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**Work-in-progress report series**



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CRC TOURISM WORK-IN-PROGRESS REPORT SERIES : REPORT 1

**NATURE-BASED TOURISM IN  
AUSTRALIA AND BEYOND:  
A PRELIMINARY INVESTIGATION**

By David Weaver, Bill Faulkner and Laura Lawton

# CRC for Sustainable Tourism

## Work-in-progress report series

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# chapter one

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## *Introduction*

**E**ven the casual observer of Australia's tourism industry is soon made aware of the extent to which the associated attractions are dominated by the natural environment. No attempt, however, has yet been made to examine and clarify these relationships in a systematic way, despite the potential contribution that such an exercise can make toward the more efficient management of the country's tourism sector. The purpose of this report is to describe, in an introductory way, the character, magnitude and impact of 'nature-based tourism' (or NBT) within Australia, and to consider the salient issues which will influence the future sustainable development of this crucial sector. An array of secondary sources has been

investigated to achieve this purpose. The first section examines the various definitions which have been applied in the literature to NBT, and extracts from these an operational definition suitable for the remainder of this study. Subsequently, a taxonomy of NBT opportunities is presented which is relevant globally, and to individual destinations such as Australia. With reference to this taxonomy, Section three describes the magnitude of NBT worldwide and within Australia, and considers its direct and indirect economic impacts. Section four then undertakes a SWOT analysis of NBT in Australia, and considers the extent to which the tourism industry can actually attend to the issues so raised.



# chapter two

## *Definitions and taxonomies*

Many sources in Australia and elsewhere acknowledge the ambiguity, confusion and disagreement surrounding the term 'nature-based tourism' (Nature Based Tourism Advisory Committee, 1997). Backman, Allen & Becker (1992), for example, maintain that there are practically as many definitions of nature-based tourism as there are tourists. At one extreme, there is a certain logic in the argument that all tourism is nature-based, since all human activity depends ultimately upon a sustaining natural environment. This view, however, can be readily discarded, since NBT would subsequently lose all meaning as a differentiated component of the tourism sector. An initial step in formulating a reasonable working definition of NBT is to imagine a continuum which embraces all forms of tourism, ranging from those having no significant association with the natural environment, to those which are entirely dependent on same. At some point on this continuum, a threshold approximation is encountered which separates NBT from non-NBT activities. Examples of activities which can safely be excluded from the NBT portion of the tourism

spectrum include casino gambling, stadium-based sporting events, historical attractions, shopping at indoor malls, and most types of business tourism. Such activities are 'nature-based' only in so far as the associated built environment and merchandise are necessarily extracted from the natural environment, and the ability to undertake or travel to relevant venues may be constrained by the weather or other natural circumstances.

What distinguishes NBT activities from other forms of tourism is the status of the natural environment, or some component thereof, as a significant element of the tourism attraction or setting. Table 2.1 represents a preliminary and non-inclusive attempt to inventory the parameters of the natural environment which can individually, or in combination, function as potential tourism resources.

While Table 2.1 provides a useful basis for conducting an assessment of a destination's actual or potential NBT attractions and settings, other criteria should be introduced for definitional purposes. Returning to the NBT portion of the spectrum, one logical choice of

Table 2.1

A CLASSIFICATION OF NATURE-BASED TOURISM RESOURCES	
Category	Elements
Climatic	Warm weather, cool weather (for winter sports), low precipitation, moderate cloud cover, moderate breezes
Hydrological	Oceans/seas, lakes, rivers, waterfalls, geothermal water, glaciers, snow, wetlands
Lithospheric	Mountains, beaches, canyons, caves, fossils, dunes, gemstones
Biotic	Plants, animals, insects, reptiles, fish
Celestial	Stars, eclipses, aurora borealis/australis

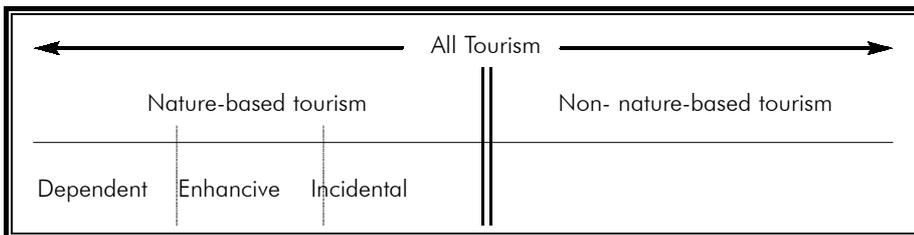
'intensity' of the activity. This can be expressed in terms of a simple quantitative continuum ranging from a low to high volume of utilisation, and simultaneously as a structural continuum ranging from alternative tourism to mass tourism. Table 2.2 presents these two forms of tourism as 'ideal types' that occupy each end of the spectrum. As pointed out by Harrison (1995), the purpose of an ideal type is not to adhere perfectly to reality, but rather to provide a model (or polarised models in this case) against which actual situations (ie., tourism products or destinations) can be assessed and situated. This allows for situations to be compared both latitudinally

variable would be the extent to which the natural environment is actually utilised as an attraction or setting. Valentine (1992) suggests a useful tripartite classification of activities based on this level of association:

- Activities dependent on nature for attractions or settings, such as wildlife observation;
- Activities enhanced by nature, such as camping;
- Activities for which natural settings or natural attractions are incidental, such as sunbathing, water-skiing, and rock-climbing.

The situation of these categories within the above-mentioned tourism continuum is depicted in Figure 2.1 (any impression of relative importance is not intended). Clearly, the activities for which the natural environment is incidental are adjacent to the non-NBT portion of the spectrum, while fully nature-dependent activities occupy the opposite end of this continuum.

Figure 2.1  
The tourism continuum and the NBT segment



Recognising this critical basis for internal differentiation, NBT can now be defined as encompassing

*forms of tourism which maintain a dependent, enhancive or incidental relationship with the natural environment, or some aspect thereof, in terms of their utilised attractions and/or settings.*

However, in order to facilitate the construction of a taxonomy which has utility for planning and management purposes, it is useful to add a second criterion involving the

(ie., among various case studies at one time) and longitudinally (ie., one case study over a given period of time). Thus, destinations will tend to lean toward either mass tourism or alternative tourism, rather than cohering perfectly to either.

By combining the above two criteria, a dependency-intensity framework can be created which accommodates any type of NBT activity (Figure 2.2). The dotted lines within the model indicate the porous or transitional nature of the boundaries between the six basic categories of NBT activity. The diagonal transect indicates the tendency of intensity to increase as the spectrum moves toward the incidental component; thus, an inverse relationship generally prevails between intensity and level of dependency on nature. Along this transect, a useful contrast can thus be made between nature-dependent forms of low-intensity alternative tourism (D-at), such as the lone hiker on a nature-appreciation walk in the wilderness, and nature-incidental mass tourism activities such as the crowded holiday beach (I-mt). The resemblance of this transect to the resort cycle sequence should be noted, with the former scenario being typical of a natural destination

in the exploration stage, and the latter scenario signifying that same destination after a process of laissez-faire tourism development. As the natural environment is gradually superseded by the built environment, and intensity levels increase accordingly, it is not surprising that the relationship with nature should be

transformed in many cases from a position of dependency to one of an incidental character. The inverse categories to this transect, however, must also be considered. Safaris and zoos, for example, are clearly dependent upon wildlife resources for their viability, but in some locales (ie., Amboseli National Park in Kenya) have displayed visitation levels clearly indicative of mass tourism (Henry 1980; National Audubon Society 1992; Western 1982). In such situations the label of nature-dependent mass tourism is warranted (D-mt). The opposite situation involves nature-incidental alternative tourism activities such as indigenous tourism.

