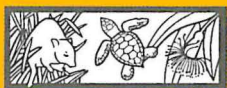


Procedures and Operations Manual

for LANDSCOPE EXPEDITIONS LEADERS



LANDSCOPE EXPEDITIONS

Working at the frontier of discovery

Compiled by Kevin Kenneally and Jean Paton



in association with

UWA Extension, The University of Western Australia

Our Vision for *LANDSCOPE* Expeditions

That the research expeditions' program continues to establish high standards and is a recognised leader in the nature-based tourism industry.

Our guiding principles

- That participants benefit by being part of something many people only dream about: rare, engaging and memorable opportunities to visit remote and exciting places in WA and to help preserve endangered wildlife and their habitats.
- That scientists benefit by receiving both funding and physical assistance. They also benefit from the diverse knowledge, fresh perspectives and skills of participants and from increased community understanding of their work.
- That the environment benefits from the improved understanding of participants as they help explore uncharted territories, assist in the preservation of threatened environments and species and work together for the benefit of natural and cultural resources.
- That the community benefits from the enriched lives of its members and from the benefits which flow on from research findings and outcomes.
- That future generations benefit from the natural and cultural resources volunteers help to identify and preserve.
- And on a global scale, the benefits include the perpetuation of cultural and biological diversity.

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WELCOME TO *LANDSCOPE* EXPEDITIONS

It is with pleasure that we welcome you to the *LANDSCOPE* Expeditions program. Our mission is to conduct scientific research and to promote community awareness of nature conservation issues in Western Australia. To this end, we provide opportunities for community participation in research expeditions.

LANDSCOPE Expeditions are not-for-profit, self-supporting study and research projects. They are part of CALM's Strategic Development and Corporate Affairs communications program and are offered in association with UWA Extension, The University of Western Australia. Between 1992 and 2000, 42 expeditions have been undertaken.

LANDSCOPE Expeditions answer the need for research to protect the environment, while they respond to the demand for first class interpretation by scientists and specialists to lay persons. They provide paying volunteers with an opportunity to work alongside scientists and other experienced CALM personnel, and promote wider cooperation in addressing conservation and land management challenges throughout the State.

The program's greatest resource is its leaders. The selection of our leaders is based not only on their expertise and experience, but also on their ability to interact with the public and communicate the relevance of their work. Your involvement is an important part of the program's continuing success. A majority of your time will be spent interacting with volunteers, finding out their interests, responding to their questions, concerns and needs. It is important you take this role very seriously. One-on-one contact is very important. Volunteers may ask questions about the project and may be curious about other research with which you have been involved.

Please review the information contained in this manual. It is important that you have a clear understanding of the program's expectations. The manual has been written to help you in the field in a range of situations. Please always keep in mind that everyone involved in an expedition has worked hard to create the final product. We welcome any questions, concerns and suggestions you may have.

Please keep this manual as a reference tool. The manual will be updated from time to time and leaders involved in the program will be sent current editions.

WHY CONDUCT *LANDSCOPE* EXPEDITIONS?

Western Australia covers almost a third of the Australian continent, stretching from the tropical Kimberley to temperate areas west of Albany. The coastline alone is nearly 13 000 kilometres long. Of Australia's 80 recognised natural biogeographic regions, no fewer than 26 occur in Western Australia – more than in any other State. These biogeographic regions are defined principally by landform, soils and vegetation types. They range from the rain forests (vine thickets) and savannas of the northern Kimberley through the diverse desert regions and the mulgas and mallees of arid inland Western Australia to the tall karri forests of the Warren region in the south-west. Coastlines cover a similar diversity of environments from the extensive coral reefs, mudflats and mangroves of the tropical Kimberley through the shallow sandy embayments of the west coast to the granite promontories and islands in the southern ocean off Albany and Esperance.

This extensive and diverse landscape and seascape provides a magnificent natural setting for a vast array of plant and animal species. It is also a huge natural laboratory in which scientists can pursue their research interests. However, such a diverse and extensive State also poses a formidable hurdle for scientists in determining the first among many questions that are essential to effective research and conservation – what occurs where? A major emphasis of the scientific research undertaken by *LANDSCOPE* Expeditions is directed toward answering this intriguing and pivotal question.

In the sparsely populated western third of the continent, the distribution of most plant and animal species is very poorly known and many expeditions are focussed on trying to improve our understanding of distributional patterns. Detailed records and prudent collections are made of many species, using the most scientifically acceptable methods and techniques, so that biologists from many

institutions can carry out more detailed studies. Such documentation and collection has the dual purpose of helping to define the distribution of many botanical and zoological species as well as facilitating research by state herbaria and museums on the level of variation within species. Studies of specimens and records of species from a wide geographic area are often the precursors to the description of species new to science.

The conservation reserve system in Western Australia is not yet comprehensive, adequate or representative. Many land surface types and their associated wildlife are not represented in reserves, or are very poorly represented. This pattern was documented in the 1995 'Interim Biogeographic Regionalisation for Australia (IBRA) Report', which demonstrated that many of Australia's major bioregions are poorly served by the existing conservation reserve system. While some land systems may have been well represented within reserves, others remain completely unrepresented. Bioregions provide a framework for identifying gaps in the reserve system. Conservation reserves should protect representative samples of each bioregion. *LANDSCOPE* Expeditions help identify which areas should be included to protect and enhance the State's biodiversity.

LANDSCOPE Expeditions has the specific aim of encouraging the public to travel with us to distant places for close encounters of the scientific kind. As expedition members they are vital partners. Many conservation goals are difficult to achieve by scientists working alone—volunteer support can make the difference.

HOW DO EXPEDITION MEMBERS HELP?

When they travel with *LANDSCOPE* Expeditions, they help in a variety of ways:

Funding

Their financial contributions make the research possible. This alone is a significant factor in making the expedition a success.

Scientific discovery

- They can help by collecting key information. Although some interpretations will be made in the field, much of the synthesis takes place back in the laboratory, where final identifications and analyses are made and results prepared for publication. They will discover that field work can be repetitive and time consuming as it has to be done in a systematic way. Outcomes are not always obvious at first, but there's always the chance of that surprise discovery.
- Extra pairs of hands and eyes are of great benefit in helping to achieve goals, as field work is very intensive. Leaders should attempt to maximise time spent in the field, but should provide instruction in field techniques as time permits.
- They may be asked to collect plant specimens and make animal sightings in order to increase our knowledge of the distribution of species. However, with plants, only representative specimens will be kept. Volunteers may be disappointed if some are discarded, but you should explain that redundancy is often part of the scientific process. With bird observations, it is the collective experience that confirms the sighting and produces advances in knowledge.
- Their fresh point of view or personal expertise may help you in unexpected ways. Please encourage them to share their ideas.
- Volunteers should expect to return home with a broader understanding of the natural world, the role of scientific methods, the value of nature conservation and the rewards of knowing that they have contributed to pioneering studies in remote areas. *LANDSCOPE* Expeditions aim to whet their appetite for nature, to give them a taste of scientific discovery, and to provide an experience that may not otherwise be a part of their lives.

