## Administrative procedures for operation of a national visitor use monitoring program in protected areas

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Parks and protected areas often attract significant public interest, which in turn leads to a stream of visitors who invest money, time, and effort to experience these areas in person. Many factors determine the experience of visitors including the conditions of the resource itself, the logistical support available, and the attitudes of people contacted, including the park staff and other visitors. Visitors' opinions affect the perceptions of the site by other potential visitors, and by political authorities. The numbers from monitoring programs are critical indicators of the natural, social and economic functions performed by parks and their caretakers. Monitoring public use is important and is a fundamental responsibility for managers.

Many park agencies operate visitor monitoring programs, at various levels of depth and sophistication. Hornback and Eagles (1999) and Kajala et al. (2007) provided the basic definitions and possible approaches directing a monitoring program. However, there is very little literature on choosing the adequate methods and techniques in concert with available administrative resources, both financial and managerial. This paper will explore the methods, administrative approaches, and resources needed for a visitor monitoring program in a park agency.

We propose that a visitor monitoring program requires administrative procedures in the following areas: 1) agency policy; 2) monitoring objectives; 3) level of program development; 4) staff resources; 5) financial commitments, 6) measurement technologies; 7) data storage; and, 8) communication technologies. Each of these procedures is influenced by the scale of the program: national, regional, park, or site.

Hornback and Eagles (1999) suggest that there are five progressive levels within a public use program: an initial level (I) of public use reporting program and moving onto basic (II), intermediate (III), developed (IV) and advanced (V) levels. Each higher level results in greater accuracy and detail of public use data and a corresponding increase in the required staff time, hardware and funding. These five levels must be coordinated within the overall administrative procedures and the scale of the program.

The larger scales, especially national visitor monitoring systems, have several benefits compared to the more regional or local approaches. They help ensuring that monitoring is implemented in a uniform manner across the country, enabling comparability of the results across areas and time and further calculations e.g. on effectiveness of protected area management. For example, in Finland the national visitor monitoring system has proven to be able to play an important role in justifying resources for protected area management (Figure 1). Given the importance of this economic impact, it is vital that a national visitor monitoring program be properly established and operated.



Figure 1. According to a Finnish assessment based on national visitor monitoring data, 1 EUR investment in national parks and other key protected areas results in 10 EUR return to local economies (Kajala 2012).

However, national visitor monitoring systems also have some challenges. By definition, monitoring means inflexibility; establishing a national program requires adopting rigid methodology and technical solutions. This reduces flexibility compared to case studies, with which one can test and use, e.g. newest technical solutions or ask questions on current management issues. Consequently, no matter how good a visitor monitoring system is, it can never solve all the information needs related to visitor use and management in protected areas. Thus, in addition to a visitor monitoring system, also other ways of gathering visitor data can be needed. For example, for management planning information needs, GIS-based internet surveys allowing visitors to give feedback and ideas in connection to a particular location is becoming a very useful tool.

This paper will provide a structure that can be used by policy makers and senior managers in the creation of a park agency and park visitor use monitoring program. It will also analyse the benefits

and challenges of national visitor monitoring systems. It provides a conceptual basis that can be used for further research.

## References

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