Figure 2.2  
Dependency-intensity framework for NBT

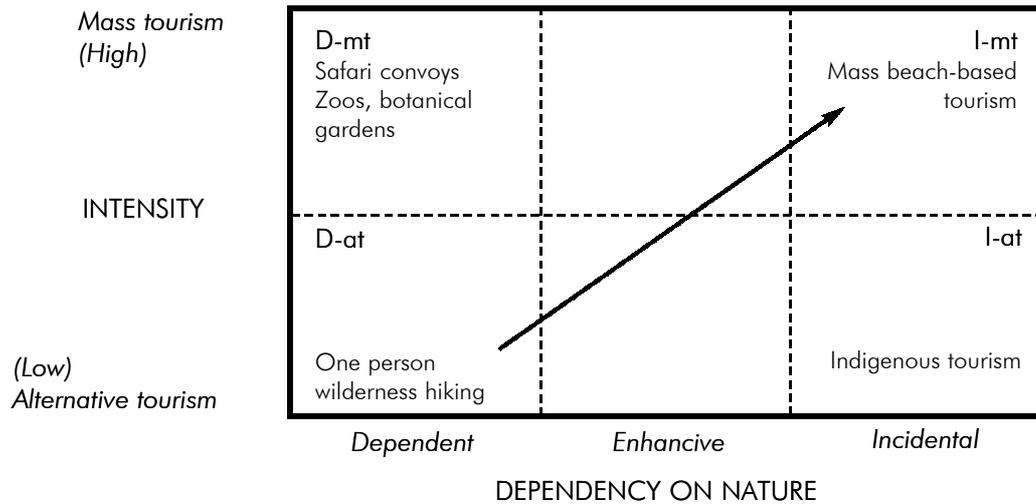


Table 2.2

IDEAL TYPES, MASS TOURISM AND ALTERNATIVE TOURISM		
Characteristic	Mass tourism	Alternative tourism
<b>MARKETS</b>		
Segment	Psychocentric - midcentric	Allocentric - midcentric
Volume & mode	High; package tours	Low; individual arrangements
Seasonality	Distinct high & low seasons	No distinct seasonality
Origins	A few dominant markets	No dominant markets
<b>ATTRACTIONS</b>		
Emphasis	Highly commercialised	Moderately commercialised
Character	Generic, 'contrived'	Area specific, 'authentic'
Orientation	Tourists only or mainly	Tourists & locals
<b>ACCOMMODATION</b>		
Size	Large-scale	Small-scale
Spatial pattern	Concentrated in 'tourist areas'	Dispersed throughout area
Density	High density	Low density
Architecture	'International' style; obtrusive, nonsympathetic	Vernacular style, un-obtrusive, complementary
Ownership	Non-local, large corporations	Local, small businesses
<b>ECONOMIC STATUS</b>		
Role of tourism	Dominates local economy	Complements existing activity
Linkages	Mainly external	Mainly internal
Leakages	Extensive	Minimal
Multiplier effect	Low	High
<b>REGULATION</b>		
Control	Non-local private sector	Local 'community'
Amount	Minimal; to facilitate private sector	Extensive; to minimise local negative impacts
Ideology	Free market forces	Public intervention
Emphasis	Economic growth, profits; sector-specific	Community stability & well-being; integrated, holistic
Timeframe	Short-term	Long-term

Source: Adapted from Weaver 1993.

## Relationship between NBT and other tourism terminology

As cited earlier, there is no consensus at the present time on a definition for 'nature-based tourism'. Similarly, there is a great deal of ambiguity and disagreement regarding a constellation of terms which have also been introduced recently into the tourism lexicon. This section will attempt to clarify the meaning and applicability of the more frequently used terms within the context of NBT, having already established that NBT can occur in both mass and alternative tourism.

### *Sustainable tourism*

The origins of 'sustainable tourism' can be easily traced to the more generic concept of 'sustainable development' popularised in the late 1980s by way of the Brundtland Report (World Commission on Environment and Development 1987). Essentially, there is some consensus around the 'motherhood' idea that sustainable tourism involves the development and maintenance of this sector in such a way that it does not negatively impact the basic economic, socio-cultural and environmental dynamics of the destination over a long-term period (Butler 1993). More contentious is the extent to which sustainable tourism should entail 'intra-generational' as opposed to 'inter-generational' sustainability, that is, whether an agenda of equity among current social groups (eg., rich and poor, developed world and developing world) should be followed, or whether the issue of equity should apply only from one generation to the next. This ideological perspective aside, fundamental questions have also been raised concerning the benchmark criteria by which sustainability can be measured and monitored, the appropriate strategies for attaining these criteria, the spatial and temporal scales over which the question of sustainability should and can be considered, and the most effective means of determining the culpability of tourism (as opposed to other forces) in effecting change within a destination.

With reference to the dependency-intensity framework presented above, tourism literature until recently has assumed a positive relationship between sustainability and alternative tourism, but a negative relationship between sustainability and mass tourism (Clarke 1997). This polarisation resulted from several factors, including the polarised nature of the ideological debate of the 1970s and 1980s which implicated mass tourism as an evil 'right-wing' exemplary of unfettered free market forces. In addition, a more objective body of evidence was gradually emerging to suggest that sustainable outcomes were less likely to occur in mass tourism, given the volume of activity involved and its negative implications for destinations unable to cope with the intensification of tourism. Butler (1990) and others have criticised this

dichotomisation of tourism as a gross over-simplification, and have advocated instead a position of appropriateness. In essence, this view holds that there is nothing inherently positive or negative about either mass or alternative tourism, and that a host of idiosyncratic circumstances within each destination will combine to determine whether one, or the other, is the most appropriate model in each particular case. Adhering to this perspective, any activity within the NBT framework can potentially be an example of sustainable or unsustainable tourism.

### *Ecotourism*

Like 'sustainable tourism', 'ecotourism' has emerged as a high profile buzzword since its introduction by Ceballos-Lascurain (cited in Boo 1990) in 1983. Perhaps the most notable feature of ecotourism is the proliferation of definitions assigned to the term. [See Scace (1993) and Goodwin (1996), for partial presentations of the definitional diversity in ecotourism.] An analysis of these definitions serves to focus both the common ground among ecotourism researchers, and the main source of persisting disagreement. With respect to the former, there is widespread agreement (if not consensus) that products and activities should meet three criteria in order to qualify as ecotourism (see for example Blamey 1995):

- Attractions should be primarily based upon some aspect of the natural environment, though cultural elements may be utilised as secondary attraction resources;
- The relationship with the attraction should be an intrinsic one based upon such motivations as education and appreciation; and
- Affiliated activities and products should be carried out in a sustainable manner.

Blamey (1997), however, points out that none of these three criteria are entirely clear-cut when it comes to actually attempting to identify ecotourism activities. As well, defining an 'ecotourist' for some researchers is not the same thing as simply counting the number of participants in activities which qualify as ecotourism. Ballantyne and Eagles (1994), for example, suggest not only a series of intrinsic motivations, but also a time commitment of at least 33% of total trip time devoted to ecotourism, in order for a tourist to qualify as an ecotourist. Blamey (1997) is more generous in suggesting a minimalist approach whereby an ecotourist is anyone who reports at least one ecotourism experience in a specified region during a specified period of time.

Nevertheless, adopting the above three criteria as ideals, and ignoring for the moment the ecotourism/ecotourist

Figure 2.3  
James Butler's ecotourism principles and characteristics

- It must be consistent with a positive environmental ethic, fostering preferred behaviour.
- It does not denigrate the resource. There is no erosion of resource integrity.
- It concentrates on intrinsic rather than extrinsic values.
- It is biocentric rather than homocentric in philosophy, in that an ecotourist accepts nature largely on its [own] terms, rather than significantly transforming the environment for personal convenience.
- Ecotourism must benefit the resource. The environment must experience a net benefit from the activity, although these are often spin-offs of social, economic, political or scientific benefits.
- It is a first-hand experience with the natural environment.
- There is in ecotourism, an expectation of gratification measured in appreciation and education, not in thrill-seeking or physical achievement.
- There are high cognitive (informational) and effective (emotional) dimensions to the experience, requiring a high level of preparation from both leaders and participants.

confusion, ecotourism situates ideally in the dependency-intensity framework as a form of nature-dependent sustainable tourism. This positioning of ecotourism within NBT, however, has not been accepted by all researchers, many of whom equate one with the other. Valentine (1992, p.108), for example, avers that "nature-based tourism is primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature". Similar assumptions are made by Backman, Allen and Becker (1992), Luzar et al (1995), and Boo (1990), who sees NBT as visitation to natural areas that involves non consumptive use of those areas. For reasons which are considered later in this report, this interchangeability of ecotourism and NBT is rejected as being unduly restrictive, illogical, and counter-productive.

The more controversial element of ecotourism concerns its appropriate level of intensity. Initially, and to a large extent at present, ecotourism was equated with alternative tourism, and rigorous parameters of qualification were commonly espoused. An extreme example of these parameters is found in the 'eight commandments' of James Butler (in Scace 1993) (see Figure 2.3).

One fundamental problem with such restrictive parameters is that ecotourism (and NBT, if the two are equated) emerges as an elitist and minor, if not negligible, form of tourist activity. It is doubtful, for instance, whether any ecotourism product or participant could actually fulfil all of Butler's criteria. Other definitions are more liberal, tolerating a lower sense of commitment and omitting an excessive number of provisos. Rymer (1992,

p.1), for example, suggests that ecotourism is "centred on tourists' desire for immersion in a relatively natural environment in which they and their support facilities have low impact upon the environment". Australia's National Ecotourism Strategy (Allcock, Jones, Lane, & Grant 1994, p.3) adopts the following parameters:

Ecotourism is nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable.