It's not all science

Many elements combine to make an expedition successful, not just the scientific activities. An affinity for team work, a flexible approach and a willingness to help create the best results for nature conservation.

ADMINISTRATION OF EXPEDITIONS

Planning and administration of the *LANDSCOPE* Expeditions program is carried out from CALM's Strategic Development and Corporate Affairs Division at Kensington. Personnel are Kevin Kenneally, Scientific Coordinator, Jean Paton, Expeditions Administrator and Marianne Lewis, Expeditions Liaison Officer. UWA Extension's role is to maintain the mailing list, distribute brochures, process bookings and pay accounts.

Expressions of interest in running expeditions

A notice is distributed each year to staff in CALM Science Division, and to regional offices, inviting expedition proposals for the following year. The expeditions provide a unique opportunity for staff to identify research needs and priorities, particularly in remote areas, which are suitable for public participation.

Acceptance of project

The expedition proposals are assessed by CALM's Director of Strategic Development and Corporate Affairs and the Scientific Coordinator of *LANDSCOPE* Expeditions. Projects are selected on merit, and must be aligned with departmental objectives and strategies. Scientists are notified of successful proposals, meetings are held with them, and brochure copy and costings prepared.

Agreed budgets

Once costings are received from expedition leaders, *LANDSCOPE* Expeditions personnel prepare a budget and circulate a copy to the leaders for approval. A copy of the approved budget is required to be signed-off and returned to Jean Paton. Once the budget is finalised no additional costs can be added without the approval of the expedition administrators.

Disbursement of expedition funds

The expeditions are run on a not-for-profit basis. When accounts have been paid for individual expeditions and general

administration costs that are incurred on an annual basis are deducted, any remaining funds are paid by UWA Extension to CALM Strategic Development and Corporate Affairs, and are dispersed by the Director in January/February of the following year. Leaders whose expeditions run before the end of the financial year and who have a necessity to reimburse departmental funds can avoid the problems of carrying debt over by submitting accounts to the expedition administrator on completion of the expedition.

Briefing paper

A comprehensive briefing paper is prepared by the expedition leaders prior to each expedition. This should contain background information and the aims of the project, a detailed itinerary and notes on the terrain and environmental conditions of the study area. (As a guide, a sample copy is sent to leaders of new expeditions.) The finalised briefing is processed by the expedition administrators, proofed by the respective leaders, and distributed to the volunteers on the project. In addition, each volunteer receives any printed material relevant to the project or region, e.g. Health Department of WA pamphlets, copies of scientific articles, CALM leaflets, etc.

Briefing meeting

A meeting is held for each expedition approximately two weeks prior to departure. This provides an opportunity for leaders to meet local volunteers and for final preparation for the expedition to take place. Because so many expeditions visit remote areas, it is important that volunteers are fully briefed on what to expect. Briefing nights are also an opportunity for leaders to ascertain volunteer qualifications or special areas of interest which could lead to complementary activities taking place on the expedition. Minutes of briefing meetings are distributed to all personnel, and are particularly useful to volunteers not based in Perth. Anyone unable to attend a briefing can submit questions beforehand.

Role of expeditioners as CALM volunteers (rights and responsibilities)

On receipt of application forms, participants are registered as CALM volunteers, entitling them to certain benefits. These include receipt of *CALM News*, 20% discount on the purchase of CALM publications, and permission to drive CALM vehicles (subject to holding the necessary licence) or be a passenger in same. Insurance through the Insurance Commission of WA covers volunteers for accident (up to \$124 000). Minor injuries are covered by Medicare. Volunteers in employment normally are covered for loss of income up to \$500 per week for 52 weeks following an accident while working in the field on behalf of CALM. Leaders should note that the risks involved for each trip are independently assessed by the insurers. Additional coverage may have to be obtained to cover volunteers engaged in dangerous work or subjected to hazardous conditions, e.g. crocodile handling, backpacking in remote areas etc. It is important that any potential risks be disclosed to expedition administration staff.

CALM'S CONSERVATION ESTATE

One of the most important mechanisms for achieving nature conservation objectives is the reservation and management of land and waters for conservation purposes. Most plants, animals and micro-organisms can not survive outside natural ecosystems.

It should be recognised, however, that even if the ideal system of nature conservation reserves was established securely, this would still not fully protect the biological diversity of Western Australia. Nature conservation must be practised where possible across all land tenures. Land management practices should be ecologically sustainable on agricultural lands, pastoral lands, Shire reserves, vacant Crown land, urban areas, and Aboriginal lands.

Lands and waters managed by CALM

Total area of land managed by CALM at 30 June 2000 : 21 351 086 ha. The area of marine reserves was 1 145 940ha.

The terrestrial area is 8.0 % of the land of Western Australia.

National parks are for the purposes of wildlife and landscape conservation, scientific study, preservation of features of archaeological, historic or scientific interest, together with recreational enjoyment by the public. They have national or international significance for scenic, cultural or biological values.

Area of national parks at 30 June 2000 : 4 938 916 ha.

Nature reserves are for the purposes of wildlife and landscape conservation, scientific study and preservation of features of archaeological, historic or scientific interest. No recreation which damages natural ecosystems is allowed and no commercial exploitation of wildlife, except that commercial tour operators may be licenced to take tours through nature reserves where such operations are considered compatible and non-consumptive.

Area of nature reserves at 30 June 2000 : 10 775 263 ha.

State forest is managed for multiple uses including water supplies, recreation, sustainable timber production and wildlife conservation. It also provides for public utilities and mineral production, where these activities are imposed.

Area of State forest at 30 June 2000 : 1 727 358 ha.

Marine reserves

Marine parks are managed for marine conservation and recreation fishing on a sustained yield basis.

Area of marine parks at 30 June 2000 : (approx.) 1 013 940 ha.

Marine nature reserves are managed for the conservation of marine and terrestrial flora and fauna and their habitats. Fishing and collecting are not permitted.

Area of marine nature reserves at 30 June 2000 : (approx.) 132 000 ha.

Other reserves, freehold land and pastoral leases

Miscellaneous and timber reserves are normally transitional classifications, and in the interim may be managed for wildlife conservation, recreation or sustainable timber production.

Area of other reserves at 30 June 2000 :

- conservation park 298 386 ha
- timber reserves 141 434 ha
- pastoral land 2 405 890 ha
- freehold land 33 121 ha.

The Conservation Commission is the vesting body for all conservation lands including national parks, nature reserves, conservation parks, multiple-use State forests and timber reserves. It is responsible for approving management plans, reviewing CALM's progress in the management of conservation lands, and approving leases and commercial tourist operators' licences issued by CALM. The Commission's policy on Aboriginal involvement in national parks and nature conservation is aligned with departmental policy.

Responsibility for commercial activities in native forests and plantations has been transferred from CALM to the Forest Products Commission.

ABORIGINAL LANDS

Approximately 10% of the State, mainly in the arid zone and the far north, is held, leased or owned for the benefit of Aborigines. Much of this land is relatively unmodified and has great value for nature conservation but needs management to retain these values.

