

# If they Treated the Whole World like a National Park: Environmental Education by Teachers and Rangers

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## A B S T R A C T

This paper considers the role of rangers and education officers who present and represent their park on school trips to national parks, and their interactions with teachers who organise those trips. These shared encounters are commonplace events. They have an important potential and actual role in environmental education, but have not been the subject of much research. Both the teachers' environmental education objectives and the possibilities offered by parks are wide: nature study, ecology, parks as natural and cultural heritage, land management and community issues, recreational activities and their consequences. However this breadth of potential activity possibly exacerbates a gap between the two cultures that meet on such encounters, a gap that needs to be addressed if the participants are to be able to maximise their shared and separate concerns.

Using semi-structured interviews, our research looked at the strengths and limitations of several school visits for both teachers and ranger. In this paper we report particularly on the importance of the ranger in the process. We suggest that the role of the ranger is an undervalued and under-supported link in effective environmental education.

## Introduction

The idea for this research began with an anecdote from a ranger about school visits. He worked at Tower Hill, a massive volcanic crater in Victoria's Western District. The visitor centre is surrounded by the walls of the collapsed volcano. It looks across a crater lake and many smaller cones that have formed within the rim of the original volcano. Describing a Year 9 visit where he had given his best 'schools talk' for 45 minutes, the ranger recounted how, as the group got back into the bus, he heard a plaintive voice rising above the hubbub. 'But where's the volcano, Sir?'

Of course this kind of disillusioning experience is commonplace to teachers, who know how to assess its significance, maybe even to remedy it, but the ranger might well wonder where he had gone wrong, perhaps even reflect that he had wasted his time. For the authors of this paper, such incidents make it evident that some assumptions about the educational processes on such visits remain tacit or inadequately analysed by either participating party. Hence a visit may be a testing and unsatisfying experience for either or both groups of participants, even though they may be reluctant to say so because of their 'in principle' belief that this is a good thing to do.

This belief in the value of the school visit arises because both schools and national parks services recognise that national parks are significant places and topics for education. Many visitors to parks are school groups: in fact the recent ANZECC benchmarking report Best Practice in Park Interpretation and Education (DNRE 1999, p. 28) showed that the 35 park services in Australia and New Zealand identified schools as

their second most important group of visitors. Parks recognise education's utility value: it can reduce visitor impacts or encourage support for management programs. It also has community service value in citizens' enjoyment and appreciation of their heritage in parks (DNRE 1999, p. vii). In addition, the National Parks Act (1975) in Victoria defines education as one of the purposes of parks. This purpose has traditionally provided both a rationale and an ethic for rangers to work with school groups.

Schools use parks because prescribed content in several subjects directs attention to ecological studies, human-nature relationships, protected area management, conflict over land use and recreational activities, personal development and skills in the outdoors. Parks are well suited to provide some or all of these opportunities.

## Outdoor and Environmental Education curriculum

The Outdoor Education curriculum in the Victorian Certificate of Education (VCE) has recently integrated many aspects of environmental study with outdoor education into a new subject, Outdoor and Environmental Studies (BOS 2000). This has furthered the trend towards learning about the ecology, land management and cultural history, as well as the traditional emphasis on enabling students to enjoy recreational activity whilst learning about environmental impacts—their own and others.

These changes will probably increase teachers' need for the environmental expertise of national park staff, and their use of national parks as outdoor education locations, raising issues

of the adequacy of, and processes used in, professional training and development (Dillon 2000).

Meanwhile, the parks management authority, Parks Victoria, had a policy of reduced support for ranger interactions with the public in recent years, preferring to replace face-to-face encounters with Web pages and contracted-out visitor services. The two Ministries responsible for the interactions of schools with parks (Education and Natural Resources and Environment) support only three teacher trained Education Officers located in parks (of which there are 36 in the State). Although both Departments are theoretically committed to environmental education, they are reluctant to fund it. If visiting teachers don't have access to quality information and support in parks the educational value of their visits will decrease, a process that will ultimately increase problems for the land managers, thus making this study particularly timely and pertinent.

