Influencing behaviour of visitors and residents in protected areas

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Abstract

Inappropriate behaviour of visitors and residents is a critical challenge for managers of protected areas. Traditionally, to protect areas from inappropriate use, managers relied heavily on information sharing for example through pamphlets and signs in the area, and often in combination with strict enforcement of regulations. In many situations this approach has proven inefficient for the protection of sensitive areas and costly for critical relationships of parks management and interest groups.

Over the past decade the scientific understanding of how behaviour of individuals and socially connected groups is formed has substantially evolved, and it is certainly still growing. We propose a refined model, focused on understanding how user behaviour in protected areas is formed and can be influenced.

We also explore whether and how a broader tool set of interventions, such as it is applied in Community-Based Social Marketing (CBSM) (BALINT et al. 2011; KOTLER & LEE 2008; MCKENZIE-MOHR 2008; MCKENZIE-MOHR et al. 2012), would be effective in complex challenges for environmental and conservation concerns.

We find the model improves understanding user behaviour, and propose that park managers consider the model and a broader tool set to foster appropriate behaviour in protected areas.

Keywords

Degradation through users, behaviour management, visitor management, stakeholder relations, land use conflicts, conflict resolution;

Introduction

What factors play into the perceived acceptability of a behaviour from a user perspective? How can managers effectively influence user behaviour in protected areas? What factors explain differences in compliance with park rules between visitors and residents and how can they be addressed? In the session parks and people – reconciling park management with local and regional development - activities on the ground, we explore a refined model for how user behaviour is formed, and what intervention options exist to influence behaviour.

We test the test model against empirical observations in our work with consensus based participatory processes and behaviour management programs based on the Community-Based Social Marketing (CBSM) model.

CBSM is a methodology to influence behaviour of target groups by analyzing barriers and benefits of selected behaviors' from a user perspective. In CBSM an initial analysis identifies the best suited behaviours in terms of behaviour change and effectiveness for conservation objectives. Strategies in CBSM build on a broad toolset of consensus building and communication, and apply some or all of the following tools: Commitment of users to encourage the realization of attitudes and intentions in consistent actions, social norms to create a social environment for individual choices, social diffusion to increase awareness and adherence to norms through trust networks, signals and reminders to act in accordance with norms and commitments, and effective messaging and incentives. A rather unique approach in community based social marketing strategies is looking at ways to increase the convenience of promoted behaviors and simultaneously making inappropriate behaviour less convenient.

Methods

We reviewed scientific literature on planned behaviour and analyzed empirical observations from CBSM projects and experiences from our professional services to help implement or maintain protected areas.

Results

Models of planned behaviour propose that behaviour can be predicted and explained by attitudes, subjective norms and behavioural intentions. Following the model one would expect that behaviour of individuals or groups would change with corresponding changes in their attitudes, and one would focus on changing attitudes to induce such behaviour changes. Although attitude-behavior research shows an overall strong attitude-behavior relationship when methodological artifacts are eliminated it also finds that attitudinal relevance affects correlation.

This is just one explanation for why CBSM approaches have shown success in environments where attitude-behaviour based interventions did not succeed in promoting appropriate behaviour; here the link between attitude and behaviour seemed to be weak or buffered by other factors. There are other indications and a growing body of research how the rather simplistic attitude - intentions - behaviour chain is skewed by a few other factors and conditions.

In our refined model we propose self-identity, including attitudes and subjective norms, interact with social relations of the agents and the situational context in which they make choices. In our model, it is indeed the complex interaction of all those factors that leads to a displayed behavior, and which may not be explained by simplistic attitude-intentions-behavior models.

Discussion

Our refined model offers an explanation why interventions purely focused on raising awareness and changing attitudes fail when social relations or situational context affect the choices of targeted park users. The refined model still allows for the case where success through information sharing and coercion is achievable. However, in adding the elements of social relations of the agents and situational context in which they make choices the models ability to explain varied user behaviour in protected area is increased.

For example in a situation where tensions between the parks management and resident users manifest themselves in vandalism against park infrastructure the behaviour is a case of retaliation against a perceived overreach of managers - a incident rooted in a social context - and not founded in attitudes toward the natural environment. In situations where excessive littering is devaluing resting or gathering places in parks and affecting sensitive ecosystems the visitor attitudes may well be the same as in other parks, though the norm signalling effects of the situational context skew the behavioural intentions and open the door for the otherwise renounced littering.

Again, the refined model allows that information sharing through signs and printed material, possibly in combination with enforcement efforts, may have some effect, though it suggests those efforts will probably be limited in how many users are reached and how effectively behaviour is influenced.

By adding social relations of the agents to the planned behaviour model the refined model offers opportunities for a parks management to review their tool set for influencing user behaviour. It suggests that material punishment, traditionally a staple measure to coerce cooperation in matured social environments, is not the only or most effective way to influence user behaviour. An important lesson, especially when local interest groups are involved. This is not saying fines have no place, though they may be more effective when used in a nuanced tactical approach where the primary effort is to strategically build and use social relations to achieve the same goal without disrupting the foundational relationships between parks management and local user groups. In the end good relationships matter - a lot. Strained relationships come with great costs for the day to day work of parks management and erode crucial support in key moments.

Recommendations

We propose that managers should have a strategic focus on the social context of their protected area to build shared stewardship communities. This includes creating support for a collaboration of area managers with open minded and also with historically critical interest groups.

We propose that park managers test the proposed refined planned behaviour model with self-identity, including attitudes and subjective norms, social relations of the agents, and situational context to explore why users in their park make certain choices. Building on the refined model park managers can identify and apply a broader tool set of interventions - beyond information sharing and enforcement.

As a side note to the model development we found that the concept and the broader tool set of CBSM is more responsive to the various factors that affect choices users make in protected areas, and to key differences between resident users and visitors. Through the inherent analysis, strategy development and evaluation in CBSM projects management can also help to further the concept itself and further improve the tool set, especially for the specific context of protected areas.

Future perspectives

The scientific understanding and the applied methodology for influencing user behaviour is a growing field of knowledge that has practical value for the application in the management of protected areas. We suggest that managers of protected areas consider using this toolset and establish a Community of Practice for the application of CBSM in the specific context of protected areas to further their understanding and the methodology itself.

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