## Workshop "Economic Impacts of Tourism in Protected Areas" 21.-25.09.2015, Wilhelmshaven







## **Introduction and Workshop Goals**

#### International Workshop "Economic Impacts of Tourism in Protected Areas"

21. - 25.09.2015, Wilhelmshaven

Hubert Job



Evolution of the terrestrial and marine protected area network, in numbers of sites (green bars) and in area (km2; blue line) since the first World Park Congress in 1962 based on previous versions of the UN List Source: UNEP-WCMC 2014, with data from Chape et al. 2003

#### UNI WÜ

#### 'Nature' and 'Wild Lands' – growing Awareness or Lifestyle Trend?

- When asked:
  - 60% of Germans prefer "primal/wild nature" 40% wish for more "wild landscapes"
     Source: BMUB/BfN 2014
- European Outdoor Market in 2014:
  - 10 Billion Euro in sales =>
  - 5 Billion Euro in revenue Source: European Outdoor Group (EOG) 2015









28.09.2015

Lehrstuhl für Geographie und Regionalforschung, Univ.- Prof. Dr. Hubert Job

#### ÖW setzt ab 2016 auf Kompetenzthema "Nature Reloaded"

am 15. Juni 2015.







Naturbegegnendes Reisen-Ankunft und Erneuerungskraft

Quelle: Österreich Werbung (Hrsg.) (2015)



#### **Nature-Based Tourism**

- Nature-based tourism seems to be the fastest growing tourism sector. Its share in the world travel market is currently about 20%
- Over the past two decades, both nature and adventure tourism have developed to be part of the fastest growing segments within the tourism industry. With an annual growth rate of 10 - 30%

Source: Kuenzi, C., McNeely, J. (2008): Nature-Based Tourism. In: Renn, O., Walker, K. D. (Eds.): Global Risk Governance: Concept and Practice using IRGC framework"

 54% of people in Germany say "to experience Nature" is a main motivation to travel

Source: Forschungsgemeinschaft Urlaub und Reisen (FUR) 2014



#### **Nature-Based Tourism in Industrialized Countries**



Visitor numbers: 2002: 1,13m 2014: 1,58m +40%

Share of national park visitors (core group): 2002: 11% 2014: 27%



Visitor numbers:

Yellowstone NP 2002: 2,97m 2014: 3,51m +18%

Olympic NP 2002: 3,69m 2014: 3,24m -13%

Berchtesgaden NP, Germany

**United States** 

28.09.2015

Lehrstuhl für Geographie und Regionalforschung, Univ.- Prof. Dr. Hubert Job



#### **Nature-Based Tourism in Developing Countries**







## Estimating the global scale of park visitors

- "Estimating the Global Magnitude of Visits to Protected Areas", Balmford et al. 2015 (PLOS Biology)
- statistical data on visit rates of 556 terrestrial reserves
- five region-specific models to predict visits in protected areas based on
  - size of the park
  - local population size
  - remoteness
  - national income
  - attractiveness of natural features
- application to 94,238 protected areas worldwide



#### Findings (Balmford et al. 2015)

- 8 billion visits/year (80% in Europe and North America)
- generates approx. \$600 billion/year in direct in-country expenditure
- \$250 billion/year in consumer surplus



Source: Balmford et al. 2015



"Consistent Evaluation Obligations" vs. "Patchwork Monitoring"

#### • Evaluation Obligations:

- International, e.g. UNEP CBD
- International, e.g. UNESCO World Network of Biosphere Reserves
- Continental, e.g. EU: Habitats and Birds Directive
- National, e.g. Germany: National Biodiversity Strategy and Action Plan
- Progress on national levels to unify and standardize methodology:
  - Eagles, Kajala: "Administrative procedures for operation of a national visitor use monitoring program in protected areas"
  - Daniel Stynes: "Money Generating Model"
- $\rightarrow$  Lack of globally comparable data



## Workshop Goals

- state of the art of visitation to parks and measurement of economic impacts in different national settings
- identifying (minimal) requirements for a global monitoring standard
- integrate possible standards in existing national monitoring practices
- monitoring system: as comprehensive as necessary, as manageable as possible

# What are your expectations regarding this workshop?





# Conservation and community support through tourism in protected areas



Dr Anna Spenceley, annaspenceley@gmail.com International Workshop on Economic Impacts of Tourism in Protected Areas, 21-25 September 2015





- **Part 1:** TAPAS Group and the IUCN Best Practice Guidelines
- Part 2: A decade of progress on tourism and economic impacts: Comparing the IUCN WPC 2003 (Durban) and 2014 (Sydney)