### School visits to parks for environmental education objectives

Many studies of environmental education visits to parks focus on *students*, studying what they learn or how their values and attitudes are affected by their visit (Emmons 1997, Mangas, Martinez & Pedauy  1997, Bell, Russell & Plotkin 1998, Ferreira 1998). However, this focus leaves out important institutional questions. Who is responsible for the success of such visits? Do the national parks services and education ministries adequately support teachers and rangers, both significant agents in shaping students' learning? In addition, these studies tend to consider the visit from one side or the other, rather than as an interactive process between the two sets of expertise and between the two paradigms which drive the experience. Yet obvious differences in culture, expertise, purpose and knowledge could clearly be expected between land management agencies and schools, despite a shared appreciation of the educational value of time spent in natural settings. We could find only three studies of school visits to national parks from an institutional point of view, from that of the shapers of the program, the teacher and ranger.

One was Beckman (1988) who considered a Year 9 visit to a national park entirely from the point of view of the Parks Service. She evaluated learning in the light of ranger objectives and specific information conveyed by rangers during a variety of short interpretive activities. She did not consider the role of curriculum, of the teachers' or the students' objectives, of what went before or after a park visit to contribute to its success or failure, thus ignoring a major reason for the shortcomings of this visit.

The limitations of this approach are well commented on by Crocker (1991), who contested the common assumption that a park experience itself is sufficiently powerful to ensure positive environmental or educational outcomes. She saw the visit as a two-way concern, asserting that visits must be purposefully planned by the teacher in conjunction with park

staff to meet the needs of the students. If attitudinal change is to be achieved, follow up and evaluation were also identified as essential processes in using national parks for environmental education. Crocker recommended the employment of education officers in national parks to develop specific programs for schools and the in-servicing of teachers in environmental education by the Parks Service. Here she shares the concern of Dillon (2000) and Lang (2000), that the success of environmental education may be limited by problems of teachers' knowledge and methodology.

In a later study for Parks Victoria, Beckman evaluated the role of the three Education Officers in national parks in Victoria (Beckman 2001). She found a very high level of teacher dependence on such services when they are offered. This was manifested by the return rate of teachers having used the service, as well as by their stated appreciation of the pre- and post- visit planning, advice and materials offered. Beckman observed that the services act as a 'long-term investment in the professional development of teachers', important in 'students' developing attitudes towards parks and conservation'. She also noted that most of these teachers were unaware of other support materials developed by Parks Victoria such as a Website and a National Parks Resource Book, apparently preferring to depend on the face-to face encounter.

Beckman's brief did not include ranger support for school visits, even though of necessity this is the type of support most commonly available to teachers throughout the State, as the services she evaluated are only available in three parks.

Ballantyne (1998) finds that school groups bring a different focus and attitude to interpretive centres from other visitors. This means that often displays and fixed interpretation infrastructure, the common tools of interpretation specialists, do not match their needs well. This point is also made by Tilden (1977) and Aldridge (1989). Ballantyne suggests that interpreters could improve results from school visits by working on their understanding of formal education processes, school curriculum content, needs of different age groups and paying attention to facilities and materials that suit schools' needs.

Ballantyne also looks at the general scope of interpretation for the environmental education objective of behaviour change. Summarising Knapp *et al.* (1997), he finds that the general thrust of interpretation is to work for behaviour change, but this tends to be applied to very specific site-centred objectives and short time frames, with limited carry over into other contexts. This is an implied criticism of interpretation, but it seems worth considering that interpreters, in focusing their goals on basic awareness aspects of environmental education, are responding to the needs of visitors as they find them, not to abstract models of what 'should' be achieved.

Their judgement is supported by the findings of the next stage in Knapp's research (Ballantyne 1998). In this, recognised experts in interpretation were asked to comment on the goals

