
EXECUTIVE SUMMARY

This report introduces the concept of 'social carrying capacity' as it is presented in the literature to date. It is intended to be used as a conceptual overview for managers rather than as a comprehensive academic critique. The papers were selected using a GBRMPA library search of recently published material in recreation and leisure journals.

The major points on social carrying capacity relevant to the management of the Marine Park are as follows:

- Social carrying capacity for the Marine Park will not be effectively established simply by setting visitor limits at recreation settings.
- A program to establish social carrying capacity must include: (1) research about recreationist experiences, norms and goals and their perceptions of social impacts, (2) the establishment of clear management objectives for desired visitor experiences and recreational setting attributes, and (3) standards by which to measure conditions over time.
- Perceptions of crowding have more to do with the nature of the interactions, the settings and recreationists' attributes and expectations than they do with user density.
- Social carrying capacity research should
 - . have clear objective measures,
 - . be longitudinal, that is, be conducted over a long time frame,
 - . study recreational regions rather than just one setting in order to observe recreational displacement, and
 - . not be based on visitor satisfaction.
- Management objectives must be very specific about desired conditions.
- The most useful models that may be used for applying the social carrying capacity appear to be Limits of Acceptable Change (LAC) and the Recreation Opportunity Spectrum (ROS). Further attention is warranted.
- Management response to unacceptable or crowded conditions in recreation settings may include an array of actions that do not involve use limitations.

Section 1 of this report elaborates on the above points as they are addressed by the literature. The reader should gain a fairly quick overview of the concept of social carrying capacity from this section. The vast majority of the research that has been conducted on social carrying

capacity has been in U.S. wilderness settings. As such the details of visitor use and preferences are not directly applicable to the Australian Marine Park setting. However, the material should help GBRMPA managers to approach this concept armed with some foresight about the nature of the study of visitor experiences, goals and perceptions and the impacts of encounters between different groups.

Summaries of the literature are located in Section 2. Thirty-nine papers and one book were reviewed. Papers are summarised where their content was instructive and not repetitious of points made in other papers. Two of the papers themselves review and synthesise years of relevant literature on (1) social carrying capacity (Graefe, Vaske & Kuss 1984a) and (2) crowding (Manning 1986) in recreational settings. The reader is referred to these papers in particular for a useful introduction to and synopsis of these topics. A copy of every paper reviewed has been placed on file with GBRMPA.

In Section 3 eighteen research reports that have been submitted to GBRMPA over the years are reviewed for their relevance to the concept of social carrying capacity in the Marine Park. Each of the reports was reviewed for its attention to visitor use, experiences and perceptions, specifically:

- characteristics of visitors to the Marine Park,
- the nature of visitor use (party size, lengths of stay, activities engaged in, spatial and temporal distribution),
- experiences or goals sought by participation in certain activities at specific settings, and
- social impact indicators such as numbers of contacts of a particular type, numbers of contacts at particular times or places, and perceived crowding at particular types of locations.

Although very few GBRMPA research reports address the concept of carrying capacity by name, many include information that is relevant to the GBRMPA for the development of that concept for use in the Marine Park. Unfortunately much of the pertinent data for specific regions or sites is not sufficiently thorough to stand alone.

It is recommended that GBRMPA nominate a number of representative reef complexes in the Marine Park and begin, as soon as possible, long term research on and monitoring of:

- the characteristics of the many different recreationists who visit those areas,
- the experiences each type of recreationist seeks,

- the activities they undertake to achieve those experiences, and
- the physical setting attributes and the levels and types of social impacts that substantially influence those experiences.

Such a program is a prerequisite for the development of defensible policies that will safeguard the diversity of experiences managers wish to provide for visitors to the Marine Park.