The reoccupation of these lands by Aboriginal communities raises the possibility of the resumption of Aboriginal land management practices, such as patch burning, which would be beneficial for nature conservation. It is possible for CALM to assist communities in the protection and management of such areas. Such assistance could include an interchange of information, providing technical expertise, training community rangers, conducting joint research or wildlife management programs, or formally agreeing to assist a community in a joint management arrangement.

The total area of land in WA held for Aboriginal purposes at 30 June 2000 was in excess of 27 million ha.

CALM'S ABORIGINAL RECONCILIATION INITIATIVES AND STRATEGIES

CALM's initiatives and strategies in Aboriginal Affairs have been developed in light of various reports that are directly related and pertinent to our land management responsibilities: e.g. the Royal Commission into Aboriginal Deaths in Custody, the WA Taskforce on Aboriginal Social Justice and the Review of the Aboriginal Lands Trust (WA).

Additional reports and strategies such as the report by the Council for Aboriginal Reconciliation provide frameworks for amending initiatives and strategic directions of CALM in a program environment that aims to encourage continuous improvement.

Three tenets that underlie CALM's approach are:

1. Recognition of the importance of land to Aboriginal cultural heritage and the need to consider matters of cultural importance in relation to land and wildlife management.
2. Development of cooperative arrangements with Aboriginal traditional owners and landholders to achieve sustainable conservation outcomes, both on and off the CALM managed estate, throughout Western Australia.
3. Promotion of economic, social and environmentally sustainable outcomes that achieve improved quality of life for Aboriginal people.

A draft policy on Aboriginal involvement in nature conservation is on the CALM web for all staff to view at the following address:
http://www.naturebase.net/projects/aboriginal_involvement.html

Aboriginal sites

LANDSCOPE Expeditions respects Aboriginal cultural sites and insists that our personnel and expeditioners do also. We have a very good and close working relationship with many Aboriginal groups and it is important that we remain on the best of terms. If in doubt, don't

access a site or property. Contact the expedition coordinator for clarification and to report any problems. Ensure you have the correct permits and permission prior to accessing a site or property. Under no circumstances are Aboriginal paintings to be touched by anyone or burial sites disturbed. Photographing Aboriginal paintings and burial sites is restricted by the *Aboriginal Heritage Act 1972*.

Aboriginal Heritage Act 1972

The *Aboriginal Heritage Act* makes provision for the preservation on behalf of the community, of places and objects customarily used by or traditional to the original inhabitants of Australia or their descendants, or associated therewith, and for other purposes incidental thereto. The Aboriginal Affairs Department administers the Aboriginal Heritage Act and it ensures that Aboriginals are responsible for the administration of the Act.

Relevant Sections of this Act are as follows.

Section 15 Any person who has knowledge of any Aboriginal site or artefact, or landscape elements must report it to the Aboriginal Sites Registrar.

Section 16 No-one may disturb an Aboriginal site without permission from the Registrar of the Aboriginal Cultural Materials Committee.

Section 17 It is an offence to disturb any site without permission.

PERMITS, APPROVALS AND REGULATIONS

Leaders must ascertain the need for, and acquire, any permits or approvals required for their expedition, e.g. Aboriginal lands and sites, ethics committee, accessing pastoral leases etc. Copies should be lodged with the expedition administrator.

Ethics committee

Some overseas expeditions have been infiltrated by animal rights activists, who are philosophically opposed to intervention activities involving animals e.g. trapping, blood sampling, tagging, etc. and have disrupted research activities. It is therefore important that leaders

have obtained ethics committee approval to carry out their research and are aware that such groups exist.

Campsites

Regulations concerning camping are to be adhered to. Campsite environments must be respected and looked after. Any problems associated with *LANDSCOPE* Expeditions are to be reported to the expedition coordinator. Camping fees are to be paid when required. Campsites must always be left in as good or better condition than when we arrived.

Fires

Care is to be taken at all times when setting and extinguishing a campfire. Fire regulations and bans for a particular area should be checked and adhered to. If in doubt contact the local CALM office or Bushfires Board office.

CONDUCTING EXPEDITIONS

Volunteers can only be transported in CALM vehicles or in vehicles licensed for tourist operations; and suitably surveyed and licensed vessels and aircraft. This ensures that volunteers are covered by insurance carried either by CALM or the operators subcontracted to *LANDSCOPE* Expeditions. Seat belts should be worn at all times. Perth based departures and arrivals are attended by expeditions administrative staff. It is desirable that one of the leaders travel in the vehicle with the volunteers at all times.

Trip diary

All expeditions are expected to keep a diary recording the daily activities and achievements. The diary will be supplied by the expeditions staff. Each expeditioner is required to contribute to and sign the diary. Entries may include sketches, verse, anecdotes etc. After the expedition the diary will be transcribed and a copy forwarded to each volunteer. This diary forms the basis for the final Expedition Report.

Contact with people along the way

Each expedition is an exercise in public relations for CALM. The presence of CALM personnel in remote areas is an opportunity for a positive public relations exercise. Locals are of great importance to *LANDSCOPE* Expeditions operations. They are to be respected and dealt with in a courteous manner at all times. They are to be asked local conditions at every available opportunity. The expedition coordinator is to be notified as soon as possible of any problems concerning locals. Remember, you may not pass this way again but *LANDSCOPE* Expeditions may!

Leadership skills and group dynamics

For many people the exposure to CALM personnel will be the only contact they have with the organisation and they may form an opinion of the organisation based on this experience. The expeditioners are putting their trust and faith in you and you have an obligation to deliver. They are looking for leadership from you. It is your responsibility to create an atmosphere of confidence, credibility, excitement and interest in the expedition. A lot of these people may have taken years of hard work to save for this expedition: you are the key person for a successful, enjoyable, rewarding and safe outcome for them. Don't get drawn into too many one-on-one situations, your responsibility is to the whole group (not just to the good looking blonde!). Every person on the expedition has and deserves an equal right to your time, efforts and participation. Some volunteers may feel that having 'bought' your services they are entitled to ask all sorts of personal questions. You need a technique to deal with this – something like "I don't have a private opinion when I'm on an expedition" (said with a smile) will usually do the trick. Be wary of intruding on volunteers' privacy. You can frame personal questions in the context of "It helps me to know something of your background so that I can have some idea of your interests and expectations."

It is important for leaders to be aware that different people like to do different things, and the experience will be more fulfilling for all concerned if people are enjoying themselves. Talk to people to find out their interests as early as possible, as this can facilitate serendipitous

research, complementary to the main research aims. Many participants are highly qualified in their own fields. Information about participants can be gleaned from application forms; briefing nights provide another opportunity; and by travelling on vehicles on long trips a scientist can move around and talk to volunteers on a one-to-one basis.

It is a good idea to keep an eye on older participants who may struggle to keep up with the daily activities. Be aware of alternative activities which these people may wish to do, but without discrimination or barring people from activities they choose to do. Be sensitive to the group dynamic. If appropriate (and in consultation) place husbands and wives on separate teams. Find out people's interests and ensure that they are involved in activities of special interest to them where possible. Be aware of overbearing people and don't allow them to intimidate others. Ensure no-one is left out. Strongly encourage people to change seats daily on the vehicle. Leaders are encouraged to travel on the vehicle, which provides quality, relaxed, one-on-one time with individual participants. Remember enthusiasm, enthusiasm! You may have seen it all a thousand times but it will be a once-in-a-lifetime experience for most people. Be excited and interested with them.