According to Orams (1995), definitions such as the latter two can be situated on the 'passive' end of the ecotourism spectrum, whereas Butler falls on the extreme of the segment designated as 'active'. Table 2.3 indicates the major differences between passive and active

ecotourism. As with Table 2.2, the descriptions are indicative of ideal types rather than universals, since in reality the full inventory of qualifying ecotourism products would range along a continuum from active to passive, rather than conveniently falling into either of just two dichotomous categories. (As well, the positive characteristics listed in association with active ecotourism should not give the impression that this form of the activity is free from management problems such as overly intrusive contact.) This report supports a definition of ecotourism which encompasses both the more active and the more passive variations of the activity. A major reason for this stance is that the much higher levels of participation generate an ecotourism sector that makes a significant economic contribution to the overall economy of Australia and other destinations. As well, passive ecotourism is far more democratic in the sense that virtually anyone can be a participant, whereas active ecotourism tends to require above-average levels of physical capability, education, discretionary income, and available free time. In essence, advocates for a strictly active interpretation of ecotourism are open to criticism for supporting an elitist, economically marginal activity which therefore cannot be easily rationalised, or publicly supported, as an incentive for retaining land or water in a relatively natural condition.

The principle of an ecotourism continuum is recognised in a growing number of ecotourism planning frameworks. The Draft Queensland Ecotourism Plan (Department of Tourism, Sport & Youth 1995), for example, identifies three categories of ecotourism, based on escalating levels of group size, venues and services:

Table 2.3

ACTIVE AND PASSIVE ECOTOURISM CHARACTERISTICS		
Characteristic	Active ecotourism	Passive ecotourism
Nature of activity	<ul style="list-style-type: none"> <li>· Hard, direct nature-based</li> <li>· specialised involvement</li> <li>· over a longer period of time</li> </ul>	<ul style="list-style-type: none"> <li>· Soft, direct to indirect nature-based</li> <li>· often as part of a multi-purpose trip</li> <li>· over a shorter (often diversionary) period of time</li> </ul>
Type of venue	<ul style="list-style-type: none"> <li>· Spatially extensive</li> <li>· wilderness or semi-wilderness orientation</li> </ul>	<ul style="list-style-type: none"> <li>· Spatially intensive</li> <li>· at edge or in controlled enclave within protected area</li> </ul>
Level of services	<ul style="list-style-type: none"> <li>· Minimal, primitive</li> </ul>	<ul style="list-style-type: none"> <li>· Good provision of services</li> </ul>
Characteristics of participants	<ul style="list-style-type: none"> <li>· Committed, highly motivated</li> <li>· Small group, individual</li> <li>· Small numbers overall</li> </ul>	<ul style="list-style-type: none"> <li>· Interested, moderate motivation</li> <li>· Small to large groups</li> <li>· Large numbers overall</li> </ul>

The legitimacy of the liberal or populist perception of ecotourism thus owes largely to dominant market dictates, as succinctly described by Kearsley et al (1997, p.71):

*At present, the bulk of demand is less likely to be for the 'back country' of wilderness and remote places than it is to be for the 'front' country of relatively easily accessible natural settings with a good but unobtrusive infrastructure of basic facilities.*

- Self-reliant ecotourism involves individual travellers or groups of less than ten, visiting relatively remote areas using non-motorised transportation. Services are non-existent.
- Small group ecotourism utilises somewhat less remote locales and involves somewhat larger groups. Rudimentary services are accessed.
- Popular ecotourism entails large numbers of tourists using mechanised transport to readily accessible natural or semi-natural attractions. A significant level of services is required.

Whether styled as an elitist or populist pursuit, ecotourism has been criticised on a number of grounds, including the common assumption of its benign nature, its fundamentally Eurocentric underpinnings (which include the commodification of natural and cultural resources), the danger that carrying capacities may be exceeded inadvertently, and the possibility that ecotourism may open environmentally and culturally sensitive areas to less benign forms of tourism (Bandy 1996; Cater & Lowman 1994; King & Stewart 1996; Weaver 1998).

**Consumptive and non-consumptive tourism**

Ecotourism is often described as a 'non-consumptive' activity, as opposed to 'consumptive' activities such as hunting and fishing (eg. Applegate & Clark 1987; Duffus

& Dearden 1990). This value-loaded dichotomy is based upon a literal definition of consumption, wherein the hunter attempts to kill (consume) wildlife, while the ecotourist benignly views the resource. When used in such a dichotomous way, such designations are simplistic and misleading. The notion of 'consumption' is probably more appropriately applied in reference to the longer-term viability of a resource. For example, inappropriate viewing could culminate in the disappearance or inadvertent 'consumption' of a particular bird species, whereas the controlled hunting of certain feral species or unbalanced wildlife populations can ultimately improve the overall environmental situation. Thus, any activity can be either 'consumptive' or 'non-consumptive' of the broader resource base in the long term. Nevertheless, from a taxonomic perspective, it is useful to designate certain activities such as fishing or hunting as being literally 'consumptive'.

**Adventure tourism or travel**

The term 'adventure tourism' is sometimes used erroneously as a substitute for ecotourism. Ewert and Shultis (1997) refer to the combination of ecotourism and adventure tourism (along with indigenous tourism) as resource-based tourism, although this designation does not appear to have gained any significant currency in the literature. While some overlap may exist, the former does not necessarily focus upon the natural environment. For example, adventure tourism could involve visits to a lost tribe of cannibals, or direct exposure to ethnic conflicts in the former Yugoslavia. [The guide to the world's most dangerous places, published on a regular basis by Fielding's, is perhaps the best example of non-NBT adventure tourism 'opportunities'.] Second, even if the focus is nature-based, there is no innate imperative of sustainability in adventure travel as there is in ideal ecotourism. Third, while an element of appreciation and

education may be evident with respect to participant/resource interaction, the relationship with the resource tends to be more incidental and extrinsic, or one where the resource allows the participant to fulfil certain risk- or thrill-oriented motivations. In white-water rafting, for example, a wild river provides an ideal setting

or venue for experiencing a particular type of personal thrill. In large part, it is the issue of risk that differentiates an activity as adventure travel (Hall 1992) or 'risk recreation' (Ewert 1985), although there are no recognised parameters as to the risk threshold which qualifies an activity as adventure tourism.