Table 1

|         | Teacher background and experience, type of school   | Teacher objectives  | Ranger background and experience   | Ranger objectives  |
|---------|---|---|--|--|
| Visit 1 | O.S. First year teaching Phys. Education trained. State High School, rural town.  | <ul style="list-style-type: none"> <li>• What management is for, why we have rangers, what parks are for.</li> <li>• Exploration and engagement with park environment.</li> <li>• Gain awareness, knowledge and respect for environment.</li> </ul>   | D.J. 3 year4s park ranger, previously work crew in forest management, Year 8 education level               | <ul style="list-style-type: none"> <li>• Present part to local school.</li> <li>• Represent part managers in a positive light.</li> <li>• Address issues raised by impacts of walking groups.</li> </ul>   |
| Visit 2 | H.H. 2 years overseas teaching, 3 years teaching VCE, Phys. Education trained. Private School, rural town.              | <ul style="list-style-type: none"> <li>• Gain insight into the workings of a park.</li> <li>• Investigate patterns of past and current use of park.</li> <li>• Gain first hand experience of recreational use of park in winter (surfing and hiking).</li> <li>• Understand impacts of these uses on the park.</li> </ul> | H.C. 15 years experience as a teacher of Science. 5 years experience as a National park Education Officer. | <ul style="list-style-type: none"> <li>• Educate teacher about park and its management.</li> <li>• Help students to address Study Design.</li> <li>• Provide structured first hand experience of a national park, its values and significance</li> </ul> |
| Visit 3 | B.I. 2 years teaching, 1 year VCE Year 11, 1 year VCE year 12, Phys. Education trained. State High School, inner urban. | <ul style="list-style-type: none"> <li>• Gain first hand experience of recreational use of park in winter.</li> <li>• Understand how different groups/cultures value land.</li> <li>• Gain awareness of environmental issues.</li> </ul>  | H.C., as above   | As above   |
| Visit 4 | L.M. 6 years teaching, 2 years VCE teaching Outdoor Education Graduate Diploma. State High School, rural town.          | <ul style="list-style-type: none"> <li>• Understand the past and present reasons why people visit the park.</li> <li>• Gain an overview of conflicts and management strategies for dealing with these.</li> </ul>   | E.C. 4 years as ranger in several parks in Victoria and NZ. Degree in Natural Resource Management          | <ul style="list-style-type: none"> <li>• Understand role and significance of national parks.</li> <li>• Issues in management of N.P.s.</li> <li>• Gain community support for values and management of N.P.s</li> </ul>                                   |

of interpretive programs from an environmental education point of view. They strongly supported the focus that they found on the 'consciousness raising' objectives of environmental awareness, sensitivity and so on rather than the more highly developed goals concerning critique of the way we live and how we can redress or prevent environmental problems.

This paper reports on an exploratory investigation that aimed to map out philosophical and practical matters involved in the teaching of environmental education in national parks. The teachers' role is examined in the first of two papers that report on this research (Manuscript submitted to *Journal of Adventure and Outdoor Learning*, June 2002). This second paper focuses primarily on the rangers' perceptions about their role and value in relation to school visits to their park. It aims to look specifically at how rangers see their responsibility as interpreters in meeting the needs of environmental education face-to-face, what goals they have in such encounters and why they choose these.

## Method

The study is based in a qualitative framework. It adopts a sample study approach. (See Table 1 for an overview of the participants' background and objectives.) Four secondary school outdoor education field trips of two to four days were

investigated. Schools were selected based on their intention to visit a national, and in one case, a state park, for VCE Outdoor Education. The teachers' objectives, from the VCE Unit, included both environmental education objectives and outdoor recreation activities (bushwalking, surfing, navigation). All of the teachers intended to use park staff as part of the learning process. The park staff involved were two park rangers (one in a national park and one in a state park) and a national park education officer (the same person for two school visits).

The methods of obtaining data were:

- Semi structured interviews with each teacher and ranger or education officer before and after the park visit experience.
- Observation of the group during time spent with both the teacher and the ranger or education officer.
- Analysis of teacher documentation relating to the environmental education aims and processes of the park visit.

## Interview format and interview data

### Pre visit

- interviewee's previous experience and background;
- interviewee's objectives, broad and visit specific;
- perception of objectives of the other party: teacher,

education officer or ranger;

- the planning/ pre-visit knowledge and learning expectation of the interviewee for these objectives;
- role of the national park in the experience—i.e. why choose a national park, what do you expect of a national park and ranger? Or of the school group and teacher?

### Post visit

- general impressions of the visit;
- how well were the specific objectives achieved?
- what personal learning or professional development or satisfaction was acquired?
- evaluation of the visit for future planning.

The interviews were taped and transcribed. Data were grouped according to themes emerging from interviews with each participant. Common and contrasting themes were identified for each group (teachers and park staff) and checked against field observations and documentation provided. Here we present the findings from the rangers'/ education officer's point of view.

### Research Findings

#### *What did rangers want to achieve?*

Rangers wanted to encourage and support education in the park, but they differed somewhat from the teachers about why. Their objectives were the benefit of the visit for the park. Rangers wanted to present a positive public image of caring for the park and of ranger authority in it. They perceived that perhaps the most effective (and easy to deliver) role of the ranger was as an authority figure and representative of another worldview.

