* Meeting with Terry Slee, DOC Programme Manager Visitor Assets, Derek Thompson, DOC Recreation Planner, and Sarah Gibbs, Executive Officer, Tongariro Natural History Society and field trips / site visits.
- 19th – 20th May *Napier.* Meeting with Jane Denton, Chief Executive, Backup New Zealand. Attend backup familiarisation course.
- 21st May Visit *Mount Bruce Bird Sanctuary.*
- 24th - 25th May *Wellington.* Meetings with Brian Dobbie, Fiona Colquhon, Department of Conservation, Central Regional Staff.
- 27th May *Motueka.* Meeting with Rudy Tettler, DOC, Programme Manager, Community Relations.
- 31st May *Christchurch.* Meeting with Graham Condon, Chairman of Parks and Recreation Committee, Christchurch City Council. Site visits
- 3rd - 4th June *Christchurch,* Meeting with Dave Wilkins supervisor recreation planner DOC Canterbury Conservancy.
Leonie Fechny, Volunteer Coordinator DOC, DOC Southern Regional Office.

Universal Access Facility Design

Background:

Australian building codes, Australian Standards 1428, governs universal Access facility design within Australia, particularly relating to the built environment. These standards are adopted when designing facilities for outdoor recreation sites such as ramps, boardwalks and toilets etc. However, there is little documented guidance for recreation planners, national park managers and maintenance staff for what constitutes accessibility in the *natural* environment when designing, constructing and maintaining facilities such as trails, campsites, signage etc.

Nearly 20% of all Australians have some sort of disability. This is expected to gradually increase mainly due to a rapidly aging population. 33% of the population know someone with a disability, whether a family member, friend or work colleague.

Natural environment recreation opportunities give people with and without disabilities the opportunity to enjoy life, benefit from the experience of recreation and contribute to their own sense of health and wellness. Ensuring recreation opportunities are accessible, such as trails and picnic areas, creates more opportunities for people with disabilities to participate with their families and friends. The natural environment is part of the experience *all* people should be given the opportunity to experience.

Accessibility in the USA

The United States of America is governed by a very clear set of regulatory guidelines regarding Universal Access design principles within the *built* environment. Since, 1990 the “Uniform Federal Accessibility Standards” and “The Americans with Disabilities Act Accessibility Guidelines” (ADAAG) cover “the bricks and mortar”. However, these guidelines do not transfer well to the *natural environment* as this is affected by so many factors that are beyond human control, for example, the weather. To overcome this discrepancy between guidelines covering the built environment and very few guidelines covering the natural environment the U.S. Access Board created the Regulatory Negotiations Committee to come to consensus on technical provisions for accessibility in outdoor areas. In 1999 the Regulatory Negotiations Committee (RNC) drafted “Recommendations For Accessibility Guidelines: Outdoor Developed Areas”. This report will be presented to Congress and will probably become statutory law, thus creating very definite guidelines being issued and adopted as best practice for Universal Access in the U.S Outdoors.

The minimum requirements found in the *Outdoor Developed Areas Final Report* by the RNC are based on several principles and include:

1. “Protect resources and environment
2. Preserve experience
3. Provide for quality of opportunity
4. Maximize accessibility
5. Be reasonable
6. Address safety
7. Be clear, simple and understandable
8. Provide guidance
9. Be enforceable and measurable
10. Be consistent with ADAAG (as much as possible)
11. Be based on independent use by persons with disabilities” (1.)

Examples within natural environments where universal access design principles need to be considered include, campsites, trails, picnic facilities, lookout facilities, interpretation signage, car parking, etc.

1. Regulatory Negotiation Committee, *Recommendations for Accessibility Guidelines: Outdoor Developed Areas, Final Report*, p.4, September 1999.

