

ADMINISTRATIVE PROCEDURES FOR OPERATION OF A NATIONAL VISITOR USE MONITORING PROGRAM IN PROTECTED AREAS

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BACKGROUND

- ✘ Any phenomenon that is not measured and reported does not exist politically.
- ✘ 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.

BACKGROUND

- ✖ 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.

DEFINITIONS AND APPROACHES

Hornback and Eagles (1999) and Kajala et al. (2007) provided the basic definitions and possible approaches directing a monitoring program.

- ✘ Hornback, KE & Eagles, PFJ 1999, **Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas**, IUCN, Parks Canada, Cooperative Research Center for Sustainable Tourism for Australia and World Commission on Protected Areas. Cambridge, UK and Gland, Switzerland.
- ✘ Kajala, L et al. (2007). **Visitor Monitoring in Nature Areas – A Manual based on Experiences from the Nordic and Baltic Countries**. TemaNord 534.

GUIDELINES for PUBLIC USE MEASUREMENT and REPORTING at PARKS and PROTECTED AREAS

FIRST EDITION

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WORLD
COMMISSION
ON
PROTECTED
AREAS
(WCPA)



VISITOR MONITORING IN NATURE AREAS

– a manual based on experiences
from the Nordic and Baltic countries

THE MOST POPULAR NATIONAL PARKS ARE PART OF THE APPEAL OF THE TOURIST DESTINATIONS

Number of visits in 2013

Pallas-Ylläs	488 400
Urho Kekkonen	292 600
Nuuksio	267 400
Oulanka	174 600
Koli	140 600
Pyhä-Luosto	105 500