What I really try to get across to students is why we have national parks and that they are important. But most important is who manages them and why we manage them that way. Why we bother—that's the message I'd like to get across to these students as my first priority and secondly is to give them an appreciation of issues that face the park managers (E.C.).

Further, they wanted students, future users, to see the park as an accessible part of their world. This was especially so for students from rural areas, park neighbours whom they wanted to convince that the park was of potential benefit to the farming community. This has to be seen in the context of often strong rural opposition to park formation and management as 'locking up the land', denying rural people legitimate traditional access to public land resources.

O-'s group coming from H-, it is pretty much a farmer orientated school so their vision of a park ranger is not what I believe to be the ideal relationship. They see us as the bad guys, locking up the forest, so if I can get kids to at least just come up and talk to us I think that's

a barrier that we have broken down.

I think I can give those children an understanding of why that parcel of land has been put aside, not only for the educational values ..., it fits for the whole environment as well.... That without that reserve they might not be able to sustain their farming either (D.J.).

In evaluating the time spent with the group, this ranger described how:

...some of those kids came up to me which stood out I guess, that they approached me... so I was quite happy with that. ... I'd broken down that barrier, that was an achievement (D.J.).

In general, rangers took for granted that they should present a solid organisational image of the value of scientific and management approaches. This differs from the curriculum perspective that requires that students critically assess assumptions that have shaped attitudes to the land at different times. This surely includes a critical perspective on scientific and technical management, but rangers want to present the positive values of the park, the complexity of then issues and to show that management addresses problems successfully. Through these goals, the rangers hoped to develop students' appreciation of park values and encourage support for management goals.

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*'rangers took for granted that they should present a solid organisational image of the value of scientific and management approaches'*

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Both rangers and teachers wanted students to see themselves as citizens in the park, to get a sense of the park as an historical artefact in which they could participate and for which they could influence the future. In this sense they were promoting the sense of the park as another aspect of the students' broader culture, one they may not have encountered or thought about before: 'Something to get them some ownership of it. So they feel part of it' (E.C.).

Rangers were concerned about large groups' (including schools) impact on the park through recreation activities without sufficient ecological understanding. They aimed to show students (and teachers) that only some kinds of recreation activities are appropriate within a park setting. The rangers wanted students to appreciate the hidden or more complex aspects of park management, the difficulties of matters such as fire management, pest plants and animals, vegetation change, as well as the more obvious minimal impact matters of rubbish, toilets, tracks and so on:

I've tried to articulate to the students some of the impacts that occur in the park and how they come about.

I mean they just don't appear out of nowhere ... Maybe considering the bigger picture rather than just looking at a fire on the ground—people might think of that's nice, a little camp fire, romantic. Maybe instead of having that one image they will also think about where the wood is coming from, what's the scar going to be like? Once the fire's out what implications is that going to have on the soil and natural environment as a whole? (E.C.).

The teachers also recognised that rangers could add to students' understanding of appropriate behaviour and reinforce their own objectives:

Now we've been here and seen the signs and talked with the rangers about needing to stick to the trails and how certain areas are now fenced off for regeneration because people have been taking those shortcuts for too long and they really make comments about people just shouldn't have been doing that. Whereas when we first come here they would have thought 'Great there is a new trail going in and a new place to hike', rather than how does this connect to the whole area (H.H.).

But unlike the teachers, the rangers had a wider view of the park than just their patch and role, and wanted to communicate the value of the wider park system and natural systems. In this sense rangers had an important curriculum of their own, although they wouldn't call it that, about broader conservation issues and students' lives:

Perhaps I've just planted the seed in their mind of things to consider in the future. Some of the associated impacts. Whereas initially they might have just seen modification of a natural environment such as stream flow regimes to be not enough water, now perhaps they have thought about raw implications of manipulating those water flows and the other effects downstream to users. Just to get them thinking about cause and effect (E.C.).

### **Rangers relating to teachers' objectives**

The rangers felt more uncertain about the teachers' objectives than they did about their own. They recognised that teachers' understanding was limited, and so they valued the chance to influence both teachers' and students' experience of the park.

It helps if teachers have a background of understanding. I think they would like to impart some more technical detailed information to their students and I see that as a thing that we can provide (E.C.).