Accessible Trails

The RNC needed to come to consensus regarding criteria that would be mandated for accessible trails. Trails provide outdoor experiences that are unique. It may sometimes be difficult to make a trail accessible while still maintaining the natural elements. Also, accessibility requirements vary for different individuals. For example, a person with a strong upper body using a manual wheelchair may be able to easily manoeuvre across slopes a parent pushing a stroller could have difficulty manoeuvring. So useable does not always mean accessible and the purpose of the trail should always be kept in mind.

Technical Provisions:

In the RNC's *Outdoor Developed Areas Final Report* ten technical provisions of trail accessibility are addressed:

- Surface
- Clear Tread Width
- Openings
- Protruding Object
- Tread Obstacles
- Passing Space
- Slope
- Resting Intervals
- Edge Protection
- Signage

Surface

Surface is of primary importance. The trail surface should be firm and stable. Firmness refers to the penetration of the surface that occurs when force is applied, for example, when stepped on. Stability refers to the displacement of the surface material when a turning motion is applied such as the twisting of a foot or turning of a wheel. (Trail surfaces section in this report provides more detail).

Clear Tread Width

A clear tread width is intentionally the unobstructed width of the trail. Under the provisions, an accessible trail must have a clear tread width of 32 inches/800mm. This gives a wide enough area for a wheel chair or pram to comfortably stay on the firm and stable surface.

Openings

This addresses the openings in trail surfaces, such as spacing between the boards of a boardwalk. These spaces should not allow a sphere 4cm in diameter to pass between them. In addition, the long dimension must run perpendicular or diagonal to the main direction of travel to prevent casters from wheelchairs or the tips of walking aids from being caught in the spaces.

Protruding Objects

This addresses the needs of people who are visually impaired. Protruding objects such as vegetation must be cleared to a minimum height of 2m from the ground, preventing visually impaired people from bumping their heads on branches etc hanging over the trail. Maintenance is critical to ensuring trails remain accessible.

Tread Obstacles

Examples of tread obstacles include tree roots, rocks, brush, fallen trees or branches. Tread obstacles are not to exceed a maximum height of 50mm. An exception occurs if running and cross slopes are 1:20 or less, then the obstacle may be 75mm in height.

Passing Space

This provision allows people who use wheelchairs to pass other hikers easily. Passing spaces need to be a minimum of 1.5m x 1.5m and occur every 250m.



- Yellowstone National Park example of edge protection and passing spaces on a boardwalk

Edge Protection

The guidelines state that edge protection is not necessarily required, however if it is provided, it should be a minimum of 75mm high.

Resting Intervals

These need to be 1.5m in length and be as wide as the widest portion of trail leading to the resting interval. The slope may not exceed 1:20 in any direction.

Slope

Running slope and cross slope are two crucial elements to people with mobility impairments. With the exception of drainage, the cross slope should not exceed 1:20. Of the running slope, no more than 30% of the total trail length should exceed 1:12 and in addition, running slopes must comply with one or more of four provisions.

The four provisions are:

- Running slope cannot exceed 1:20 for any distance.
- If resting intervals are provided every 60m, the running slope may be a maximum of 1:12.
- If resting intervals are provided every 9m, the running slope may be a maximum of 1:10.
- If resting intervals are provided every 3m, the running slope may be a maximum of 1:8.

Signage

Accessible trails should include signage with information on the total distance of the accessible segment and the location of the first point of departure from the technical provisions, (see “conditions for departure” section in this report). There is no universally specific symbol yet designed to represent an accessible trail, however there have been four examples produced as seen below.



Conditions for Departure

Due to the dynamic nature of the outdoor environment, the *Outdoor Developed Areas Final Report* identifies four conditions for departure or circumstances that allow deviation from the technical provisions. These conditions apply to each of the designated areas in the report. The application of one or more of the conditions is not an overall exemption of the entire trail. If the condition for departure no longer exists, the technical provisions re-apply. The exemption only applies to the respective technical provision, all other aspects should comply. For example, if an endangered plant species only allows 76cm of clear tread width, the surface should still be firm and stable in addition to compliance with the remaining provisions, other than tread width. After passing the plant, the clear tread width should return to at least 90cm.