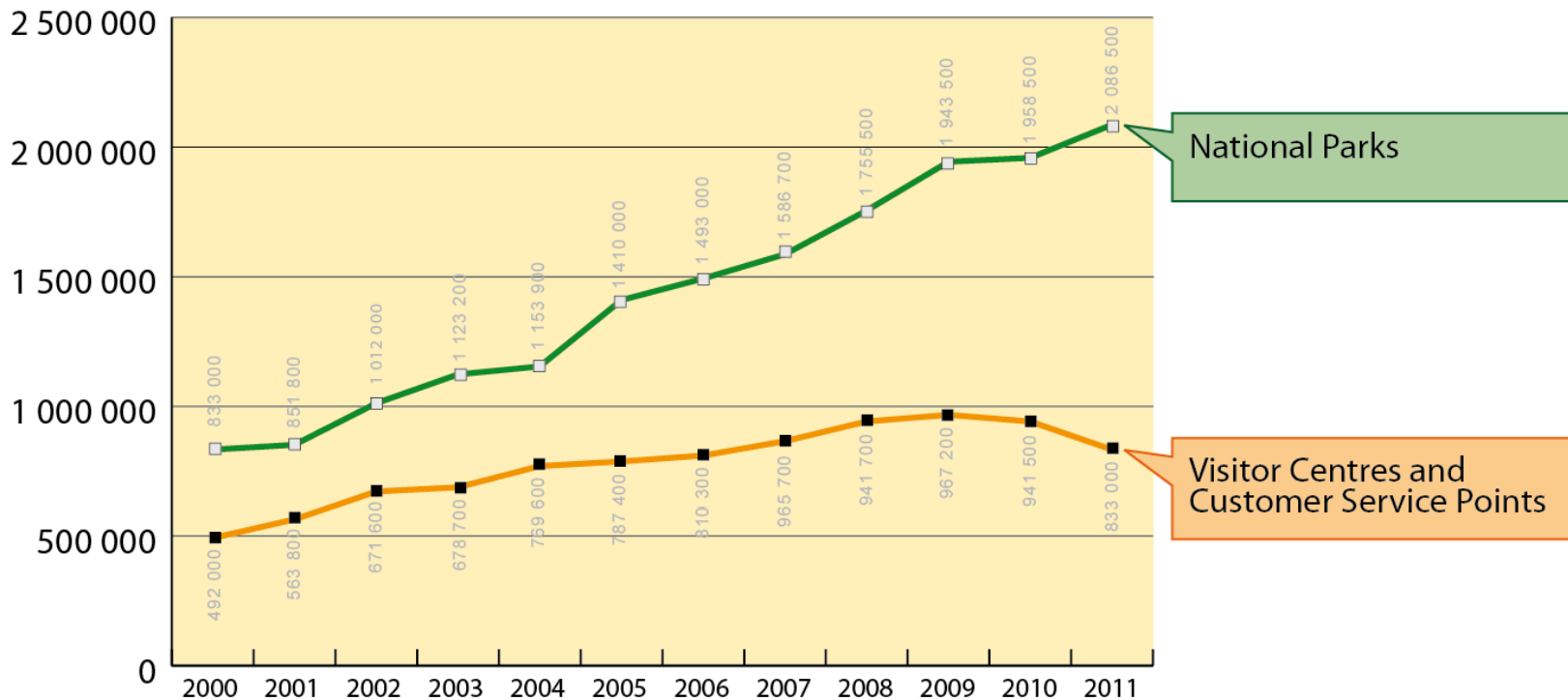
ADMINISTRATIVE PROCEDURES

- ✖ 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.

1. AGENCY POLICY

- ✘ The agency policies for public use monitoring and reporting provides overall guidance.
- ✘ Elements might include:
 - + Management goals for public use monitoring
 - + Visitor use levels in each park, typically daily
 - + Visitor use distribution across any park
 - + Expenditure levels of each visitor
 - + Seasonal coverage

NUMBER OF VISITS TO NATIONAL PARKS AND VISITOR CENTERS



2. MONITORING OBJECTIVES

- ✖ Statistical definitions used
- ✖ Spatial distribution of monitoring stations
- ✖ Degree of accuracy required
- ✖ Amount of information desired per visitor
- ✖ Types of technologies desired
- ✖ Data storage methods
- ✖ Speed of data reporting

3. LEVEL OF PROGRAM DEVELOPMENT

- ✖ Hornback and Eagles (1999) outline five progressive levels within a public use program:
 - + 1) an initial level of public use reporting
 - + 2) basic level
 - + 3) intermediate level
 - + 4) developed level
 - + 5) advanced level
- ✖ 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.

ADVANCED LEVELS

- ✘ Visitor monitoring in its advanced levels includes both visitor counting and visitor surveys.

4. STAFF RESOURCES

- ✖ Employee responsibilities distributed amongst park, regional and national offices.
- ✖ Named staff member assigned responsibilities.
- ✖ Much of this work is done independently so staff must be honest and reliable.

5. FINANCIAL COMMITMENTS

- ✘ Benefits of increased detail must be balanced against the cost of collection.
- ✘ Electronic data collection can lower the costs per data contact.
- ✘ Monitoring budget must be included in park and agency budgets.

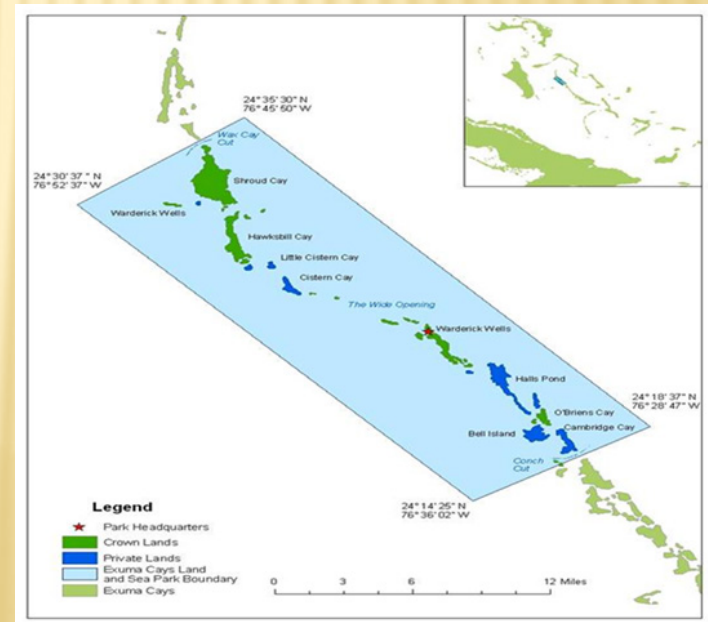
6. MEASUREMENT TECHNOLOGIES

- ✖ The choices for measurement technologies are diverse.
- ✖ Electronic measurement is inexpensive on a per unit basis.
- ✖ Mobile communications and the dedicated apps are making spatial monitoring much easier.
- ✖ Error rates must be assessed.