## Toward a taxonomy

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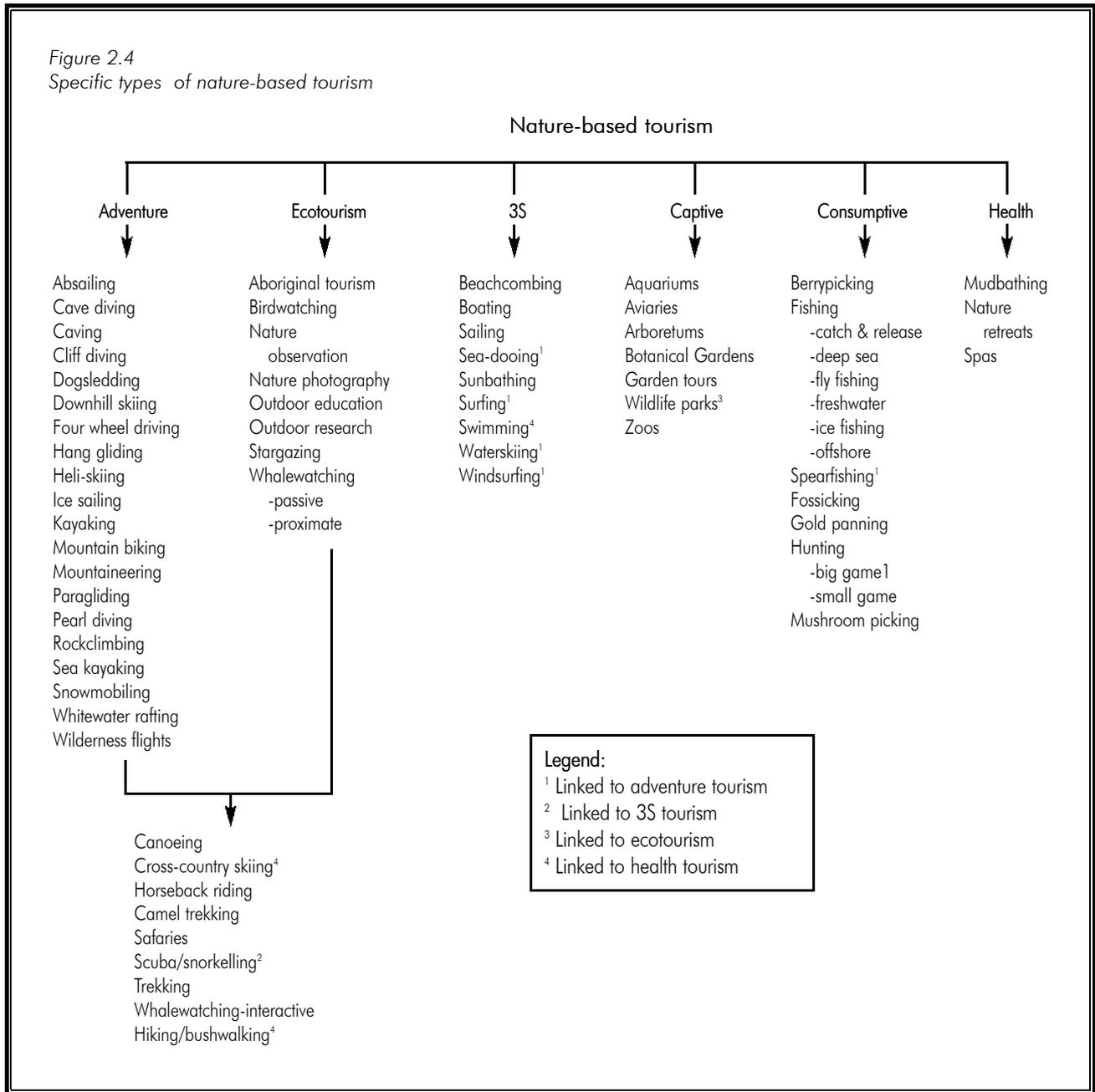
No comprehensive and universal taxonomy applicable to a broadly conceived NBT sector was uncovered in the literature. Rather, several authors have merely listed various activities deemed to fall under one rubric or another, such as Bottrill and Pearce's (1995) inventory of ecotourism activities in British Columbia, and Hill's (1995) list of land and water-based adventure tourism activities. Orams (1996) is somewhat more systematic in proposing a spectrum of wildlife-related activities, the SoTWIO (Spectrum of Tourist-Wildlife Interaction Opportunities), that incorporates the range of relevant possibilities, as follows:

- CAPTIVE: aviaries, zoos, oceanaria, aquaria
- SEMI-CAPTIVE: wildlife parks, rehabilitation centres, dolphin pens
- WILD: national parks, migratory routes, breeding sites, feeding/drinking sites

Even here, however, the spectrum is limited to a particular subset of the NBT phenomenon. An initial step toward a universal NBT taxonomy was taken by first identifying all tourist activities that clearly fall under the NBT rubric as defined earlier. Subsequently, an attempt was made to group these activities based on

commonalities and convention, acknowledging that overlap was both possible and probable. The results of this exercise are depicted in Figure 2.4, while the sub-category inter-relationships are illustrated in Figure 2.5 by way of a Venn diagram. The sizes of the circles in this figure are approximately proportional to their actual size in terms of participation. The overlap between ecotourism, 3S tourism and adventure tourism is best represented by the important scuba diving/snorkelling sector, while the adventure-consumptive overlap is accounted for by big game hunting and some types of deep sea fishing. The captive-ecotourism overlap is represented by game parks which come close to replicating an authentic habitat situation. Adventure tourism overlaps with all other sectors except for captive NBT experiences; this is because of the wide extent to which a risk element can be introduced into tourism-related activities. The adventure-ecotourism overlap may be exemplified by the phenomenon of 'trekking' in such countries as Nepal and Thailand. Figure 2.5 also indicates that four of the sub-components overlap with the non-NBT sector. Examples include the casino gambling element in 3S tourism, and the secondary cultural component in ecotourism (see page 5).

Figure 2.4  
Specific types of nature-based tourism



# chapter three

## *Magnitude of nature-based tourism*

*The following sections consider the magnitude of NBT, as defined above, from both the global and Australian perspectives.*

### *g* Global

It must be stated at the outset that no concerted attempt has yet been made to quantify NBT on a global scale, and that such an attempt is beyond the mandate of this report, although aspects of the problem of NBT quantification are raised in Section 3.5 below. If anything, the wildly variable estimates which do exist on the magnitude of NBT merely serve to emphasise the lack of any definitional consensus or rigorous data collecting procedures, where any such definitions are applied. Ewert and Shultis (1997), for example, suggest that 'resource-based tourism' (their term for NBT) might account for anywhere from 10% to 50% of all tourism, depending on whether strictly direct, or more indirect criteria are applied. This would indicate

a contribution of somewhere between US\$600 billion and US\$3 trillion, assuming an overall tourism contribution of US\$6 trillion for 1996. According to Cater (1994), estimates for the magnitude of 'ecotourism' alone in 1989 ranged from US\$10 billion (assuming a more active-oriented definition) to US\$200 billion. The latter assumes the inclusion of the passive end of the spectrum, but not the indirect impacts. If this version of ecotourism is augmented by other forms of NBT, and especially 3S-based activity, then the direct monetary worth of NBT globally is probably around the US\$600 billion minimum proffered by Ewert and Shultis. This figure, however, is provided here not as any definitive indication of magnitude, but rather as an

initial point of reference upon which further investigation and refinement can be made.

Alternative ways of quantifying global NBT include the estimation of participation, and of the portion of the world's surface which is dominated by nature-based, as opposed to other, forms of tourism. Regarding the latter, we can confidently begin by assuming that tourism in virtually all 'wilderness' areas is nature-based. McCloskey and Spalding (1988) estimate the cumulative size of all wilderness blocks of at least 400,000 hectares to be just under 51 million km<sup>2</sup>, or about one-third of all land. At a continental scale, these proportions range from 100% in Antarctica to 7% in Europe. However, if smaller blocks of relatively undisturbed habitat, including protected areas (IUCN categories I-IV) are included, this figure would approach 50% of the earth's land. To this could be added most of the less settled rural areas, the tourism element of which is highly skewed toward NBT, as through activities associated with vacation farms, hunting and fishing, and sightseeing. Such lands constitute about 35-40% of all land. Most urban space would not qualify, except for specialised 'pleasure periphery' resort destinations (Turner & Ash 1975) which depend upon 3S or alpine resources, and lands occupied by urban botanical gardens, zoos, wildlife parks, etc. Notwithstanding the latter, NBT may be described as a

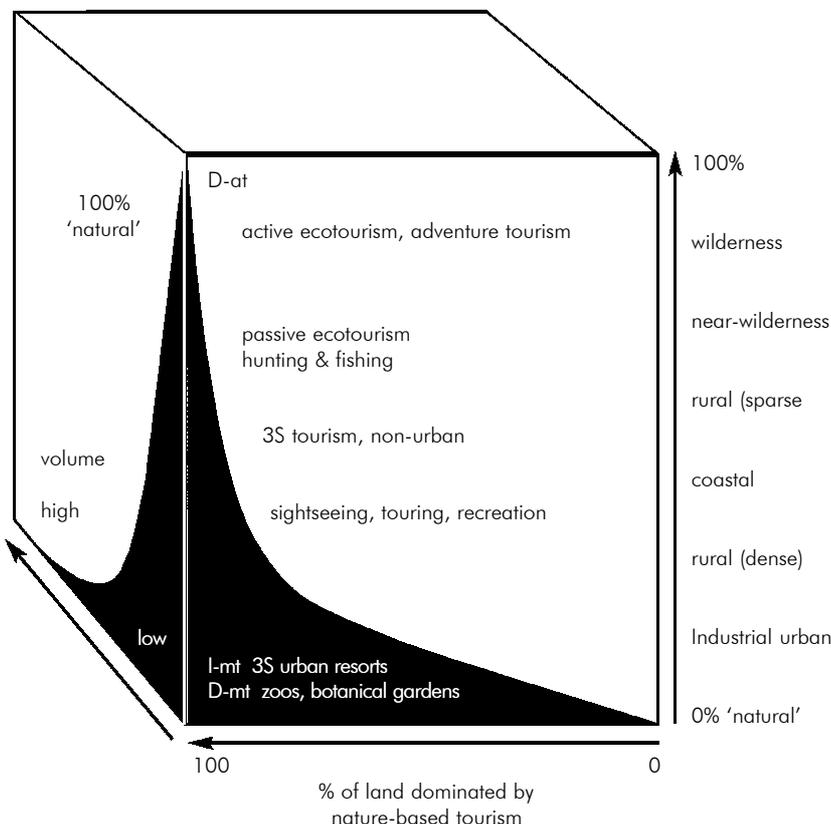
ubiquitous activity whose spatial dominance greatly exceeds its share of overall tourism participation.