The conditions for departure are:

Condition 1:

Where compliance would cause substantial harm to cultural, historic, religious, or significant natural features or characteristics.

Condition 2:

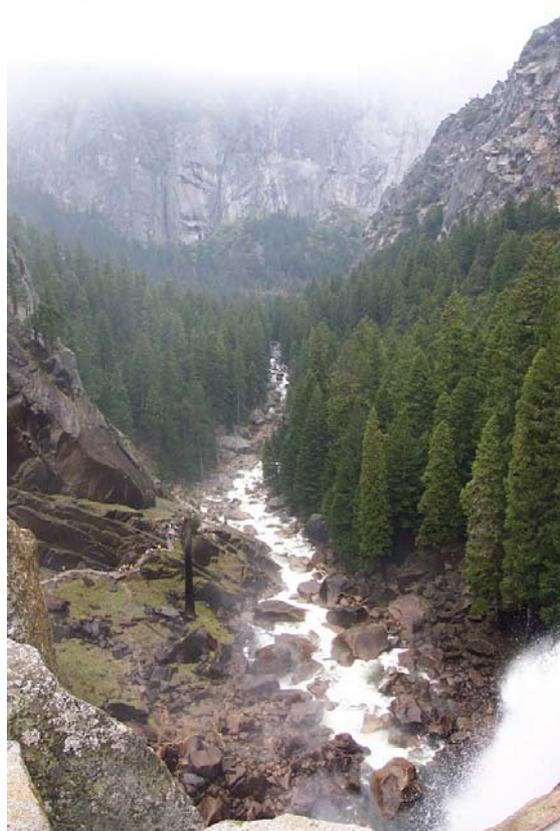
Where compliance would substantially alter the nature of the setting, or the purpose of the facility, or a portion of the facility.

Condition 3:

Where compliance would require construction methods or materials that are prohibited by Federal, State or local regulations or statutes.

Condition 4:

Where compliance would not be feasible due to terrain or the prevailing construction practices.



- Vernal Falls lookout, Yosemite National Park, U.S.A

Looking closely at the photo above, a walk trail can be seen running along the left side of the river. To achieve an accessible trail to the top of the waterfall from the valley floor in this environment would cause significant alterations to the natural features and take away the ambience of the natural environment and therefore, the purpose of the trail. Conditions 1, 2 and 4 from the conditions of departure could be applied to the walk trail so accessibility is not required.

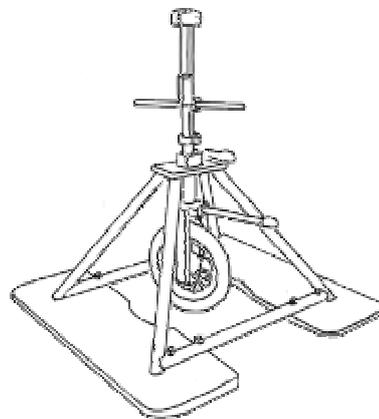
Trail Surfaces

The proposed accessibility guidelines require a trail to be firm and stable. The intended use and length of the trail may regulate the degree of firmness and stability preferred. For example, a trail greater in length than 800m should be very stable. A trail 150m to 800m in length should be moderately firm and stable.

An instrument called the penetrometer is used to measure firmness and stability. When controlled pressure is applied to the penetrometer, the penetration depth of the device is measured as the degree of firmness while rotating the penetrometer will provide the stability measurement.