ERROR RATE WITH ROAD PRESSURE COUNTER



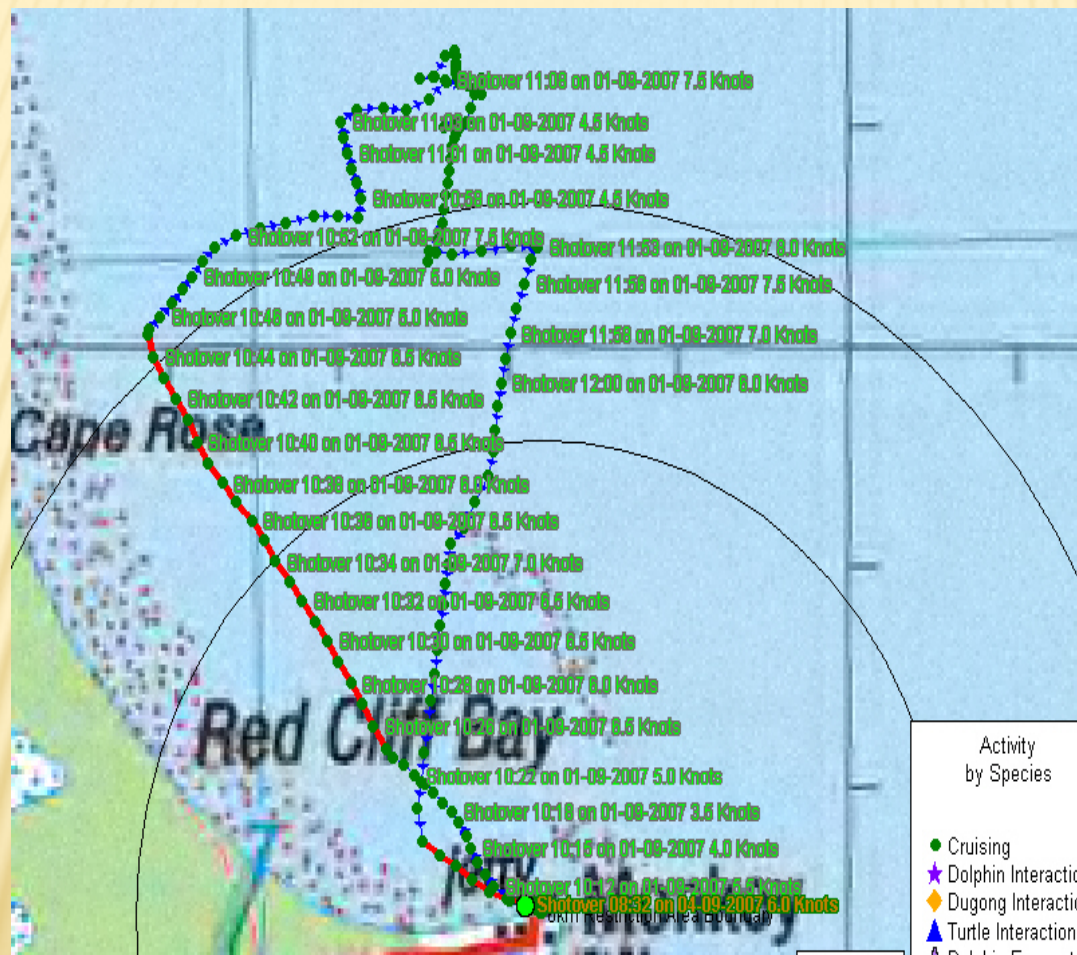
COLLECTION POINTS



7. DATA STORAGE

- ✖ All data must be checked and then stored appropriately.
- ✖ Site and cloud storage fast and cheap.
- ✖ All data must be treated as a valuable resource, and must be protected from erasure, inappropriate use, and fraud.

TOUR BOAT OPERATION OFF WESTERN AUSTRALIA



8. COMMUNICATION TECHNOLOGIES

- ✖ Real time data use possible and desirable.
- ✖ It is very valuable for managers to be able to assess visitor use data as it is collected.
- ✖ Analytical reports must be developed by specialists, and distributed to assigned audiences.

INTEGRATED VISITOR MONITORING SYSTEMS



<http://www.eco-compteur.com/Photo-Gallery.html?wpid=40892>

VISITOR COUNTS AND SURVEYS

- ✖ The most advanced systems integrate visitor counting data with data from visitor surveys.
- ✖ Economic impact estimates can then be calculated.