Figure 3.1 provides a generalised indication of various environments, the extent to which their tourism is accounted for by nature-based opportunities, and the dominant types of NBT found in each. As well, the generalised volume of tourist activity that occurs within these environments is depicted, in order to qualify the impression that most tourism takes place within less developed venues. Clearly, the relationship is again exponential, with the volume of traffic increasing dramatically as one moves toward the more urban end of the spectrum. Putting the two exponential curves together, the following extremes are obtained:

- Wilderness: almost all NBT, but very low incidence of tourism
- Large urban areas (not resorts): land devoted to NBT is extremely small (eg. small captive-oriented sites); NBT itself is significant, but minor as compared with tourism in general

In relating Figure 3.1 to Figure 2.2, low volume, nature-dependent activities (=D-at) are positioned at the top of the figure, while mass tourism activities both incidental to nature (I-mt) and dependent upon nature (D-mt) cluster toward the bottom.

Figure 3.1  
Generalised model depicting NBT environments and dominance



At the level of individual geographical units, Antarctica, as mentioned, is clearly the dominant NBT destination region, and the epitome of the wilderness scenario just described. Among the populated continents, Africa is perhaps notable for the primary importance of its natural resources, and of its wildlife in particular, as a basis for its tourism product (Ferrario 1982). A number of developed countries with a large wilderness or semi-wilderness component, such as Canada, Sweden, New Zealand and Australia (see below), are also known primarily as NBT-dominated destinations. A similar reputation is accruing to a number of less developed countries as a result of recent increases in their international passive ecotourism sectors. Included in this trend are Costa Rica, Thailand, Nepal, and Kenya (Weaver 1998). Finally, to these must be added 3S destination-countries such as the Maldives, Mauritius, the Bahamas, etc.

Another criterion for measuring

NBT is the level of participation. Again, a pattern of ubiquity is evident from the surveys which solicit such information. For example, a mid-1990s survey of middle to upper income residents in seven major North American metropolitan areas revealed that 77% had been on a trip that involved nature, outdoor adventure, or a cultural experience in a countryside or wilderness context, while the remainder all indicated an interest in do so in the near future (Ewert &

Shultis 1997). Looking at just one NBT component, the proportion of American adults who indicated that they participated in wildlife viewing as a primary economic activity increased from 36.7% of the applicable population in 1981 to 44.2% in 1992 (Scace, Grifone & Usher 1992). Moreover, bird-watching was reported by Cordell, Lewis and McDonald (1995) to be one of the largest and fastest growing sectors of US outdoor recreation.

## Selected sub-sectors (global)

Insight into the overall and presently opaque NBT sector may be attained by examining specific sub-sectors for which reasonably reliable data have been collected. In particular, such a scrutiny demonstrates the unequal magnitude and growth performance of the various NBT sub-components. At one end of the growth continuum, whale-watching was estimated to have generated global expenditures of A\$700 million in 1994 from 5.4 million viewers, having grown by an annual rate of 10.3% between 1991 and 1994. Over 295 communities in 65 countries now play host to whale-watching industries (Orams 1997). A pattern of exponential growth is apparent in the fact that the industry was born as recently as 1955 in California, and produced revenues of A\$80 million in 1988 (Hoyt 1996). A similar pattern of exponential growth was experienced concurrently by the cross-country skiing sector, whose participant levels increased from 2,000 in 1964 to 500,000 in 1974 within the US alone (Ewart 1985), and the recreational scuba-diving sector (Tabata 1991).

Unfortunately, it is a misleading tendency in much of the popular (and academic) literature to extrapolate such

indications of exceptional performance to the entire spectrum of NBT activities, thus giving rise to unsubstantiated claims that NBT as a whole is the fastest growing segment of the overall tourism industry. Perhaps the best example of an NBT pursuit which is displaying a completely contradictory pattern of growth is hunting, which was surpassed only by tennis as the recreational activity experiencing the highest rate of decline among American adults between 1982 and 1994. The number of participants during this period fell from 30 million to 21.2 million, while fishing, another 'consumptive' activity, declined from 60.1 million to 58.3 million (Cordell, Lewis & McDonald 1995). Continuing long-term declines in global hunting participation are anticipated (Backman & Wright 1993), although the activity appears to be undergoing something of a revival in sub-Saharan destinations such as Zimbabwe (Butler 1995). Somewhere between these two extremes is the spa tourism sector, which has maintained a regionally important status over the past century. It is estimated for example that 3% of Poles, 2.5% of Germans, 2% of Italians and 1% of French regularly visit traditional thermal spas (Hall 1992).

## Australia

Although no rigorous definition or subsequent quantification of NBT as a whole has yet been undertaken in Australia (Office of National Tourism 1997), ample anecdotal evidence combines to suggest the paramount status of this sector within the overall tourism industry. Participation statistics provide the initial indication, with nature-based categories dominating the list of 'entertainment and cultural activities' that international tourists engaged in at least once during their visit to Australia (Table 3.1). Allowing for almost universal patterns of restaurant participation, nature-based categories occupied the top 3 positions, including:

- The highly mediated encounter with wildlife provided by zoos, animal parks and aquariums
- Botanical or other public gardens
- National parks

Specific market segments display greater or lesser tendencies to participate in these activities, with the

Germans and other Europeans being most inclined to visit a national park, and the Taiwanese and Koreans having the highest proclivity to attend mediated nature-based attractions. [See Blamey (1995) for a more detailed discussion of the inbound NBT market profile, focusing upon ecotourists.] These international visitor survey (IVS) data do not reveal the proportion of time spent in each activity, or the total proportion of visitors who indicated at least one nature-based experience. However, allowing for overlap, it is quite clear just from these data that a large majority of inbound tourists participated at least marginally in nature-based activities.

The IVS also solicits information about participation in a variety of sports and other activities, many of which are also nature-based. These data (Table 3.2) indicate the importance of bushwalking and related activities (which is even more stratified by market source) as well as snorkelling and scuba diving. Swimming/diving/surfing

Table 3.1

1996 INBOUND VISITORS TO AUSTRALIA BY SELECTED ACTIVITIES <sup>1</sup>						
Country	National parks	Botanical or public gardens	Aboriginal attractions	Zoos, aquariums, animal parks	Amusement or theme parks	Casinos
Percent						
NZ	24	31	6	21	14	23
Japan	43	32	16	65	35	29
Taiwan	54	70	7	75	54	30
Korea	44	63	6	74	29	21
USA	52	51	23	43	5	19
UK	59	57	24	48	12	21
Germany	66	66	43	59	5	10
Other Eur:	64	60	34	58	9	16
All visitors	42	45	15	48	20	25
Number	1,609,000	1,723,000	574,000	1,838,000	766,000	957,000

<sup>1</sup>Refers to visitors 15 years of age and older who engaged at least once in the indicated activity while in Australia  
 Source: Bureau of Tourism Research, 1997b.

Table 3.2

1996 INBOUND VISITORS TO AUSTRALIA BY SELECTED SPORTS AND ACTIVITIES PARTICIPATION						
Country	Swimming/diving/surfing	bushwalking & related activities	Snorkelling, scuba divers	Other walking for pleasure	Outback safari	Fishing
Percent						
NZ	22	10	3	34	2	1
Japan	30	10	20	25	4	2
Taiwan	16	5	2	17	1	2
Korea	19	4	3	18	1	1
USA	32	25	19	41	7	2
UK	48	27	9	49	11	7
Germany	57	42	30	50	15	2
Other Eur:	15	37	4	49	14	5
All visitors	28	15	12	33	5	2
Number	1,072,000	574,000	460,000	1,264,000	191,000	115,000

Source: Bureau of Tourism Research, 1997b.

and 'other walking for pleasure' are too ambiguous as categories to assign a definitive nature-based component, although the volume of beach activity and casual walks in a semi-natural environment would suggest that the NBT component of those two categories is very large. Domestic tourism data obtained through the Domestic Tourism Monitor (DTM) is even more vague with respect to the nature-based component in Australian tourism, offering only the number of tourists who undertook at least one day trip in the past year in several categories, including visits to 'animal parks, wildlife reserves and zoos' (which amounted

to 2,193,000 trips during 1994/95) (BTR 1997a).