Information on this device can be accessed via “Beneficial Designs” www.beneficialdesigns.com, in the United States of America

	Very Firm/stable	Moderately firm/stable	Not firm/stable
Firmness	0.3 inch or less	>0.3 inch & <0.5 inch	>0.5 inch
Stability	0.5 inch or less	>0.3 inch & <1.0 inch	>1.0 inch



Penetrometer

National Center on Accessibility

The National Center on Accessibility is a program of Indiana University’s Department of Recreation and Park Administration. It is funded in part by the U.S. Congress through the National Park Service. NCA focuses primarily on accessibility as it relates to parks, recreation and tourism industries. Their major objectives include: conducting research, providing technical assistance, developing resources and training materials, and conducting educational programs.

Providing Access to Beaches

A day at the beach is a popular Australian recreational pursuit. Time at the beach, playing or relaxing in the sand and surf, may provide all of the physical, psychological, emotional and spiritual benefits that recreation can offer. The National Center on Accessibility has conducted three research projects on beach access. The study included use of assistive devices and temporary surfaces for beach access.

The beach assistive devices were evaluated for three factors; appearance, independence and safety. The beach surfaces were evaluated for four factors; function, appearance, texture and width.

Beach assistive devices:



Types of beach wheelchairs.



Lady transferring from standard wheelchair to beach wheelchair.

(Photos courtesy of Access Today brochure from National Center on Accessibility)

In summary, the research showed that while the devices travelled better through sand than standard wheelchairs, not many of the beach devices facilitated independent use. The majority of devices were difficult to propel across sand independently or with limited mobility, requiring the assistance of another individual to push the chair from behind. Independent access to beaches could be achieved by combining assistive devices with sound temporary surfaces.

Temporary surfaces for beach access:

Natural beach surfaces generally are not accessible. Surfaces need to be firm and stable and could be permanent or temporary. Some examples of temporary surfaces include rubber mats, recycled plastic decking, plastic mesh, lattice and other materials. These are used to prevent thin wheelchair wheels, walking sticks, crutches and walkers from penetrating into sandy areas. These surfaces also provide paths for families with prams and people with an unsteady walk. A temporary surface can be effective in situations

where a permanently installed beach access route may not be suitable, for example when sand, wind and water cause erosion or when sand build up occurs.

The NCA's *Beach Surface Accessibility Study* final report states that some of the temporary surfaces were extremely easy to install, eg. Lattice, Recycled Lumber, Diamond Rubber Mat. 95.8% of people participating in this study indicated they would "visit the beach more often if they could get across the sand more easily". Temporary surfaces provide accessibility in situations where people may not otherwise have the option of accessing the beach.



- Example of temporary beach surface allowing wheelchair access

(Photos courtesy of Access Today brochure from National Center on Accessibility)

Accessible Picnic Tables

Accessible picnic elements facilitate inclusion and socialisation of park visitors. It is important for facility operators/managers to provide accessible picnic areas and elements such as tables.

RNC's proposed accessibility guidelines suggest that when providing accessible picnic tables it is important to consider the following technical provisions:

- Number of accessible tables – The final report gives guidelines on the ratio of accessible tables for a picnic area.
- Dispersal of accessible tables – Tables should be dispersed among different types of picnic areas provided eg, if a location has picnic areas near a lake and also in the forest, it is important that each area of different experience has accessible tables.
- Surface – surface should be firm (as per guidelines in trails section above).

- Slope – 1:50 is an acceptable slope under the guidelines, however if drainage is an issue on site a slope of 1:33 is acceptable.
- Wheelchair seating spaces – The final report gives guidelines on the ratio of accessible spaces required per tabletop perimeter.



- The above design seen in Lake Tahoe, California, a picnic table with centre post allows access for wheelchairs on either end.

An important recommendation learnt from National Center on Accessibility documentation is that it is important to position wheelchair spaces for social interaction. A space in the middle of the table as opposed to the ends, positions a person in a wheelchair closer to all people on the table therefore increasing social interaction. In addition, a parent with more than one child can provide care for all of the children by being seated in the middle of the table.

It also identified the fact that an oval shaped tabletop allows the center of the table to be within 'reach range' while seated at any position.