Opportunities for good public relations occur through activities such as 'show and tell' around the camp fire at night, when each person can contribute and when leaders can report on the day's activities and achievements. Involve people by asking open-ended questions to which everyone can contribute; ask for their opinions/impressions/experiences. Remember that all opinions are valid. It is important to use this time to make sure that individuals are clear about the next day's activities and about any changes or modifications to the itinerary that may be necessary. This is where a degree of flexibility may be necessary to accommodate volunteer capability. Remember to allow periods of 'free time' for people to make their own discoveries. In the planning of daily operations such as meal times and travel schedules etc., leaders need to communicate and cooperate with those providing logistical support so that all aspects of the expedition are seen by the volunteers as a cohesive whole.

The greatest *faux pas* of all is undermining authority, denouncing

someone else's work or contradicting comments made by your fellow workers. If there is a problem, whether personal, mechanical or operational, never address the issue in front of the volunteers. Take the person aside, away from the public eye, to resolve the issue.

Tricks of the trade

Be aware of your strengths and weaknesses in these areas.

- **Voice projection:** this doesn't necessarily mean loud, though you do have to be aware of background noise; talk **away** from source of noise, **towards** your clients. Open your mouth. Don't mumble. If you have a pronounced accent, remember your audience may not be familiar with it; speak clearly, and slowly. Generally, the deeper your voice, the better it carries; drop an octave (if you can!) to assist people with hearing problems.
- **Stance:** look confident. Stand straight, face your audience. Make eye contact. When you use hand gestures, do so for a reason.
- **Tone of voice:** vary this. If you are affirming something, sound positive. Not sure? Sound doubtful. Nothing is duller to listen to than a monotone.
- **Volume:** can people hear you? Ask often, and modify your volume accordingly. Be appropriate in volume and tone; you will not talk the same way to a couple of people, as to a full bus. If there's a problem with a microphone, **stop** the vehicle while you talk. Repeat questions put to you if the others haven't heard.
- **Voluble clients:** don't allow them to take control. If one person is constantly questioning you, that's fine; but make your answers and comments relevant and audible to everyone.

Avoid these things

- **Irrelevant information** – beware pointless information. 'If it wasn't raining we'd have a beautiful view'. Don't raise people's expectations if you're going to dash them immediately.
- **Aussie-isms** – if you have non-English speakers on board, avoid things like 'are you right mate' or 'fair dinkum'. And take care with English speakers from overseas; 'rubbers' and 'Durex' mean different things to Australians/Americans/English...

- Never be negative: present everything in the best possible light. It's a rainy, grey day. Remark how cool it is, and how green the country looks, and look for pools and waterfalls. **Don't** talk about what a shame it is they weren't here yesterday, and how beautiful it looks in the sunlight!

Sensitive issues

Remember that a person's whole opinion of CALM can be based on their exposure to a single CALM officer. If you become aware that a volunteer would prefer not to be engaged in a particular activity for any reason, it is advisable to make optional activities available to them. Issues about which people can be sensitive include trapping, handling and tagging of animals, as well as:

- Working with animals;
- Use of firearms;
- Use of fire;
- Disposal of waste;
- Sexist attitudes and issues, religious opinions, risqué jokes. Don't joke unless you are absolutely sure you have gauged audience response correctly;
- Cultural issues (Aboriginal land rights, Mabo/Wik High Court decisions);
- Photography – request and obtain permission before photographing indigenous people. (Photographing Aboriginal paintings and burial sites is covered by the *Aboriginal Heritage Act 1972*.);
- Music – at some point on the expedition it may be appropriate to play music. It is exceedingly difficult to please every volunteer with the selection of music. What is important is to find the happy balance. Consideration should be given to volume as well;
- Politics – never get into conversations of a political nature and don't hold forth with personal views on a potentially controversial issue. Try to give several points of view, without disclosing your leanings. An anonymous imaginary 'friend' is a good standby, to speak for you – 'I have a friend who thinks'.

Mutual expectations

Much of this information will be contained in the written briefing. Etiquette and guidance for attendees will also be included in this document. This may include appropriate behaviour when in close contact with animals, handling of equipment, camp rules, etc.

Cancellation policy after departure

If, after departure, a trip has to be terminated due to unforeseen circumstances, no refunds will be made. To avoid such penalties, we strongly recommend that volunteers purchase trip cancellation insurance.

Communications

A recent publication *Saving our natural heritage? The role of science in managing Australia's ecosystems* (C. Copeland (ed.): 1998, Halstead Press) has suggested that the information gathered by scientists is not being clearly communicated to the general public and that Australian scientists are not being trained in appropriate communication skills. One of the aims of *LANDSCOPE* Expeditions is to address this concern.

It is an important part of any expedition that the leader/s are conversant with all the many facets of the area he/she will be operating in e.g. the flora and fauna, history, geography, cultures, current affairs etc. *LANDSCOPE* Expeditions' reputation has been built on the quality of its personnel and the high level of interpretation its scientists can provide. The commentary should be informative and interesting without becoming so in-depth as to be boring. Again, a degree of decorum needs to be observed particularly in the areas of race, sex, religion and politics.

Take care how you personalise your commentary – clients want to experience the here and now, not necessarily learn all about your last job or your ashram stay in India. It's fine over lunch but not over the microphone at the expense of the scenery.

Guide to successful interpretation

The ecotourism experience can engender an intellectual, emotional and even spiritual connection between people and places as much as it does a physical experience with land and water. Interpretation is a process of translating the stories of our natural and cultural heritage in terms that will motivate and inspire visitors to greater understanding and care for the environment.

The interpreter's role is to create awareness and promote appreciation and understanding. The best interpreter likes people, cares about the environment and is a skilled communicator. Interpretation is a service provided by *LANDSCOPE* Expeditions to its clients. It is a management tool that can increase visitor appreciation of sites to encourage protection of their resources, and it can communicate to users the goals of the agencies which manage the areas visited.

A good interpreter:

- Knows and understands the basic principles of communication and interpretation;
- Looks pleasant and acts courteously;
- Communicates well, speaking clearly and simply;
- Acts with self-confidence;
- Is warm and friendly and responds to the group;
- Cares about the clients and their feelings and well-being;
- Takes responsibility for the group's safety and comfort;
- Shows enthusiasm and makes the audience feel enthusiastic too;
- Provokes curiosity;
- Leads by example – shows appropriate visitor behaviour;
- Is honest about what he/she knows about a particular topic;
- Sounds credible without being arrogant;
- Is flexible enough to cope when something unexpected happens;
- Maintains a sense of humour and perspective, especially when things go wrong;
- Talks with the audience rather than at them;
- Knows and personalises the topic relating what people see back to their everyday lives;
- Gives the audience time to digest information, observe and explore;

- Leaves something for people to discover for themselves;
- Evaluates and refines his/her interpretive skills.