Given the character of Australia's physical landscape, which is over one-third wilderness (McCloskey & Spalding 1988), the spatial dominance of NBT is not surprising. Non-NBT activities, effectively, are dominant only in the larger urban areas such as Sydney, Melbourne and Brisbane, and in specific non-urban locations of particular historical or cultural interest. Otherwise, the pattern is similar to the global dispensation modelled in Figure 3.1. That is, most of the country harbours ecotourism or adventure travel (ranging from active to passive, depending on the specifics

of the venue), while 3S-type opportunities are available along an increasingly sizeable portion of the coastline and offshore. The relative importance and content of NBT varies from state to state, and to an even greater degree from location to location. Using Queensland as an example, the IVS revealed that 52% of all international visitors during 1996 at some point visited the beaches of the Gold Coast, with participation ranging dramatically from 21% among

US visitors, to 88% among Koreans (Table 3.3). Other state destinations with an obvious nature-based focus included the Great Barrier Reef and the rainforests of the tropical north. In contrast, almost all visitors to New South Wales visited urban attractions within Sydney and 45% (or 896,000 visitors in 1996) made at least one visit to a Sydney beach, while only 19% experienced national parks or natural bushlands (BTR 1997b).

## Specific sub-sectors (Australia)

As with the previous sub-section, a more satisfactory level of NBT specificity may be achieved by individually considering at least some of its constituent sub-components. Because of the large amount of overlap with other categories, adventure tourism is not discussed as a separate entity.

### 3S tourism

3S tourism is dominant in the Australian portion of the 'pleasure periphery', which extends from Sydney to Port Douglas, and includes outliers such as Broome, in Western Australia. Certain international markets, such as Japan, are very highly skewed toward 3S tourism, as evidenced by their concentration in Queensland and New South Wales. Elsewhere, many coastal locales are important for mainly domestic 3S activity in the summer. Despite this importance, no data are available as to the actual occurrence or economic impact of Australia's 3S tourism sector as a whole. At a local scale, data from 3S resort destinations can be taken as good indications of this sector's magnitude and of its related activities, NBT and otherwise.

For example, a Gold Coast survey undertaken in 1996 to identify main-interest tourist clusters found that 39% of domestic visitors were 'beach holiday-makers', while 'nature bush walkers' constituted 10% of the sample, and sailing specialists were 3%. In contrast, theme park specialists accounted for 38% (Raybould and Mules 1998). Supply-side calculations of usage, such as the monitoring of beaches, creates problems because of difficulties in distinguishing between 'tourists' and 'locals', given that 86% of Australia's population lives on or near the coast, and the beach is imbued with iconographic significance for the local population (Rowe & Paton 1995).

### Ecotourism

A scrutiny of the literature indicates a relatively high volume of research in the Australian ecotourism sector as compared with 3S tourism. However, the lack of any consensus on definition means that the resulting indicators of magnitude are highly variable and sometimes contradictory; in general, the best and most

Table 3.3

1996 INBOUND VISITORS TO AUSTRALIA: SELECTED PLACES/ATTRACTIONS VISITED IN QLD						
Country	Gold Coast beaches	Great Barrier Reef	Queensland tropical rainforests	Cairns Skyrail	Port Douglas	Gold Coast hinterland
Percent						
NZ	48	11	9	10	9	5
Japan	50	34	9	10	12	4
Taiwan	87	6	3	2	2	4
Korea	88	4	2	1	1	3
USA	21	63	44	30	28	5
UK	34	52	36	22	26	10
Germany	25	66	56	29	30	11
Other Eur:	39	66	50	31	25	10
All visitors	52	32	18	13	13	6
Number	837,000	515,000	290,000	209,000	209,000	97,000

<sup>1</sup>Refers to visitors who engaged at least once in the indicated activity while in Australia

Source: Bureau of Tourism Research, 1997b.

reliable data are associated with protected areas (such as some National Parks), where visitor numbers and behaviour are monitored over a long period of time. An additional problem in isolating ecotourism is the importance of scuba-diving, which overlaps with the 3S and adventure components of NBT. This raises the question as to whether activity associated with the Great Barrier Reef should be classified as ecotourism, or either of the other two options. Perhaps the best rationale for preferring the former designation is the reef's status as a marine protected area, which implies a regulatory environment more conducive to ecotourism. Allowing that some of the associated activity could have a 3S or adventure element, Driml and Common (1994) estimated that the Great Barrier Reef World Heritage Area generated \$776 million in expenditure in 1991. The specific sectors of expenditure included \$326 million on mainland accommodation, \$188 million spent on island resorts, \$168 million on commercial boat tours, and \$94 million by recreational fishers using their own boats. If scuba-diving alone is considered, it has been estimated that over 800,000 recreational dives took place in Queensland during 1991, with 500,000 of these occurring in the Cairns region, and most of the rest in other parts of the reef. Otherwise, very little is known about the Australian scuba-diving industry in particular (Davis & Tisdell 1995). It is apparent, however, that visitations and concomitant receipts associated with the reef have expanded exponentially. In 1983/84, just 140,000 visitor trips and 660,000 visitor nights were reported for the 245 island resorts on the Great Barrier Reef. At that time, only \$60 million in expenditures were realised. At a strictly local level, the number of visitors to the Whitsundays increased from 28,000 in 1962 to 182,000 in 1979, while visitation to Green Island grew from 48,000 in 1960 to 130,000 in 1975 (Hundloe 1990).

Aside from the reef and related phenomena, the ecotourism sector is dispersed broadly throughout Australia, with important concentrations occurring within protected areas, and in marine environments harbouring significant whale populations. While the former do not generate as many revenues as the Great Barrier Reef, the impact from a supply-side perspective is still impressive. Expenditures associated with the Wet Tropics WHA in 1991 amounted to \$377 million, while the comparable figures for Kakadu, Uluru and the Tasmanian Wilderness WHA were \$122 million, \$38 million and \$59 million (Driml & Common 1994). Like the Great Barrier Reef, a geometric growth pattern is also evident in the better known of these more interior-oriented protected areas. For instance, visitation to Uluru NP increased from 5,000 per year in the 1970s to over 250,000 in 1990 (McIntyre & Boag 1995), while the number of tourists visiting Western Australia's Shark Bay also demonstrated dramatic growth, increasing from approximately 10,000 in 1984 to 150,000 in 1992 (Blamey 1995).

Econometric evaluations have also been undertaken within lesser known public lands. For example, the gross market value of tourism on public lands in the Upper North East Region of New South Wales was estimated to be \$290 million in 1992/93, the vast majority of which involved NBT. In relative terms, this amount represented 57% of the total value of those lands. Outdoor recreation (as distinct from 'tourism' due to its strictly local clientele) added another 30%. In contrast, timber and forest products each accounted for only 5% of the value. Together, tourism and recreation (virtually all nature-based) accounted for 10.5% of the region's entire economic activity (Carlsen 1997). Looking only at direct expenditures, a value of \$5.4 and \$.8 million per year was accredited to Dorriggo and Gibraltar Range National Parks, respectively, in the same region (Bennett et al, 1996).

Defined using a more 'active' set of criteria, the ecotourism and adventure tourism industry in Australia is estimated to involve about 2,600 operators (600 being more ecotourism-oriented, and the remainder more adventure-oriented). These businesses account for approximately 6,500 employees, 4,500 person-years of employment, and a turnover of \$250 million per year (McKercher 1998). The wisdom of treating these figures cautiously is demonstrated by the fact that another source (Nature Based Tourism Advisory Committee 1997) estimates 300 ecotourism operators for Western Australia alone (ie., half the McKercher ecotourism total), even though it is generally conceded that most other states have a far larger ecotourism sector. While the figures quoted by McKercher represents only about 1% of total tourism employment and receipts, the actual contribution of ecotourism and adventure tourism are far more substantial if their 'passive' and low-risk manifestations are included, and if they are enumerated in terms of incidental participation (eg., as seen in the proportion of inbound visitors who engage at least once in such an activity).

To date, little information is available regarding specific ecotourism sub-sectors, the one major exception being whale-watching (Davis et al, 1997). Australia currently ranks as the world's third largest whale-watching destination in terms of viewers (Parsons 1996), and the sixth with respect to revenue, with \$5.17 million (following the US [\$41million], Canada [\$14m], Mexico [\$10m], Ecuador [\$7.5m], and Spain [\$7.15m]) (Bridgewater 1996). In 1994, direct employment in the sector was estimated at 200 persons (Parsons 1996). With 75,000 whale watchers reported in 1995, the Queensland community of Hervey Bay is by far the major node of activity within Australia (MacDermott 1996), although Shark Bay (Western Australia) and other communities also harbour a growing specialised whale-watching sector (Dowling 1991).