Trail Assessment for Accessibility

A United States organization called Beneficial Designs has developed an assessment process (Universal Trail Assessment Process), to allow land managers to assess trails and collect data such as grade, cross slope, surface, width and features. This information benefits land managers by providing them with objective information about the conditions of their trails.

Information such as this allows land managers to:

- Document and monitor trail conditions
- Identify access barriers
- Identify and prioritise maintenance, access and construction needs
- Evaluate environmental impact
- Increase user safety through timely maintenance
- Provide users with detailed access information at the beginning of the trails.

This information is also a benefit to trail users with disabilities as it:

- Provides information on conditions which affect access (eg, grade, surface, obstacles)
- Allows disabled users to plan for assistance if it is required
- Encourages participation through knowledge of trail conditions

Universal access information provides detailed information on the degree of accessibility of an environment. Users decide for themselves whether they will be able to access a particular environment. A universally recognisable icon has been developed by Beneficial Designs, which indicates to people that access information is available at a site. (See Beneficial Design website)

Four elements are used to describe the level of access of a trail. These are:

- Grade
- Cross slope
- Width
- Surface

Detailed information to do with these elements is communicated on a sign and then installed at the beginning of trails. The symbols seen below are used by Beneficial Designs in these signs to indicate the four elements listed above.



grade



cross slope



width



surface

National Park visits within the USA:

Design principles for the visually impaired is evident with new infrastructure at Sequoia National Park. The National Park has had some major infrastructure improvements over the past two years that have seen many of its high visitation recreation sites refreshed and 'hardened'.

Some key detail observed from site visits was facility design for the visually impaired. For example, in the design of toilet structures, the architect has specifically used darker timbers as posts and dark colors on toilet doors that contrast with lighter colored toilet walls (see photo below). This design detail allows people with slight percentage vision to see the posts and doors when walking towards the toilet.



- New toilet structure in Sequoia National Park

Interpretation methods have also been considered during the design process of the redevelopment. To allow children and/or persons with visual impairment to gain an appreciation of the size of a Sequoia tree, raised cobblestone is laid in the asphalt surface to the exact size of a nearby Sequoia tree.



- Lighter colored cobblestone is inset into the asphalt to the exact scale of the nearby Sequoia tree as if it was lying on the ground.



- The lighter colored cobblestone inlay represents the base of a nearby Sequoia tree.



- In the Sequoia National Park redevelopments, much consideration has been given to universal access principles as noted in the sign above. Braille has been used in the bottom left hand corner of the sign.

Yosemite National Park was established in 1890 and receives over four million visits per year, therefore has a lot of existing infrastructure. Priority is currently being given to retrofitting existing infrastructure for accessibility to ensure facilities comply with the *Americans with Disabilities act*. For example, 5% of the cabins and permanent tents within campsites have been designated for retrofit. New facilities are designed using *“Recommendations For Accessibility Guidelines: Outdoor Developed Areas” Final Report*.

Due to the very high visitation, accessible trails in Yosemite are generally constructed with materials such as asphalt and bitumen. These materials are long wearing and low maintenance and generally provide ideal accessible trail surfaces.

The Access Coordinator for Yosemite National Park, Don Fox, currently has two volunteers carrying out an accessibility audit of facilities in Yosemite. This information will then give the National Park Service information regarding accessibility status within the park and then assist with future planning for prioritizing allocation of resources.

Yellowstone National Park, the world's first national park dating from 1872, again has a lot of existing infrastructure. Yellowstone has many good examples of accessible boardwalks and trailside signs. The use of recycled plastics on boardwalks is evident throughout the National Park primarily to combat the requirement of replacing timber structures regularly due to decay. One of the issues facing recycled plastic structures in the outdoors is the slipperiness of the smooth plastic surface when wet. From what I witnessed, this issue is yet to be overcome.