- **Part 1:** TAPAS Group and the IUCN Best Practice Guidelines
- Part 2: A decade of progress on tourism and economic impacts: Comparing the IUCN WPC 2003 (Durban) and 2014 (Sydney)

## Part 1: IUCN WCPA TAPAS





## Social media / online channels





Membership application: <a href="http://tinyurl.com/tapasmembership">http://tinyurl.com/tapasmembership</a>

Facebook: https://www.facebook.com/pages/Tourism-and-Protected-Areas-Specialist-Group/122961127797095



LinkedIn: <a href="https://www.linkedin.com/groups?home=&gid=4735342">https://www.linkedin.com/groups?home=&gid=4735342</a>



Slideshare: http://www.slideshare.net/planeta/tapasgroup



Wiki: http://planeta.wikispaces.com/tapas

Google+:

https://plus.google.com/u/0/117973343043881234019/posts

#### **IUCN Website:**



Google+

http://www.iucn.org/about/work/programmes/gpap home/gpap c **IUCN** <u>apacity2/gpap wcpacap/gpap tourism/</u>

## What we do traditionally











## What we doing more of







Tourism and Protected Areas Specialist Group Shared publicly - Jul 24, 2014

http://annaspenceley.wordpress.com/2014/07/24/review-oftourism-and-biodiversity-for-the-cbd-conference +Anna Spenceley

## Online review and comment

Review of tourism and biodiversity for the CBD conference

annaspenceley.wordpress.com

## Engagement with international tourism groups











## **IUCN Best Practice Guidelines**

qiz







Tourism and Visitor

- 58 contributors from 23 countries
- Chapters on "Tools for sustainable financing of protected areas through tourism"
  - user fees (recreation, • entrance, licenses etc)
  - concessions (PPPs)