#### *Consumptive*

Data on the consumptive tourism sector is partial and

undifferentiated in many crucial respects. For example, it is known that 4.5 million Australians fish for recreational purposes at least once a year, that 70% are male, that the sector is worth \$2 billion a year, and that some 60-80,000 jobs are directly and indirectly attributable to recreational fishing. However, it is not clear as to the proportion of users (and therefore, impacts) that are accounted for by domestic tourists, as opposed to 'locals'. Regarding inbound tourism, it was reported that 101,000 international tourists fished in 1990 as part of their overall trip experience in Australia (Dovers, 1994).

### *Captive*

Captive wildlife attractions are seldom explicitly included in analyses of NBT, despite their dependence upon selected plant and wildlife populations, and their popularity as tourist attractions. To provide just one example of the latter, the Royal Botanic Gardens in

Melbourne, and the Royal Melbourne Zoo, respectively, are Victoria's third and fourth most popular tourist attractions (Blamey 1995). This status no doubt relates in large part to their location within a major urban area, a geographical factor that pertains to many captive-oriented NBT products within Australia. Quantification of this sub-sector is assisted by the fact that almost all relevant activity occurs within a relatively small number of sites for which visitation data is readily available. While captive-oriented and largely urban sites such as zoos and botanical gardens are the most popular category of attractions when quantified strictly in terms of actual visitation by inbound tourists (Table 3.1), their actual importance must be qualified by the fact that the related experience tends to be relatively brief (ie., two or three hours) compared with visits to national parks or other rural venues; therefore, they would not have as high a profile if measured in terms of 'activity-hours'.

## *M* Methods for quantifying NBT

As the previous section has revealed, efforts to quantify most of the NBT components have been thwarted by a combination of definitional problems and the generally piece-meal approach which has prevailed. Progress in this area firstly requires a more precise definition to be broadly accepted and, secondly, for this definition to be operationalised to provide the basis of some measurement procedure.

This paper takes a step towards addressing the first of these requirements by recommending a broadly applicable definition in Section Two, while schema for classifying various forms of nature-based tourism have been presented in Figures 2.2, 2.4 and 2.5. If this interpretation were accepted as a useful starting point, the major challenge then becomes the design of a method for measuring the extent of tourist activity that falls within the various categories that have been recognised.

There are essentially two approaches to measuring levels of tourist activity:

- A supply-side measurement approach; and
- A demand-side approach.

The supply-side approach involves the collection of data on the level of tourist activity from suppliers of services to tourists. This approach has two fundamental limitations in the context of nature-based tourism. First, while some suppliers provide a specialist service which is unequivocally nature-based (eg a tour specialising in nature walks and bird watching), others provide a product that is only partially nature-based (eg a resort which

includes beaches and natural areas among the wide range of facilities they offer). A survey of the specialist nature tour operators would provide an accurate basis for estimating tourist involvement in nature-based activities, but the survey of resorts would not, because not all visitors to the resort would necessarily take the opportunity to use the natural resources. Secondly, many of the nature-based experiences enjoyed by tourists involve the consumption of public goods, rather than a purchase from a specific supplier. For instance, when a family visits a natural area for a picnic or goes fishing while on holiday, there is no 'supplier' from whom they purchase these experiences, and data on the extent of this behaviour is therefore not captured.

The demand-side approach involves the measurement of tourist activity by surveying tourists directly. Given the above limitations of the supply-side approach and the fact that the demand based approach enables us to measure the degree to which individual trips have a nature-based orientation, the latter approach would appear to be more appropriate. At the very least, this approach would enable managers to determine the extent to which NBT activities (such as those identified in Figure 2.4) are included in tourist's itineraries, by employing a simple recall survey approach. If more detailed information is required on the relative significance of these activities, vis-à-vis non-nature-based activities in individual itineraries, a diary/time budget approach might be employed. Additionally, estimates of the specific economic significance of the nature-based component of travel would require expenditure data to be collected.

# 4 chapter four

## *SWOT analysis of NBT in Australia*

*The SWOT technique offers a useful way of assessing the actual and potential positive and negative characteristics of a particular sector. Below, a SWOT analysis is applied to NBT within Australia.*

### *S* Strengths

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- **P**ervasiveness; as seen above, NBT is ubiquitous within Australia, and is implicated at least to some extent in the visits of most international tourists
- Diversity of Australia's 3S product; encompasses the range of NBT opportunities, from 3S to hard wilderness ecotourism, and even alpine; few countries can match Australia's diversity in this regard
- Many unique natural features; Australia has the largest number of endemic mammal species of any country (209), the second largest number of endemic bird species (its 351 being second only to Indonesia's 356), and over 13,000 endemic plants (an amount exceeded only by China and Indonesia) (World Resources Institute, 1994); such unique assets give Australia a unique product profile, and a competitive advantage over destinations lacking such a high proportion of endemic flora and fauna
- High profile and attractiveness of Australia's nature-based resources; includes attractive wildlife such as koala and kangaroo, and natural features such as Uluru, the Great Barrier Reef and Kakadu; these products give Australia immediate market recognition as an NBT destination
- High quality, extensive and mostly undeveloped 3S

resources along the coast, augmented by the world's largest barrier reef; Australia is highly competitive in this regard, and because of the low level of overall coastal development, has a range of development options available which are not present in more mature destinations

- A very high proportion of territory that is wilderness or semi-wilderness, and hence retained in a state conducive to the provision of high-quality wildlife viewing
- A high proportion of protected areas; in 1993, Australia had 733 protected areas (IUCN categories) covering 81.4 million hectares, of which 424 (or 65.9 million hectares) were 'totally protected', or 8.5% of the country. These areas represent high quality venues

for NBT within which competing land uses are minimised or eliminated by regulation and legislation

- Accessibility of high quality natural resources; Australia's major urban gateways are all in close proximity to highly attractive natural resource hinterlands, eg., Sydney/Blue Mountains, Gold Coast/Lamington & Springbrook, and Cairns/Kuranda.
- Institutionalisation of certain sub-sectors; the ecotourism sector in particular is becoming increasingly mobilised through the establishment of the Ecotourism Association of Australia and the National Ecotourism Strategy
- Increasing monetary commitment; establishment of CRC in Sustainable Tourism and CSIRO tourism projects examining issues relevant to NBT

## Weaknesses

- **N**o consensus on the definition of NBT or its magnitude within Australia; any lobbying efforts are hampered by the deficiencies in data, as the case for its magnitude cannot be 'scientifically' demonstrated. As well, the lack of consensus in definitions dilutes the argument that the sector should be treated as a viable entity in its own right
- Vulnerability of fragile sites to increased visitation; eg., visitation growth rates in Uluru and Shark Bay (Dowling, 1991); Australia is subject to the perennial dilemma of ecotourism, which is that the sites most attractive to ecotourists are also often the most vulnerable, since both vulnerability and attractiveness are paradoxical consequences of scarcity
- Lack of knowledge as to the carrying capacities of most sites for virtually any type of NBT activity, and a lack of research in general regarding NBT within Australia; the amount of research conducted into this component (and all other components) of Australian tourism is not at all commensurate with the contribution made by tourism to the country's GNP. Hence, there is a lack of knowledge to inform the

development of a sustainable NBT sector capable of making an even more substantial contribution to the economy of Australia, and its quality of life in general.

- Large unprotected areas; 91.5% of Australia is not protected, and is thus vulnerable to land uses detrimental to NBT (see next point)
- Competing perspective of protected area resource managers and tour operators; while both groups in Australia acknowledge the importance of maintaining a high quality natural environment, the two groups tend to perceive each other as enemies; that is, tour operators see resource managers as unduly restrictive, while resource managers tend to see tour operators as unduly permissive and reckless. Moore and Carter (1993) effectively summarise the two competing views as 'more the merrier' (tour operators) and 'fewer the better' (resource managers)
- Lack of any umbrella organisation encompassing all aspects of NBT. This means that the sector is not sufficiently mobilised to compete with other stakeholders in the allocation of natural resources (Cohen & Richardson, 1995) (see Threats, below).

## Opportunities

- **N**ew product development; idea that natural resources never traditionally thought of as tourism resources are now being redefined as such due to changes in the society -eg., whales, tropical rainforests, etc. Opportunities within Australia include safari style excursions into the outback, peri-urban wildlife parks, and expansion in the health and personal development NBT sub-sectors.
- Tie-ins with mass tourism; a more diverse tourism product can be achieved by encouraging further

mutually beneficial linkages between ecotourism (in the near interior, for example) and the 3S tourism that tends to locate on the coast. Such a symbiotic relationship is advocated by Ayala (1996) and others.