Yellowstone National Park has excellent examples of tactile trailside information signs as seen in the photo below. Plastic moulds of specific objects are available at trail side signs to allow people to touch and feel the objects.



- The model display of a Wolf paw print allows persons with visual impairment as well as children to get an appreciation of the size and shape of the paw.

US National Park Service (USNPS) National Accessibility Achievement Awards

The USNPS initiated the National Accessibility Achievement Award Programme in 1998. The purpose of the programme is to recognize outstanding accomplishments that result in greater opportunities for persons with disabilities within the National Park Service.

There are seven separate categories for awards. These are:

- Sustained Park Accessibility Achievement Award;
- Programmatic Accessibility Achievement Award;
- Accessibility Leadership Award;
- Volunteer Accessibility Achievement Award;
- Design Project Achievement Award (Architectural);
- Design Project Achievement Award (Exhibits and Waysides); and
- Accessible Website Achievement Award.

The awards provide an incentive for land managers to show initiative and commitment to universal access design and accessibility issues.

Henk and Georgia Parsons, volunteers I met with from Yosemite National Park, were recipients of the Volunteer Accessibility Achievement Award in 2003 for their work with the National Parks Service over the last few years. Henk and Georgia are involved in auditing accessibility in Yosemite National Park and have donated over 7000hrs of their time to the USNPS. This award is a great boost for Henk and Georgia as they were recognized for their wonderful efforts.

Accessibility in New Zealand

New Zealand's Government has recently completed a Standards handbook for "*Tracks and Outdoor Visitor Structures*". This new document replaces previous documents the Department of Conservation used such as "*Track Service Standards*" and "*Guidelines for the design of Outdoor Visitor Structures*" when constructing and servicing facilities in the outdoor environment. It is this document that the Department of Conservation and other natural land managers such as Auckland Regional Council, use to provide guidelines on accessibility requirements in their sites. The document often refers to "people with mobility difficulties or limitations" as opposed to people with disabilities.

The “*Tracks and Outdoor Visitor Structures*” Document categorizes sites by user groups/visitor groups. “There are six visitor groups, each given a group number as seen below;

User group	Visitor group
1	Urban residents (UR) – <i>not a category often used by DOC</i>
2	Short Stop Travellers (SST)
3	Day Visitors (DV)
4	Backcountry Comfort Seekers (BCC)
5	Backcountry Adventurers (BCA)
6	Remoteness Seekers (RS)” (2.)

The classification of visitor groups acts as a key driver for the level of accessibility provided when developing or maintaining a site by the Department of Conservation.

Other land management agencies are encouraged to use the classification system above so as to standardise New Zealand’s approach to managing tracks and outdoor visitor structures.

Accessible Trails

New Zealand trails are classified into six categories and correspond with the visitor group.

Trails that are constructed or maintained for User group 1, Urban Residents, are called paths.

Trails that are constructed or maintained for User group 2, Short Stop Travellers, are called short walks.

It is within these two classifications of trails that it is considered appropriate to plan and develop for people with mobility disabilities. The document refers only to people with mobility difficulties.

2. Standards New Zealand, *New Zealand Handbook, Tracks and Outdoor Visitor Structures SNZHB 8630:2004*

Volunteer Management, U.S National Park Service

Volunteering in the United States National Park Service is considered an integral part of Park Management and vital to their success as a service. The Volunteers-in-Parks (VIP) programme engages more than 120 000 volunteers and receives over 4 million hours of donated time annually.

The National Park Service (NPS) Director's Order #7 "Volunteers in Parks," has been produced to provide direction to NPS personnel who are responsible for, and/or involved in implementing the VIP programme.

To assist in administration and provide a centralised coordination role of the VIP programme the NPS has appointed a Service wide "Volunteers in Parks" coordinator. Overall responsibility for the NPS VIP programme rests with the VIP Programme Manager located in the NPS Washington Office. To flow on from this, Regional Coordinators and individual Park Coordinators have also been appointed.