But they were realistic about the constraints. The visit is only one of multiple concerns preoccupying the ranger's time: a brief opportunity to offer some information and understanding of parks and park management. The rangers recognised the limitations imposed by the time they had or were expected to

offer, knowing that with the scope of material outlined by the teacher they could do little more than skim the surface of a great many issues. In addition they felt that the onus was on the teacher to know about the park, rather than for them to know about curriculum or other teacher objectives. Because of this, there is a tendency to 'play it by ear.' They had reservations about their skills in presenting to the group, and perhaps, about their own formal educational background (Year 8 level in one case).

Often it is a bit hard. It depends on the groups... Some groups will sit there and not take notes and won't say anything so it is really hard. It is like blood from stone trying to get them to talk to you. Other groups will be jumping out of their skin to talk to you. I don't really know how to deal with those different groups (E.C.).

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As they lack the professional skill of teachers in facilitation and in effectively teaching complex concepts they tend to adopt a minimalist generic approach. This tends to be information-laden and falls somewhat short of both the practical on-ground detail and the approach to complex ideas needed for the assessment task:

I think they were interested but I think I overwhelmed them with the information I provided. I could have made it easier on them by not providing so much information. You always tend to think more is better, but it is not always the case (D.J.).

### **Rangers and teacher planning**

Rangers knew about ecology and park management but little about group management and educational processes. In addition they were conscious of the lack of detailed briefing between teacher and ranger, lack of knowledge of Outdoor Education curriculum, found it difficult to assess or shape student and teacher knowledge and were aware that time and student interest and capacity are limited. In this sense rangers are somewhat at the mercy of teachers on school visits.

Rangers perceived that the quality of what is being asked of them is rising, that teachers are asking for more sophisticated material.

Nobody's just going out and kicking the footy or white water-rafting—it's getting involved in some issues associated with outdoor recreation, it's getting to the students who might be potential leaders of activities in the future about impacts on the natural environment (E.C.).

However they still felt some concern that teachers don't always know enough to benefit from the park visit fully. In this regard they are also at the mercy of the park managers, Parks Victoria, who might be expected to back them up with the sort of detailed information or access to it that exists about the park. One experienced teacher commented on her attempts to find material for a new field trip:

At the time I tried to tee up this talk I contacted the Melbourne number, the 13 number, and got some person on the phone who didn't even know where I was going or what I was talking about. Which was pretty frustrating... (L.M.).

Rangers understand the need to educate the teacher as well as the students, but don't have the time or inclination to take on the extra effort required in carrying this out. One Physical Education trained teacher was clear that he was struggling with the knowledge he needed to access and understand:

So I am sort of warming to the environmental side, the more resources I find on that. And that is the biggest dilemma is thinking is that I've got all these criteria, what am I going to do with it. So as soon as I started finding resources, mainly from the Internet and especially the Teacher's guide I started to feel a bit more safe. A bit more comfortable with the material. I could see the bigger picture rather than seeing the smaller picture. So, I mean that is the bottom line of it, the resources have made me enjoy it more and made teaching it more enjoyable because it all made sense (B.I.).

Such teachers may be familiar with the park but in a very narrow sense when compared with the demands of the current Outdoor Education curriculum, typified by another Physical Education trained teacher who described himself as 'hard core recreation':

I've been here plenty of times and I know what it is like. And it is accessible in terms of money and time to get here. I have done the walks many times (O.S.).

The rangers' capacity to recognise and address teachers' needs contrasted with the role of the Education Officer who saw it as explicitly part of his purpose and skills to expand the teachers' environmental knowledge by supplying resources and ideas.

### Comparison with role of the education officer

As a former classroom teacher, the Education Officer was able to bring out the unique opportunities for learning of both Outdoor and Environmental Education and national parks. He could do this because he could bridge the gap. He knew and understood the complexity of ecological understanding of the management issues in the park but could pitch them at a level appropriate for students. As one of the teachers observed, the Education Officer was able to do things that he couldn't, because of his role in the park. But in addition he

was able to do things the rangers couldn't because of his training as a teacher:

Just the way he set up the whole session, going through step by step and also the knowledge of the area, I couldn't do that here. I couldn't set up sampling in the pond, and tracking and how people work to find information about or the research techniques needed to find out about population and health of the area. And ... to do some work in the area, bringing in the history of the area and how it should be managed. He is definitely needed in that area because I wouldn't have been able to do it and also I wouldn't be able to take the kids in there anyway (H.H.).

