The economic contribution of protected natural areas: benefits from human use
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This paper presents a case for human access to protected natural areas based on demonstrating the subsequent economic benefits. Alpizar (2005), Athanas et al (2001), Eagles (2003), Krug et al (2002) and Font et al (2004) all observed that government managed protected natural areas around the globe are inadequately resourced. This is generally attributed to the low priority governments place on the seemingly more esoteric issue of biodiversity conservation relative to perceived more important concerns such as public health, education and security (Athanas et al. 2001; Krug et al. 2002; Font et al. 2004; Alpizar 2005). Consequently, the limited resources of government tend to be focused away from protected areas.

Protected natural areas are now primarily managed to conserve cultural and biodiversity values (Australian Government 2007). From this perspective, public access is commonly treated as a threat to biodiversity conservation (Hockings and Twyford 1997; Newsome et al. 2002; Moore and Polley 2007). However, it has been shown that human use of protected natural areas can serve two positive purposes. Firstly, such areas can be used as resources to educate visitors about the importance of biodiversity conservation and thus raise community support to this end (Edwards 1969; Field and Wagar 1973; Hammit 1981; Bramwell and Lane 1993; Ballantyne 1998; Field and Gough 1998; Howard 1998; Hughes 2004; Hughes and Morrison-Saunders 2005). Secondly, sustainably managed public access to protected natural areas can generate economic benefits for the immediate region where it is located and more broadly (Dwyer et al. 2004; Hughes and Carlsen 2008). The latter point is the focus of this paper where by the economic benefits derived from use and access to protected areas can function to generate resources for continued conservation.

This paper presents two examples from Australia where economic contributions from human use of protected natural areas have been quantified and a clear argument for increased investment in management resources generated.

Example 1: Valuing WA protected areas for tourism
Carlsen and Wood (2004) used an attributable tourist direct expenditure method to demonstrate the value of protected areas for tourism in the Gascoyne and Southern Forests region of Western Australia. The approach was based on measurement of the total tourist expenditure for the respective region using a self complete visitor survey that included an itemized expenditure list. Questions relating to reasons for visiting the region, activities undertaken and their importance enabled a proportion of the expenditure to be allocated to the protected areas. The demonstrated value revealed that parks actually generated revenue.
rather than being a drain on the state budget as previously thought. This resulted in the state government allocating about $30 million to the parks management budget.

**Example 2: Economic contribution of the Swan Canning Riverpark**
Hughes and Carlsen (2010) used property values, tourism operator revenue, stated preference value and recreational boat value to demonstrate the economic contribution of the Swan Canning Riverpark to Western Australia. Interviews with river tour operators, a desktop review of residential property values and recreational fleet values identified significant economic contributions based on the existence of the Riverpark. A survey of Perth residents revealed they also placed significant monetary value on the Riverpark. The result of this preliminary research is being used to argue for increased management resources and ongoing monitoring of values as one indicator of conservation management performance.

Demonstrating the economic contribution of protected area human use and non-use values enables a business case for appropriate allocation of resources. This in turn functions to facilitate sustainable management and continued conservation of biodiversity.

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