- Attitudinal shifts; among public land management agencies in Australia and elsewhere, there has been a shift in philosophy whereby aesthetic, recreational, cultural and social values are gradually being given parity with, or priority over, the traditional extractive sector in terms of priority access (Backman, Allen, &

Becker, 1992). A good illustration of this phenomenon is provided by the whale watching sector. While recognised today as an extremely valuable tourism resource, it should be noted that the last commercial whaling station in Australia shut down as recently as 1978 (Bridgewater, 1996). Related to this is the increased recognition of an economic value for the tourism-complementary option of maintaining land and water in a relatively

undisturbed state (De Lacy & Lockwood, 1992).

- Increasing public support for tourism as the most environmentally compatible economic option for relatively natural areas. For example, 73% of residents and tourists in the North West Cape of Western Australia affirmed this belief, whereas the proportions favouring pastoralism, commercial fishing and mining were all significantly lower, at 53%, 49% and 15%, respectively (Dowling, 1992).

## Threats

- **E**xponential growth of Australian tourism; the classic Butler sequence (or S-curve cycle of resort development - Butler, 1980) scenario seems to be occurring in many parts of Australia, and in coastal locales in particular, wherein a high rate of growth threatens the natural assets upon which the NBT sector relies (Moore & Carter, 1993)
- Competition with other resource stakeholders; despite the shift in attitudes, the forests, water, seas and other resources of Australia continue to be exploited by industries whose actions and impacts on the environment are often detrimental to nature-based tourism. As pointed out by Cohen and Richardson (1995), extractive industries do not depend upon the in situ consumption of its product, and therefore have little incentive to invest in ecologically sustainable practices. However, these same practices are inimical to tourism, which does depend on on-site 'consumption'.
- Climatic change; nothing can be done about macro-climatic processes which may fundamentally affect the natural environment of Australia, eg., global warming, and also the NBT activities which depend

upon the affected resources, such as 3S tourism (due to the loss of beach from sea level rising) and ecotourism (due to the possible destruction of the Great Barrier Reef through coral bleaching) (Dwivedi & Batt, 1990; Gable, 1990; Miller & Cottrell, 1990). Similar concerns about ozone depletion and the concomitant health impacts of sun exposure could lead to the declining popularity of 3S tourism.

- Potential competition among various types of NBT, and especially between ecotourism and 3S tourism in coastal and hinterland areas; eg. Port Hinchinbrook, 'Nature Link' (Gold Coast hinterland)
- Proximity of relatively natural areas to large urban areas could result in stresses occurring through the expansion of these urban areas into the 'peri-urban' environment
- Emergence of 3S and ecotourism in South-east Asia and the South Pacific; NBT in these areas is still in an incipient stage of development, but there is a potential for such destinations to increasingly siphon visitors from North America and North-east Asia away from Australia due to the dynamics of intervening opportunities.

## Management considerations

**A**SWOT analysis is no more than an academic exercise unless measures can be taken to redress the weaknesses and threats, and reinforce the strengths and opportunities. The first step in this process is to assess the extent to which the NBT sector within Australia is empowered to initiate such changes. In other words, tourism stakeholders must first gauge the level of control that they can reasonably expect to exert over the factors which will influence their sector. Weaver (1998) refers to four levels of influence based on the changing context of the tourism sector:

### *External Context*

The external context encompasses broad forces over which the sector does not and cannot expect to exercise

any significant amount of control. Socio-political forces (cited as threats in the SWOT analysis) such as major wars, and natural forces such as global warming, ozone depletion, earthquakes, hurricanes and volcanic eruptions are included in this category, along with the development of intervening tourism opportunities. The only realistic way of addressing such forces is to effectively mobilise the sector at the lower levels of resolution so that the NBT product can emerge relatively intact from, or adjust to, the changes that result from these external forces.

### *Intermediate context*

The intermediate context consists of the broad physical and cultural environment within which the NBT product

is situated. Crucial here is the truism that this environment in most cases must accommodate other industries, including agriculture, forestry, and mining. As well, encroaching urbanisation represents a tangible threat to peri-urban nature-based hinterlands in particular. In many cases, the nature of these industries and processes is such that they engender a competitive and incompatible relationship with tourism, rather than one which is complementary. Related processes that can degenerate the attractiveness of such environments for tourism include desertification and deforestation. Against such competitors, at least two strategies are feasible. First, the NBT industry must effectively sell itself to the government and to the public as a resource user with an equally legitimate (and more benign) stake in the natural environment of Australia. Concurrently, overtures should be made to the industries themselves to determine whether a *modus vivendi* acceptable to all major stakeholders can be realised.

#### *Immediate context*

The immediate context consists of the broader tourism sector, as well as those portions of the physical environment, such as the more highly regulated protected areas, where the competition over resources is kept to a minimum, and the tourism industry itself is an established stakeholder. Thus, the NBT sector often has a significant amount of influence over the management of protected areas, given that the revenue-generating dominance of tourism within such areas has been frequently demonstrated. With regard to the broader tourism industry, the intra-sectoral influence of the NBT sector will depend on how restrictive a definition is applied; if 'hard' ecotourism criteria are applied, then a very small niche product is defined which cannot expect to acquire a large voice within the sector. However, if the broader criteria are applied, and the indirect influence of NBT over other forms of tourism is recognised, then a much greater level of power is warranted.

#### *Internal context*

Of course, as with any sector, the newly defined NBT industry can exercise the greatest amount of influence

over itself. Initially, this involves the promotion of an NBT definition broad enough so that the sector has the 'economies of scale' to effectively address issues which arise at higher levels of context. Once this broad-based rubric is established, an Australian NBT umbrella organisation should be established to undertake the functions which reflect this clout. Included in the functions of an NBT organisation are the following (from Weaver, 1998):

- Lobbying government in the interests of NBT;
- Providing a coherent, reasonably united front for the sector;
- Providing an intra-sectoral forum for the discussion of relevant issues;
- Liaising with other stakeholders;
- Presenting this united front to government agencies that interact directly or indirectly with NBT;
- Collecting and disseminating data to government and the public;
- Offering a focal point for public involvement and support;
- Undertaking publicity and public education campaigns;
- Lobbying for and contributing to the formulation of a national NBT strategy;
- Engaging in fund-raising;
- Dispensing advice, training opportunities and other support to the sector;
- Establishing codes of ethics and guidelines which will inform the sustainable development of the sector;
- Working toward the establishment of mechanisms and criteria (including accreditation) to identify, measure and monitor the sector, in co-operation with government.

The problem with much of nature-oriented tourism planning at the federal and state levels in Australia is the maintenance of a more restrictive definition (essentially, just the ecotourism component of NBT), and hence the perception that this version of NBT is completely separate from, and perhaps incompatible with, other forms of tourism which depend to a greater or lesser extent upon the natural environment.

# 5 chapter five

## *Conclusions*

This report makes several useful contributions toward an increased understanding of the relationship between tourism and the natural environment. These include a proposed definition of nature-based tourism (NBT) that emphasises an activity's degree of dependency on nature, and a dependency/intensity framework that accommodates all possible NBT activities. The place of NBT in relation to other tourism-related terminology, such as sustainable tourism, ecotourism, consumptive and non-consumptive tourism, and alternative tourism, is also clarified, and a universal taxonomy of specific NBT activities is presented which consists of six overlapping sub-categories. This report additionally suggests a generalised model depicting the relationship between various environments, the dominance of NBT, and the overall volume of tourism activity. It must be stressed that these models are tentative, in the sense that they are not necessarily definitive in themselves, but are intended to form the basis for further discussion and investigation among tourism stakeholders.

Although any consensus on the definition and magnitude of NBT is absent, it is clear from available estimates and anecdotal data that this constitutes an enormous and rapidly growing sector both globally and within Australia. However, even if more data were to be made available, it is also clear that there is no single variable that definitively measures the phenomenon. For example, if construed as a hard-core, specialised, nature-dependent set of opportunities, NBT probably constitutes less than 1% of all tourism activity in Australia or world-wide. However, at the opposite end of the continuum, if construed in terms of spatial dominance, NBT is the dominant mode of tourism throughout perhaps 95-98% of the world's (and Australia's) surface. Similarly, most international tourism incorporates at least some exposure to nature-based experiences, although usually as a secondary or diversionary component. In terms of management implications, a SWOT analysis reveals great strengths and opportunities for Australia's NBT product, although significant weaknesses and threats, many beyond the control of the country itself, must also be recognised and addressed.



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