Environmental awareness (low impact/best practice)

All facets of the environment are of the utmost importance in the philosophy of *LANDSCOPE* Expeditions and they are to be respected at all times. It is the responsibility of the expedition leader/s to ensure expeditioners follow expedition guidelines. Some examples of best practice include:

- Small camp fires (to reduce the amount of wood burnt);
- Bottled gas to be used for cooking wherever possible;
- Leaving camp sites litter-free;
- Chemical toilets or pit toilets to minimize impact;
- Reducing the use of disposable items;
- Removal of all rubbish;
- No use of detergents or soap in or adjacent to rivers, creeks or waterholes.

Seabird breeding islands (guidelines for visiting)

Comprehensive guidelines have been developed for human visitation to seabird breeding islands in Australian waters. Any expedition planning to visit seabird breeding islands should consult "Guidelines for managing visitation to seabird breeding islands" (1992) published by the Great Barrier Reef Marine Park Authority.

DUTY OF CARE

Duty of care

Duty of care will be practised at all times and leaders have the responsibility to see that staff or volunteers are not placed at risk or in danger. It is not worth taking risks such as allowing staff or volunteers to ride on the roof of a vehicle, etc.

In case of emergency or accident, *LANDSCOPE* Expeditions staff in Perth must be contacted as soon as possible and a situation report supplied. Emergency numbers are:

Ron Kawalilak, Director, Strategic Development and Corporate Affairs, (w) (08) 9389 8644, (h) (08) 9336 3296, (mob.) 0419 045355
Kevin Kenneally, Scientific Coordinator, *LANDSCOPE* Expeditions, (w) (08) 9334 0561, (h) (08) 9341 5564, (mob.) 0407 986227
Jean Paton, Administrator, *LANDSCOPE* Expeditions, (w) (08) 9334 0401, (h) (08) 9339 3775, (mob.) 0411 029045
Marianne Lewis, Liaison Officer, *LANDSCOPE* Expeditions, (w) (08) 9334 0319:

Expedition leaders will be supplied with a copy of volunteers' application forms containing medical details and emergency contact numbers for family members. Expedition administrative staff will contact family members if appropriate or if advised by expedition leaders to do so.

Crisis management plan

Prior to the expedition, leaders will prepare a crisis management plan which should include emergency evacuation procedures and all expedition staff should be briefed on how this is to be implemented. It is advisable that all expedition personnel should hold a current first aid certificate.

Royal Flying Doctor Service (RFDS)

Before the commencement of each trip the expedition leaders should advise the Royal Flying Doctor Service (RFDS) that they will be in the area, the route they are taking and the number of personnel involved. RFDS operates from Jandakot Airport (administration only phone (08) 9417 6300 and ask for operations). It is recommended that expeditions to remote areas carry a satellite phone.

The RFDS emergency medical advice/evacuation phone number is 1800 625 800.

RFDS Call Signs (Note the emergency frequency operates 24 hours):

Port Hedland/Derby: 5300

Meekatharra/Kalgoorlie: 5360

Call signs for the various base stations and the operational hours are:

Derby (VJB) Mon.–Fri. 7am–5pm

Kalgoorlie (VJQ) Mon.–Fri. 8am–5pm, Sat. 8.30–10am,
Sun. 8.30–10am

Port Hedland (VKL) Mon.–Fri. 8am–5pm

Meekatharra (VKJ)

Carnarvon (VJT) emergency only.

In an emergency situation the patient is to be medically evacuated by the most effective method and with advice from the RFDS or medically qualified personnel. Any questions relating to accident or emergency evacuation insurance can be resolved at a later time; the priority is to deal with the emergency.

Safe use of vehicles

Amendments to the Road Traffic Code, commencing 1st January, 2001, prohibit persons riding in the goods section of open load space vehicles such as utilities (including dual cab 4WDs and trucks) unless such a vehicle is equipped with an approved “Rollover Protection Device” (RPD). By 1st January 2006 passengers travelling in open load space of vehicles will be prohibited.

Under the amended act, research vehicles engaged in work that requires passenger(s) to alight from and re-enter the vehicle at frequent intervals may be exempt from the regulation, provided that the vehicle is driven at a speed not exceeding 25 km per hour.

When operating on private property you must remember that there is now a law that says that this is an unsafe practice, and that your duty of care has increased.

Death – dealing with a deceased person

Although this may seem an unpleasant topic, it is a possibility that needs to be dealt with in the correct way, to avoid stress among other expeditioners and to satisfy legal requirements. Only a registered medical practitioner can certify that a person is dead but the leaders may need to make that decision in the absence of medical personnel. However, resuscitation should never be stopped when medical aid is imminent.

Signs of death

- Fixed dilated pupils, patient not responding to resuscitation;
- Absence of spontaneous heart beat (pulse) in spite of prolonged resuscitation;
- Rigor mortis (stiffening of the body) is a late but reliable sign of death.

Procedures to follow

- Seek medical advice;
- Immediately advise the police or local authorities and be guided by their advice;
- Get everybody in the group to take careful notes of the date, time, location, who was present and the circumstances surrounding the death as this will assist the police in preparing a report to the coroner;
- Make a list of any valuables and equipment belonging to the deceased person and have the list witnessed. Give the list and personal items to the police when you are able.

Effects of death on others

Watch for and acknowledge signs of stress and shock in the party. At the very least there may be depression and distress that must be addressed by the group as a whole to provide mutual support and minimise effects.

Accident checklist:

In the event of an accident the following information is required by expeditions administrative staff:

- You should establish the nature of the accident and obtain details – how, when, and personnel involved. Advise the expedition administrators as soon as is practical of any action that has been taken.
- Has medical advice been sought? From where?
- Has the patient been evacuated? By what means? From where and to where?
- Was the patient accompanied by an expedition leader? If so, who?
- If person is hospitalised, keep administrative staff informed on medical status.

- Advise if the expedition is going to continue. Liaise with administrative staff to jointly assess situation.
- Advise administrative staff if next-of-kin have been contacted.
- Based on advice received administrative staff will reassure families of those not involved that all is okay.
- If the accident is serious and likely to attract media attention, administrative staff will advise the executive director and corporate executive.
- Do not respond to media without first liaising with administrative staff.
- Administrative staff will arrange a contact number for friends and relatives to ring to obtain further information.
- Administrative staff will arrange for counselling of staff and/or participants if appropriate.
- Administrative staff will advise CALM's volunteer coordinator of nature of accident.

Note: Emergency contact numbers for all volunteers are kept at Kensington. Leaders have a copy in the field. The CALM volunteer coordinator also has a copy.

Alcohol and drugs

LANDSCOPE Expeditions has a “zero tolerance” policy in relation to drugs. Any unauthorised use, possession, manufacture, distribution, dispensation or sale of illegal drugs, narcotics and controlled dangerous substances is not permitted on any of our expeditions.