Regional responsibility for the VIP programme rests with the regional VIP Programme Coordinator, usually located in the Division of Interpretation in regional offices. The Regional Coordinator monitors the park VIP programmes in the region, provides assistance to the parks as requested, serves as liaison between the region, the parks and the Washington office, compiles VIP fund requests from the parks and submits them to the Washington office, allocates VIP funds to the parks and monitors their use, compiles status reports from the parks and forwards them to the Washington Office.

At the park level, the VIP programme is administered by the park VIP Programme Manager. Each programme office that utilizes volunteers is required to have someone on its staff who has been specially assigned the responsibility for the VIP programme in the park. The park VIP Programme Manager is responsible for keeping the programme running smoothly and efficiently, and ensuring that it is meeting the needs of the park as well as the needs of the volunteers. The manager assists the park staff in assessing needs and identifying volunteer projects and keeps staff current on ideas and procedures for utilising volunteers.

Although the park VIP Programme Manager is responsible for the overall coordination of the park's VIP programme, he or she usually does not directly supervise *all* the volunteers. The staff members directly responsible for the work the volunteers are performing, usually supervises volunteers. The role of the park VIP Programme Manager, in most cases, is to provide guidance and assistance to the various staff members who are directly supervising the volunteers.

Tammie Power is the Yosemite National Park VIP Program Manager. This massive task involves co-ordination of 3200 volunteers who return 112 000 hours of donated time. The current budget is \$17 000 and Tammie has to seek grants and other funding from other areas to top up this budget.

Some of the issues facing Tammie with her management of the programme are:

- The remoteness of the National Park means local volunteers have to drive long distances in a day to help out with projects. This can be expensive for the volunteer.
- There is little housing in the park to provide for volunteers.
- Difficulty in getting other National Park staff to provide lists of potential projects for volunteers. Often other National Park staff have the ideal opportunity to provide Tammie with projects, however volunteerism is not at the forefront of their minds.
- When projects are found, there is not always an available skilled staff member to supervise.
- Some full time employees have the impression that volunteers may displace them.

The recruitment of volunteers for the NPS is done on a nation wide basis. Volunteers apply through the VIP coordinator in Washington DC to carry out volunteer work, however, some National Parks such as Sequoia and Kings Canyon National Park, recruit independently via their own mechanisms.

Security checks play an important part during the recruitment phase. Director's order #7 "Volunteers in Parks" states, "that no person who has been convicted of a felony, violent crime, crime against a person, or crime involving use of a weapon will be utilized in the NPS VIP programme, in any manner whatsoever."

Financial resourcing of the "Volunteers in Parks" programme in individual National Parks is critical to a VIP programme's success. Sequoia and Kings Canyon National Park allocates \$13,000 annually for the operation of a VIP programme that recruits 700 individual volunteers who donate over 41,000 hrs annually. This funding allocation is set aside for the purchase of uniforms, rewards and reimbursement of volunteer expenses etc.

Sequoia and Kings Canyon National Park and Yosemite National Park have both experienced a rapid increase in volunteer registrations. To manage an increase in numbers of volunteers it is important to have systems in place to appropriately deal with the increase. It can be very draining on the existing staff resource and dissatisfying for the volunteer if volunteers are recruited for the sake of collating statistics. Some of the jobs volunteers in these parks undertake include; camp ground hosting, leading interpretation activities, providing 'front counter' customer service and park conservation and rehabilitation services, etc.

Volunteer Management, New Zealand

New Zealand's Department of Conservation uses volunteers in many different national parks and for many different jobs. The allocation and coordination of volunteers by DOC is the duty of Community Relations programme leaders in each area office. This high level appointment within the area staff structure ensures staff have a high level of commitment and respect for volunteer coordination.