The Education Officer was well aware of the role and value of the park in the wider world:

There are the links with the environmental ethos which is not just while they're in Parks but when they're out of Parks. They're going to spend most of their life not in a national park but an ideal would be *if they treated the whole world like a national park* ... parks can provide them with an opportunity for experiences they'll get nowhere else and then they will be like an implant that they take away with them—like a fertiliser that keeps on dripping all the time (H.C.).

This idealistic goal was echoed by both rangers. One said:

Without the reserve they might not be able to sustain their farming either (through salinity problems). It's a whole environment approach that we need (D.J.).

But it was not really recognised by three of the four teachers. Ecologically, they treated the park visit as an end in itself. Yet these three teachers were clearly the ones who learned most from the ranger/Education Officers' broad environmental perspective. The fourth, interestingly, had already worked with the Education Officer in previous years. He valued connectedness to the park for his students, encouraging return visits and recognising the benefit for them in knowing the people and place, in building up knowledge of it sequentially, of experiencing its different aspects and seasons, and valuing it as a local asset.

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*Teachers appeared to take for granted that the ranger would know what to do for their visit, whereas the rangers were inclined to want more recognition of shared responsibility*

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Our interviews with the Education Officer highlighted the nature and extent of the 'gap' between his knowledge of the park and that of the students and teachers. In organising himself for the visit, he was able to question the teacher closely

about the curriculum purpose, with specific knowledge of both the assessment task and how the park and its places and programs could match this. He explicitly recognised that teachers often lack specific ecological knowledge and so he set out to educate them as well as students:

I try to run them at two levels. One level is the student level at which I try to give them basic information and give them some reference points that the teachers can then use later on. At the second level I'm actually teaching the teacher so the teacher is up to speed on what is going on. Then they can draw upon those reference points later on, so their understanding and knowledge has increased (H.C.).

The Education Officer consciously strove to establish a park management framework that the teacher could transfer to other places. This was recognised by the teacher quoted above, who said that he now had a plan of attack for developing curriculum for another park with no support.

### Whose responsibility? Rangers or teachers?

Teachers appeared to take for granted that the ranger would know what to do for their visit, whereas the rangers were inclined to want more recognition of shared responsibility and to expect standards different from those teachers were sometimes able to offer. One ranger discerned that a teacher might be competent in group management or other educational objectives but inadequate in his/her approach to the park.

They only see the park as an outdoor venue. The kids' educational needs are not being met either, as far as the environment goes. I think it's something that management, both the Education Department and Parks, must take up as a problem. We can jump and scream whatever we like at this end but until the managers see it as an issue, that's when things will change (D.J.).

Another was concerned that this teacher emphasis on recreational activities actually conceals the values of the park, including his own multiple roles, which are reduced to what people can see:

A ranger is just a bloke that waves, does a lap and waits around for people... (E.C.).

But when pressed, both rangers endorsed their role with schools, even though they felt that it was not adequately supported:

Look, I think national parks have a very strong role in outdoor education as well as education as a whole. I see that as an important component of our jobs. That is where we sort of impart our ideals about our parks and management strategies. I mean management will never work unless it has the support of the community (D.J.).

This view was shared by the teachers, who valued the authenticity, the personal and specific knowledge of rangers rather than more generic information:

Yes—just someone who knows about that area. I think the ranger is the only one who can get across to the kids what is expected from them ... I can to an extent, but not in the same way the ranger can because its his backyard (O.S.).

But for the teachers who felt least adequate in their own knowledge, the ranger had a more onerous role:

Hopefully they will fill in all the gaps that I have left! It's always the case, if you want to know how a boiler works you ask the person stoking the boiler, not the technician who has studied how boilers work. So you get that hands on type feel and ownership by that person, and personal knowledge and opinion on the way things are working (B.I.).

### Discussion: Towards school visits to parks as shared encounters

The data above shows that teachers and rangers have significantly different objectives for the same experiences, a product of their training and outlook in relation to education about land management.

The long history of citizen commitment to the 'the public interest' in parks in Victoria (Hamilton-Smith 1998, Robin 1998, Slattery 2000, 2002) has both supported and encouraged the park management ethic that the parks depend on good public knowledge and appreciation of *their* parks, primarily for nature conservation. The main tool used to achieve this and other visitor education is interpretation. It is defined classically by Tilden as:

an educational activity which aims to reveal meanings and relationships through the use of original objects, by first hand experience, and by illustrative media, rather than simply to communicate factual information (Tilden 1977, p. 8).