Expeditions personnel must not have an alcohol blood level exceeding the legal limit of 0.05% when on duty and/or in charge of an expedition. This includes when in a permanent base camp. When on an expedition, no matter the hour, your **duty of care** still extends to your volunteers and as such you **must at all times be able to respond** to a situation in a coordinated, sober and responsible manner. You have a legal requirement under the *Occupational Safety and Health Act 1984* duty of care legislation to your volunteers. For these reasons and for personal satisfaction as a professional expeditions leader/guide it is imperative that you conduct yourself in a dignified and professional manner at all times. If you are escorting expedition

volunteers on night activities, please do not consume alcohol until all fieldwork is completed.

Group control

As previously explained you have a duty of care to your clients. You are legally bound to take responsibility for their actions and wellbeing even if they do not want you to! Consequently it is imperative that you are not only in charge but in control at all times. This can be very difficult at times with some people. At the outset of a trip it is important that all expeditioners understand exactly what is expected of them. If you have expeditioners who are not within your control, *LANDSCOPE* Expeditions “Conditions of Participation” (which all expeditioners sign) clearly states that: “Participants whose conduct or behaviour jeopardises the welfare or fulfilment of the project objectives may be required to withdraw”. Should it become necessary to instruct an expeditioner to withdraw from a project, then expedition administrative staff are to be advised (if possible) in advance.

Conditions of participation

Volunteers are required to sign an application form which includes, in summary, the following conditions:

- Participants whose behaviour jeopardises the welfare or fulfilment of the project objectives can be asked to withdraw;
- Photographs of expeditioners, taken by the project leaders or other members of the expedition, and material contained in the official trip diary, may be used by *LANDSCOPE* Expeditions at their discretion, unless advised in writing by a volunteer;
- Emergency transport, medical or hospitalisation costs, resulting from illness or accident during the expedition, are the responsibility of the person receiving such care;
- A volunteer may be sent home or hospitalised where a project leader, in consultation with a medical authority, considers it necessary;
- The expeditions program reserves the right to make changes and/or cancel any expedition with an insufficient number of participants or for any other reason considered detrimental to the project’s success.

Roll call

Before any departure and at every opportunity leaders are required to check that all volunteers and leaders are accounted for. Do not proceed until everyone is present. Never assume that they are in the other vehicle. Instruct volunteers that they must not go off on their own but be accompanied by at least one other person at all times. Leaders and volunteers should not leave the campsite or vehicle/s without informing another person of their direction from the camp and their expected return time.

Small boat handling

Potentially, the most dangerous activity we may undertake is that involving small boats. Only crew are allowed to tie up and/or operate small boats. Other persons may not do so unless authorised or directed by the skipper. Strict procedures and care must be followed at all times. A lifejacket or lifevest is to be worn by everybody in the small boat no matter how short the journey. Never allow more passengers than stipulated by Department of Transport (Maritime Division) survey and don't overload with equipment. Always operate at a safe speed taking into account prevailing conditions. Always check the following prior to each journey:

- Fuel;
- Anchor & rope;
- Oars;
- First aid kit ;
- Flares;
- VHF radio;
- Drinking water;
- Bailing bucket ;
- Outboard motor spares.

NEVER cast off without motor running.

NEVER leave small boats unattended for any length of time (tides!) and always run out anchor up the beach.

ALWAYS ensure that everyone keeps their hands and legs inboard and remains seated at all times.

Safety rules for marine collecting

The following are some safety rules that should be adhered to:

- Never allow individuals to collect on their own. Try to work on a 'buddy-system' for both land and water-based surveys;
- Always have one person acting as a lookout when collecting in the water;
- Wear the appropriate protective clothing, such as protective footwear when on beaches or intertidal areas;
- Don't handle or harass fauna. Many species are toxic, venomous or can inflict injury;
- Don't swim in the sea at night;
- Be careful of currents when swimming or snorkelling. Don't swim when currents are strong;
- Act cautiously in small boats and observe all necessary safety precautions;
- Inform the designated safety person in the event of an injury. Make sure all coral cuts and scratches are cleaned up and treated promptly
- Sunburn and heat exhaustion are health hazards. "SLIP on a shirt; SLOP on some cream: SLAP on a hat";
- Make sure you drink extra water before commencing any collecting activities.

Operating in crocodile country

If approached by a crocodile start the motor and move away ASAP. If unable to, then tap crocodile firmly between the eyes with an oar, keeping everyone low down and inboard. Always scan around checking for crocodiles, at night use a torch looking for red eyes, in shallows dark underwater shapes, on beaches tell-tale drag marks. Because you don't see one NEVER assume they are not there! Avoid going ashore each time at the exact same spot and don't allow expeditioners to hang around water/shore line.

HEALTH AND HYGIENE

Hygiene – general

In this day and age of exotic diseases and well-travelled tourists,

hygiene should be at the forefront of your thoughts in the field. Your **duty of care** to your clients extends to this area as well. Expeditioners should be clearly informed from the outset and reminded as often as you deem necessary of rules and requirements concerning hygiene. Appropriate handwashing facilities (including liquid soap) should be provided to all expedition personnel at all times. As important is personal hygiene and cleanliness of volunteers. No one wants to sit next to a person for an extended period who is not meeting personal hygiene requirements. It is a difficult subject to broach to a person and a degree of diplomacy will be required **but** it is a job that must be undertaken. Toilet procedures must be clearly spelt out. Remember this is a very sensitive subject, particularly to most women.

Expedition hygiene

A high level of personnel hygiene will be practised by all. All cups, dishes and utensils are to be washed in **hot water** where possible. Dish washing will always include the use of chlorine (such as 'Milton' or bleach) in the rinse water. This can also be used to provide a hand rinse for personnel handling food. Do not allow communal drinking from the same cup or bottle because of the risk of hepatitis etc. Ensure a dipper is placed beside the billy. Everyone helping in the preparation of food is to wash their hands in soap and water prior to becoming involved.

Water quality

Assessment of water quality to be used should be made before the expedition commences. All suspect water is to be chemically treated and expedition members advised of the type of treatment used.

Food

It is of the utmost importance that a high degree of hygiene is maintained. Many expeditioners, because they are experiencing an unfamiliar diet and water, will be having problems anyway and so will be more susceptible to bacteria in their food causing infection or dysentery. High temperatures, particularly in the north and in the desert, will exacerbate the problem. Ensure that quality food is bought and

check expiry dates carefully. Store carefully and to manufacturers' requirements. Don't leave food uncovered and/or lying around. Make sure cooking utensils and eating utensils are clean. Wash and disinfect bench tops, food preparation areas and chopping boards. Place all rubbish in sealed plastic bags, when possible burn inflammable rubbish and burn out empty tins prior to placing in rubbish bags. If possible, rubbish burning should be done when volunteers are not present at the camp site.

Food handling

To stop the spread of bacteria:

- Always wash your hands thoroughly with soap and hot water before handling food, especially before handling cooked food;
- Use separate cutting boards and knives for each type of food e.g. raw meat, fish, vegetables and cooked foods;
- Always clean and sanitise work surfaces and utensils. Sanitisers kill bacteria, while detergents only remove dirt and grease;
- Avoid using bare hands to touch food. Use tongs, forks and spoons whenever possible;
- Use paper towels whenever possible. Dishcloths and towels carry bacteria.