Rudy Tettler, Community Relations programme manager in the Motueka Area Office has had satisfactory results in the area of volunteer management with limited staff resources. Rudy selects a number of achievable projects to concentrate on for the financial year. People who contact his office seeking volunteer work are given the opportunity to work within the selected projects for that year. They then choose for themselves whether they will undertake the volunteer role. With this approach, DOC staff are not trying to find specific projects for every individual who volunteers.

New Zealand's Hut Warden programme has a high use of volunteers, particularly popular with international volunteers. Many of these volunteers are 'repeat' volunteers returning to the same national parks. DOC has an agreement with New Zealand's Department of Immigration allocating international volunteers special visitor visas allowing them to stay longer than the usual visa length of stay. For example, in Tongariro National Park, volunteers are hired to care take the huts located on hiking tracks. These volunteers donate thousands of hours annually to this work involving camping out in isolated locations in the high country. Due to the extensive management requirement, a ranger is appointed to directly coordinate this project. Isolated jobs for volunteers require special skills so vetting of volunteers is very important to the success of the programme for both DOC and volunteers.

There are other forms of volunteerism evident in New Zealand. An example is the Tongariro Natural History Society (TNHS), which takes on the coordination role for many volunteer projects within the Tongariro National Park and works in direct partnership with DOC. One of the aims of TNHS includes increasing participation in and support for conservation by developing opportunities for volunteer programmes. These programmes are coordinated by an Executive Officer, Sarah Gibb, employed by the society out of their trust funds, with an office within the Taurangi DOC office. The ability to work along side DOC officers enables the society to build and maintain a close working relationship with DOC. This paid position has the advantage of giving the TNHS a positive working relationship with DOC staff and creating active community involvement within this national park.

The value of groups such as the Tongariro Natural History Society includes;

- Their ability to seek grant funding from external sources that are unable to be accessed by government departments.
- The fact that they lighten the organizational load faced by DOC as often volunteers who make contact first with DOC can be channelled across to the society to be volunteers through their specific projects.
- These active local area groups often organize the publication of books and other park specific information such as pamphlets.
- Their contribution in cash and work 'in kind' – the TNHS has contributed over \$500,000 in this way.

Conclusions and Recommendations

1. The development of accessibility guidelines such as the *Outdoor Developed Areas Final Report* of United States, to suit Australian requirements and standards would provide land managers with clear guidelines and direction for designing accessible recreation facilities in the natural environment.
2. The National Center on Accessibility plays an integral role in conducting research, providing technical assistance, developing resources and training materials, and conducting educational programs for land managers. An agency or organization such as this in Australia would be invaluable.
3. Government agencies should be encouraged to develop accessibility awards to motivate land managers to consider accessibility when designing and constructing recreation facilities in the natural environment and also recognize those who have achieved outstanding accomplishments resulting in greater opportunities for persons with disabilities.
4. The success of volunteer programmes in natural land management is largely attributed to appropriate resourcing within management agencies. Allocating dedicated staff to volunteer management at appropriate levels within staff structures, should be a priority within government agencies.
5. Many improvements can be made to beach access for people with disabilities. Government agencies and local authorities should be encouraged to provide beach access for people with disabilities where ever possible.
6. Developing natural history societies / “Friends of National Park” groups is a positive way of actively involving the community in park management issues.

Useful resources and websites

Special populations: Programmatic Accessibility Guidelines for interpretive Media,
United States National Park Service Harpers Ferry Center.

www.nps.gov/hfc

United States National Park Service Director's order #42: Accessibility for visitors with
Disabilities in National Park Service programmes and Services.

www.nps.gov/policy/Dorders/Dorder42.html

ADA/ABA Accessibility Guidelines

www.access-board.gov/ada-aba/Blue%20HTML/ADA-ABA%20Guidelines%20Blue.htm

National Centre on Accessibility. www.ncaonline.org

Universal Trails Assessment Process. www.beneficialdesigns.com

New Zealand Barrier Free Trust. www.barrierfreenz.org.nz