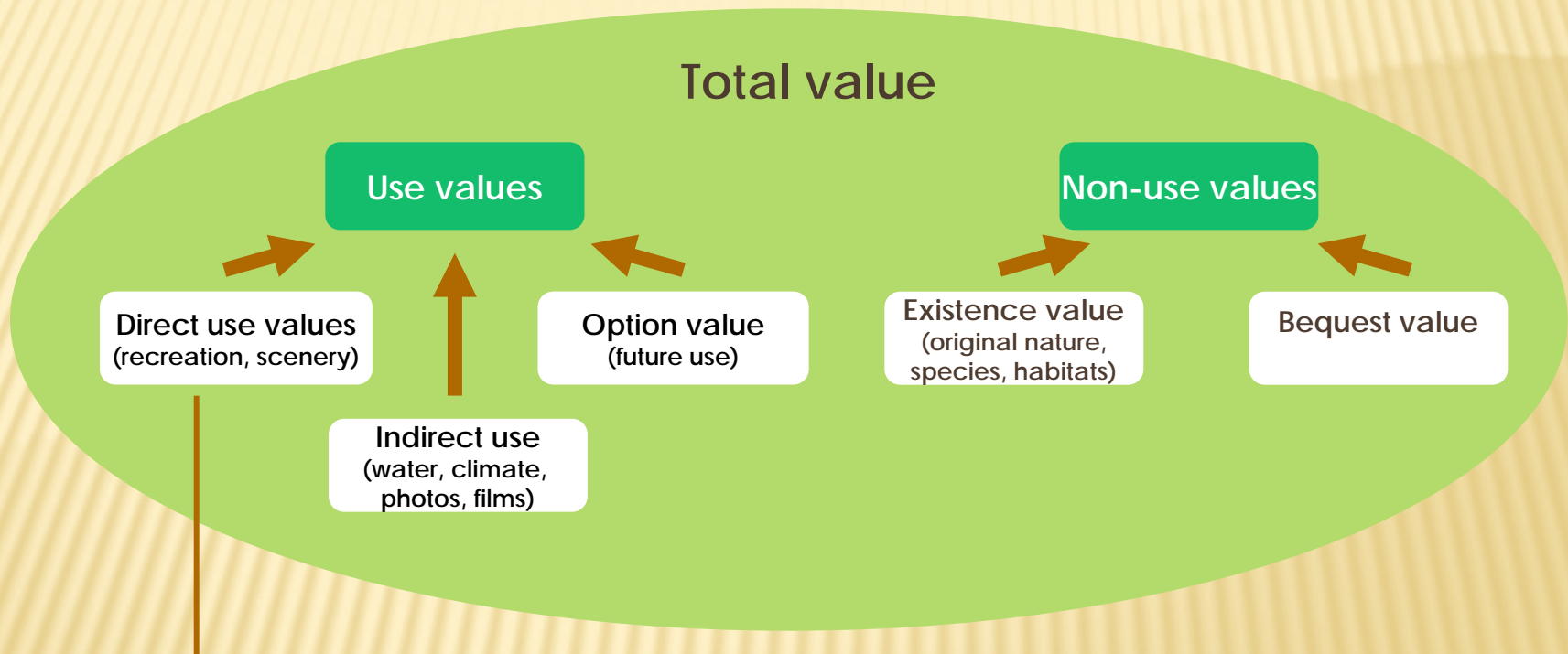
THE ECONOMIC IMPACTS OF VISITORS' SPENDING

2013

	Total value		Minimum value*	
	milj. €	person years	milj. €	person years
National parks	115,5	1 484	56,2	716
National hiking areas	15,4	199	8,7	113

***Minimum value** indicates the spending by the visitors to whom the national park was the only or the most important reason to make the trip to the destination

THE TOTAL VALUE OF A NATIONAL PARK



The visitors' spending increases income and employment in the area. Income effects reflect the part of the direct use values, not the total value.

SUMMARY

- ✘ Visitor monitoring is an on-going, multiyear activity.
- ✘ Refinement of methods takes place continually.
- ✘ Auditing is desirable.
- ✘ In an agency the development of specialists in visitor monitoring is desirable.