Expeditions personnel

LANDSCOPE Expeditions insist on the highest degree of personal hygiene and appearance from their personnel. You are an ambassador for CALM. When on extended expeditions every attempt should be made to keep your clothes clean and tidy. Appropriate footwear must be worn. All expeditions personnel should be constantly aware of their appearance. You must set the example and standard for the expeditioners to follow.

Please wear your expedition name tag at all times. Make a point to circulate and socialise with the volunteers, particularly at mealtimes. Avoid socialising and dining exclusively with other leaders.

Biological specimen handling

Remember, many species of native animals carry pathogenic strains

of *Salmonella* that can be communicated to humans causing gastroenteritis that can quickly lead to dehydration. Never allow animal preparation to take place where food is being handled or prepared. Disinfect all surfaces where animal preparation has taken place. It will be necessary for all expeditions staff handling or coming into contact with bats to take precautions in order to minimize the risk of exposure to the potentially fatal lyssavirus. Recent evidence indicates that the incubation period for lyssavirus may be longer than previously believed (up to two years). It is now considered that the risk of handling bats is so great that no expeditioner is permitted to handle bats and where bats may be encountered expeditioners must be informed of the risks. Volunteers indicating a desire to visit bat colonies, caves or roosts or to otherwise come into contact with bats should be advised of the potential risks identified above and be advised not to handle any bats, and not to attempt to 'rescue' sick or injured bats, unless they have been vaccinated and take protective precautions to minimize the risk of infection. Expeditioners should be advised that there is no suggestion that there is any risk of infection to persons who are not directly exposed to bat bites, scratches or blood. Where it is necessary for any staff to handle bats for any reason, they should be immunised with rabies vaccine, and wear protective gloves and clothing (long-sleeved shirts and trousers, overalls or equivalent would be best). Direct body contact with saliva or blood from sick bats must be avoided.

SAFETY FIRST

Safety is paramount!

We cannot stress this point too strongly. Commonsense, alertness and experience play important roles in safety. Your volunteers are relying on you to take good care of them. Stop and think things through rather than just rushing in. Make it a habit to do a **safety analysis** on a situation prior to committing yourself and/or your volunteers. *LANDSCOPE* Expeditions will always support a decision taken by one of its personnel that was based on **safety first**.

First aid kit

All expeditions carry a comprehensive first aid kit. The kit has been equipped in consultation with medical personnel and contains certain drugs that can only be administered by qualified medical personnel. In an emergency and in the absence of qualified medical personnel seek advice from the RFDS and advise them of the drugs you are carrying. (**The RFDS emergency medical advice/evacuation phone number is 1800 625 800.**) Any use of first aid supplies should be recorded on the list included in the kit.

Swimming

LANDSCOPE Expeditions and its staff have a duty of care to its expeditioners. This carries over to all times and events while the volunteers are with us. It is paramount that they are safe at all times. It is the expedition leaders' responsibility to ensure that an area is safe to swim. If in doubt do not allow swimming. Some things to take into account are:

- Can the person swim;
- Depths of water;
- Currents;
- Underwater obstacles or other hazards;
- Contaminated water;
- Crocodiles, sharks, stingers etc.

Remember, most volunteers are out of their known environment when on expedition and the onus is on the leaders to advise them as to what is safe and acceptable, even if they don't want the advice.

Camp fires

Warn expeditioners that due care needs to be taken when handling containers of boiling water on open fires. Many burns result from people attempting to handle hot water containers while not wearing protective gloves.

Sunburn and insects

Sunburn and insect bites can totally ruin an expeditioner's experience. It is important to ensure that they are fully aware of slip,

slop, slap and to apply insect repellent when required. Expeditioners should be made clearly aware of possible outcomes if repellent is not applied, i.e. Ross River virus, Australian encephalitis etc. Expeditioners are advised in the briefing notes to carry their own antihistamines if required.

Snake bite

Although rare, be aware that it does happen. Take steps to prevent the occurrence by briefing expeditioners at the outset. Keep yourself fully informed of treatment procedures. Always ensure you and expeditioners are wearing the correct footwear and leggings for bush walking. Advise all personnel to wear appropriate footwear at night and to carry a torch. Volunteers are not to handle venomous snakes.

Once bitten . . .

- Keep patient calm and still. Movement spreads the venom through the body.
- Do not wash the area of the bite as a swab will be taken at the hospital to identify the venom.
- Apply a broad pressure bandage over the bite as soon as possible. The bandage should be as tight as would be applied for a sprained ankle.
- Extend the bandage down to the fingers or toes and then back as high as possible towards the armpit or groin.
- Apply a splint. Bind it firmly to prevent movement.
- Try to bring transport to the patient, rather than moving them, and get them to a hospital as soon as possible.

Heat exhaustion and heat stroke

Many travellers are not used to the temperatures we experience in Australia. It is important that procedures to prevent heat exhaustion and heat stroke are explained to expeditioners. Insist that full water bottles must be carried at all times. Frequently remind personnel to fill their bottles. The use of electrolyte replacements such as 'Staminade', 'Gaterade' and 'Gastrolyte' may be useful.

Heat exhaustion results from loss of excessive body fluids and salts.

Signs and symptoms

- Pale;
- Clammy skin;
- Dizziness;
- Headache;
- Nausea;
- Irritable ;
- Lethargy;
- Muscle cramps.

Management

- Give plenty of fluids;
- Give small sips slowly increasing but avoid vomiting ;
- Cool sponge or fan;
- Keep cool in shade.

Heat stroke is a serious condition. At this stage the body no longer sweats to cool down and the core body temperature is no longer maintained at a normal level.

Signs and symptoms

- Hot dry skin;
- Headache;
- Nausea and vomiting;
- Collapse;
- Unconsciousness.

Management

- DRABC (Danger, Response, Airways, Breathing, Circulation);
- Coma position (if unconscious);
- Remove clothing;
- Cool sponge or wrap in wet sheet;
- Fan;
- Fluids if conscious;
- Urgent medical aid.

EMERGENCY SIGNALS

The following methods can be used to indicate your position.

Mirror

A small mirror or any polished surface that will reflect light (eg. alfoil) can be used as a mirror.

Fires

A smoking fire will aid searchers but care should be taken that fires do not escape causing a major bushfire that may endanger others.

Whistle signals

- Distress signal by lost party – **three** signals together, regularly spaced;
- Searchers looking for lost party – **one** blast at regular intervals;
- Acknowledgement of distress signal – **two** blasts repeated regularly;
- Recall signal for search parties – **four** blasts.

Gun shots and torch flashes

The same as whistle signals. Guns should be discharged into soft ground, not into the air.

Ground to air visual codes for use by survivors or those in distress

- | | |
|--------------------------------|----|
| • I/We are unable to proceed | X |
| • Proceeding in this direction | ↑↑ |
| • No or negative | N |
| • Yes or affirmative | Y |
- **Remember: if in doubt use the international distress symbol – “SOS”**

Actions by search aircraft

The aircraft will indicate that your signals have been seen and understood by rocking from side to side in daylight hours and by making green flashes with a signal lamp at night.