This view of interpretation fits well with the main strengths of both outdoor and environmental education, their capacity for first-hand interaction. Where it differs from these practices is in the kinds of meanings and relationship that could be conveyed in an interpretive encounter rather than an outdoor or environmental education one. In interpretation these normally focus on the ecological and cultural/historical values of the park and their meaning for current visitors. This is a different emphasis from the activity skills or personal and social development aspirations of many outdoor education programs or the problem centred critical analysis outlined by environmental education.

As can be seen from the descriptions of Education Officer's contributions to environmental education above, these

differences mean that encounters between rangers and school groups probably achieve less than they could. Although Ballantyne (1998) urges maximising the qualities that interpretation and environmental education have in common, this needs to be based on a real acceptance of the limitations of each others' situation and approach. How well does interpretation equip rangers for dealing with school groups? There are several issues here.

In arguing for more sophisticated interactions between interpreters and teachers, Ballantyne seems to be referring to interpretation specialists. These are often people with educational training or other communication expertise. Such people, when they are employed by parks services, are usually not found in the parks working face to face, but rather in Head Offices. There, they are able to influence practice primarily through ranger training, policy formation, or through developing tools such as displays that support and influence practice rather than offering direct interactions in parks. The quality of direct ranger expertise for visitor education therefore becomes a matter of budget allocation, of investment by the organisation in their training and support or in other interpretive tools.

As found by the ANZECC Report (DNRE 1999), most parks services do not supply a budget for interpretation that is commensurate with its stated value in their corporate statements. So how should this inadequate budget be allocated to get the greatest benefits? The ranger in the field is probably the most influential interpretive tool the park has, as reflected by the actual practice of parks (DNRE 1999, p. 33). Therefore the programs rangers have to offer need to be carefully crafted and skilled, just as much as those offered by displays and on noticeboards. At present ranger contact is a narrow conduit by which a great deal of informal, unrecognised teacher education happens. Rangers need specific schools' educational materials and interpretive sites that suit curriculum needs in parks as well as enhanced training to adequately meet this function.

Too much should not be expected of a short interpretive encounter, which may be intense in quality, may light the spark of excitement and curiosity, but is necessarily limited in opportunities for development of ideas and for interactive processes. Rangers have a large amount of knowledge that they believe to be important in understanding issues and developing appreciative use of parks but only some of this can be communicated to school groups. In general the onus lies with the teachers to shape and develop programs for environmental education. They are able to utilise long time frames, to take a personal developmental focus for students, one with broad applications beyond the park.

Rangers were very aware of some limitations of their own contribution, in particular that students could not hope to understand and process all the elements involved in making sense of their own role in complex management issues in a short interpretive encounter. In addition, it would be unrealistic to expect that, even if rangers had a more finely tuned grasp

on what teachers and students wanted to learn, that they would have the time and skills to shape their response to each visit around these more detailed expectations.

Further, from a critical environmental educational perspective, the rangers' presentation of their role and that of the parks agency needs to be viewed with a combination of respect and detachment. The respect is in response to the significant community and behavioural messages that can be conveyed. The detachment is necessary in order to critique the knowledge and perspective that is being offered. Teachers currently lack the finely tuned knowledge needed to develop this critique with their students, as it usually depends on detailed understanding of social, cultural and environmental influences on park management processes.

### Conclusion

The Education Officer's and rangers' shared ideal is that citizens should 'treat the whole world like a national park'. To this end they envisage that teachers and students will use their visit to learn to recognise people's dependence on all natural places and systems, to value their own everyday places and understand the need to protect them from degradation.

In fact the reverse is often the case, as the integrity of national parks can be threatened by school groups and others through their promotion and use as recreational and tourism opportunities. These are often pursued more vigorously than ecological and educational experiences. Rangers need support in making teachers aware that there are no 'one off events' and that they are not there just to 'fill in the gaps'. Better still, with better liaison and teacher knowledge, park visits could be very tightly integrated into the existing school program (not just a short encounter to help out with the VCE).

The role of the ranger is vital in communicating the message that schools should avoid contributing to the 'park as outdoor venue only' view. Further, they are one of the few direct sources of teacher education that are capable of showing how parks can be used in more suitable ways. 🗨️

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