If ground signals have been seen by the aircraft and not understood, it will fly in complete right hand circles in daylight hours or make red flashes with a signal lamp at night.

Rescue helicopter

Never approach a helicopter from the rear. Position yourself in front, in view of the pilot and wait until approached by a crew person.

VOLUNTEER INFORMATION

It is a requirement that expeditioners inform *LANDSCOPE* Expeditions of any special medical conditions they may have. A copy of this information is given to the expedition leaders. Leaders should make themselves aware of these. They could include:

- Allergies;
- Sleepwalking;
- Current medication;
- Particular health problems;
- Pregnancy;
- Dietary requirements.

EVALUATION OF EXPEDITION BY PARTICIPANTS

Evaluation forms are distributed to each volunteer. Feedback from those returned to *LANDSCOPE* Expeditions is available to expedition leaders at any time. The trip diary kept by volunteers is also a useful form of feedback, and is typed and distributed to all personnel at the conclusion of the expedition.

EXPEDITION REPORT

An expedition report is produced at the conclusion of each expedition. This is to be prepared by the scientists involved and should include:

- A group photograph;
- Other appropriate photographs;

- Passport photos (b/w) to accompany volunteer profiles;
- Maps;
- Text (email or on disk).

Leaders need to forward this information to expeditions staff as soon as practicable so that reports can be prepared for publication before the expedition reunion at the end of November. Content is based on the diary kept by volunteers, leaders' notes and data gathered during the trip. The report contains details of the major achievements, a group photo of the volunteers and personnel involved, a daily log of activities, bird lists, and other documented scientific information. This provides feedback to volunteers and is a published record of each expedition conducted by *LANDSCOPE* Expeditions. The report is a recognised publication and may be added to your CV.

SCIENTIFIC PUBLICATIONS

In the event of the publication of scientific articles, books, etc., resulting wholly or in part from data gathered on *LANDSCOPE* Expeditions, leaders are asked to acknowledge *LANDSCOPE* Expeditions in such publications, and to inform the expedition administrator so that volunteers can be advised of the availability of appropriate publications.

EXPEDITION REUNION

A combined reunion for all expeditions is held at the end of the year. Leaders are encouraged to attend. The reunion is an informal occasion and provides an excellent opportunity for people on different trips to compare notes, and share the highlights of their trips through photo albums and slides. Many volunteers are repeat customers and the reunions offer an excellent opportunity for interaction.

FIRST AID

- In an emergency or when someone is injured don't panic
- Call for help
- D – Check for danger to yourself then the casualty
- R – Response – check conscious – ask what happened
- A – Airway – check clear
- B – Breathing? – If not, commence EAR.
- C – Circulation – check pulse – no pulse commence CPR
CPR (cardio-pulmonary resuscitation) = EAR + ECC
- EAR – (expired air resuscitation – pulse but no breathing)
Place casualty on back, give 5 full breaths in 10 seconds and continue with 1 breath every 4 seconds
- ECC – (external cardiac compression – no pulse no breathing)
1 operator – 15 chest compressions then 2 breaths
2 operators – 5 chest compressions then 1 breath
- When breathing and has pulse but unconscious, put in coma position and keep checking breathing and pulse
- Keep comfortable and keep reassuring
- BLEEDING – apply direct pressure, elevate part, clean dressing, get medical aid. Protect yourself – wear gloves if available
- SHOCK – reassure, lie flat, raise legs, nil by mouth, keep warm, urgent help, get medical aid
- BROKEN BONES – control bleeding, reassure, gentle handling, immobilise, get medical aid
- SPINAL INJURY – apply cervical collar, maintain body alignment, do not move (unless unsafe), get medical aid
- BURNS – cool the burn, cover with clean dressing, remove jewellery, get medical aid
- HEAT EXHAUSTION – cool (fan, sponge), small frequent sips cool water, shade and rest, get medical aid

PHONETIC ALPHABET

| | | | |
|---|---------|---|----------|
| A | Alpha | N | November |
| B | Bravo | O | Oscar |
| C | Charlie | P | Papa |
| D | Delta | Q | Quebec |
| E | Echo | R | Romeo |
| F | Foxtrot | S | Sierra |
| G | Golf | T | Tango |
| H | Hotel | U | Uniform |
| I | India | V | Victor |
| J | Juliet | W | Whisky |
| K | Kilo | X | X-ray |
| L | Lima | Y | Yankee |
| M | Mike | Z | Zulu |

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ACKNOWLEDGEMENTS

The preparation of this manual has benefited from the contributions of expeditions staff, and volunteer members through post-expedition evaluation forms. The assistance of tour operators such as Peter Stewart and Arie Nygh (Travelabout), and expedition consultant Kevin Coate is gratefully acknowledged. Reference has been made to the "Christmas Island Tour Operators Manual" (1994) published by the Australian Nature Conservation Agency and the Christmas Island Shire Council; the "Aids to Survival" (16th edition) published by the Western Australian Police Academy; Chapter 35 (by Betty Weiler and Sam Ham) from the *Encyclopedia of Ecotourism*; and *The Art of Interpretation* (1996) published by the Queensland Department of Environment and Heritage: Brisbane.

We appreciate the advice and assistance given by Dr Ric How, Dr Bev Phillips, Peter Sharp, Marianne Lewis, Caris Bailey, Val Talbot, Daphne Edinger and Wendy Searle in the preparation of this manual.

NOTES

LEADER'S DECLARATION

I acknowledge receipt of a copy of the Procedures and Protocols Manual for *LANDSCOPE* Expeditions. I confirm that I have read and understood the contents. I agree to carry this manual with me on expeditions and follow the guidelines contained therein.

Name (block letters):

Signature:

Date:

Expedition name:

Expedition dates:

Note: Please photocopy and complete one declaration for each expedition. Return to the Administrator, *LANDSCOPE* Expeditions, by fax (9334 0498) or mail to Locked Bag 29, Bentley Delivery Centre, WA 6983.

This completed declaration will be kept by the expeditions administrator on the appropriate expedition file.

Counter Signed:

(Administrator, *LANDSCOPE* Expeditions)

CHALLENGES FACING LANDSCOPE EXPEDITIONS

Challenges: Organisers

- Presenting science as relevant in people's lives.
- Selling science as 'tourism'.
- Training professional scientists to be tour leaders.
- Helping scientists to be better communicators.
- Preparing volunteers for the experience.
- Interpreting the results in a report, wrapping up the experience.
- Convincing people that they don't have to be experts to contribute to research.

Challenges: Scientists/Leaders

- Highest level of interpretation required.
- Making science enjoyable.
- Relating day-to-day detailed work to the big research picture.
- Relating local science to global scenario.
- Meeting scientific objectives while providing a rounded tourism experience.
- Matching research activities to individuals.
- Explaining procedures and techniques (e.g. research activities, observation techniques).
- To ensure group cohesion and sharing of information, daily group briefings and debriefings are essential.
- Allowing opportunities for participants to share their expertise and knowledge: two-way interpretation.
- Relating science to history and culture.

LANDSCOPE EXPEDITIONS



Bookings

LANDSCOPE EXPEDITIONS

UWA EXTENSION

The University of Western Australia

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