**CN Best Practice Guidelines** 





## **CN Best Practice Guidelines**



Page Discussion Read View source View history Search Tourism and Visitor Management in Protected Areas - Guidelines for Sustainability				oogie		M C	*
Page Discussion       Read       View source       View history       Search         Tourism and Visitor Management in Protected Areas - Guidelines for Sustainability	8 🚳 📉 🤄 🎹 🔣 🌒 🖉 🔤 🥞 🖪 🛅	] 🍈 🍈 451 🛄 🛄 Charter Principles - Eu					
Page       Discussion       Read       View source       View history       Search         Tourism and Visitor Management in Protected Areas - Guidelines for Sustainability							ቆ L
Page       Discussion       Read       View source       View history       Search         Tourism and Visitor Management in Protected Areas - Guidelines for       Sustainability					Casual		
Tourism and Visitor Management in Protected Areas - Guidelines for Sustainability	Page Discussion	Read	View source	View history	Search		
	Sustainability	otected Area Guidelines Series	d Areas	- Guid	elines for		
Project sponsors: IUCN World Commission on Protected Areas, Deutsche Gesellschaft für Internationale Zusammerarbeit (GIZ) on behalf the Federal German Ministry of Economic Cooperation and Development (BMZ), and the French Ministry of Foreign Affairs. North Carolina State University Department Parks, Recreation and Tourism Management provided significant in-kind support.	A publication in the IUCN Best Practice F Project sponsors: IUCN World Commissio German Ministry of Economic Cooperation of Parks, Recreation and Tourism Management	otected Area Guidelines Series on Protected Areas, Deutsche Gesellschat nd Development (BMZ), and the French Mir provided significant in-kind support.	G Areas	- Guid	elines for arbeit (GIZ) on be Carolina State Un	half the Fei iversity Dej	deral partmen
Project sponsors: IUCN World Commission on Protected Areas, Deutsche Gesellschaft für Internationale Zusammerarbeit (GIZ) on behalf the Federal German Ministry of Economic Cooperation and Development (BMZ), and the French Ministry of Foreign Affairs. North Carolina State University Department Parks, Recreation and Tourism Management provided significant in-kind support. Project Overview	A publication in the IUCN Best Practice F Project sponsors: IUCN World Commission German Ministry of Economic Cooperation of Parks, Recreation and Tourism Management • Project Overview	on Protected Area Guidelines Series on Protected Areas, Deutsche Gesellschat d Development (BMZ), and the French Mir provided significant in-kind support.	G Areas	- Guid	elines for arbeit (GIZ) on be Carolina State Un	half the Fe iversity De	deral partmen
Project sponsors: IUCN World Commission on Protected Areas, Deutsche Gesellschaft für Internationale Zusammerarbeit (GIZ) on behalf the Federal German Ministry of Economic Cooperation and Development (BMZ), and the French Ministry of Foreign Affairs. North Carolina State University Department Parks, Recreation and Tourism Management provided significant in-kind support. • Project Overview The 2015 Sustainable Tourism Best Practice Guidelines Book	A publication in the IUCN Best Practice F Project sponsors: IUCN World Commission German Ministry of Economic Cooperation of Parks, Recreation and Tourism Management • Project Overview The 2015 Sustainable Tourism	otected Area Guidelines Series on Protected Areas, Deutsche Gesellschat ad Development (BMZ), and the French Mir provided significant in-kind support.	G Areas für Internationa istry of Foreign ok	- Guid	elines for arbeit (GIZ) on bei Carolina State Un	half the Fe iversity De <sub>l</sub>	deral partmen
Project sponsors: IUCN World Commission on Protected Areas, Deutsche Gesellschaft für Internationale Zusammerarbeit (GIZ) on behalf the Federal German Ministry of Economic Cooperation and Development (BMZ), and the French Ministry of Foreign Affairs. North Carolina State University Department Parks, Recreation and Tourism Management provided significant in-kind support. Project Overview The 2015 Sustainable Tourism Best Practice Guidelines Book Editors and Contributors	A publication in the IUCN Best Practice F Project sponsors: IUCN World Commission German Ministry of Economic Cooperation of Parks, Recreation and Tourism Management • Project Overview The 2015 Sustainable Tourism • Editors and Contributors	otected Area Guidelines Series on Protected Areas, Deutsche Gesellschat nd Development (BMZ), and the French Mir provided significant in-kind support.	d Areas für Internationa istry of Foreign ok	- Guid	<b>Elines for</b> arbeit (GIZ) on be Carolina State Un	half the Fe iversity De <sub>l</sub>	deral partmen
<ul> <li>Project sponsors: IUCN World Commission on Protected Areas, Deutsche Gesellschaft für Internationale Zusammerarbeit (GIZ) on behalf the Federal German Ministry of Economic Cooperation and Development (BMZ), and the French Ministry of Foreign Affairs. North Carolina State University Department Parks, Recreation and Tourism Management provided significant in-kind support.</li> <li>Project Overview</li> <li>The 2015 Sustainable Tourism Best Practice Guidelines Book</li> <li>Editors and Contributors</li> <li>Table of Contents and Book References</li> </ul>	A publication in the IUCN Best Practice F Project sponsors: IUCN World Commission German Ministry of Economic Cooperation of Parks, Recreation and Tourism Management • Project Overview The 2015 Sustainable Tourism • Editors and Contributors • Table of Contents and Book References	otected Area Guidelines Series on Protected Areas, Deutsche Gesellschat ad Development (BMZ), and the French Mir provided significant in-kind support.	d Areas	- Guid	<b>Elines for</b> arbeit (GIZ) on be Carolina State Un	half the Fe iversity De	deral partmen
Project sponsors: IUCN World Commission on Protected Areas, Deutsche Gesellschaft für Internationale Zusammerarbeit (GIZ) on behalf the Federal German Ministry of Economic Cooperation and Development (BMZ), and the French Ministry of Foreign Affairs. North Carolina State University Department Parks, Recreation and Tourism Management provided significant in-kind support. • Project Overview The 2015 Sustainable Tourism Best Practice Guidelines Book • Editors and Contributors • Table of Contents and Book References • Download the Review Copy of the 2015 Guidelines Book (comments due by 1 December 2014)	A publication in the IUCN Best Practice F Project sponsors: IUCN World Commissio German Ministry of Economic Cooperation of Parks, Recreation and Tourism Managemer • Project Overview The 2015 Sustainable Tourism • Editors and Contributors • Table of Contents and Book References • Download the Review Copy of the 2015	otected Area Guidelines Series on Protected Areas, Deutsche Gesellschal ad Development (BMZ), and the French Mir provided significant in-kind support.	G Areas für Internationa istry of Foreign Ok December 201	- Guid le Zusammera Affairs. North	<b>Elines for</b> arbeit (GIZ) on be Carolina State Un	half the Fe iversity De	deral partmen

handbooks, manuals and other resources pertinent to sustainable tourism and visitor management in protected areas. Search terms can include any





# **Part 1:** TAPAS Group and the IUCN Best Practice Guidelines

**Part 2:** A decade of progress on tourism and economic impacts: Comparing the IUCN WPC 2003 (Durban) and 2014 (Sydney) t 2: Tourism & the WPC

- World Parks Congress once a decade
- Biggest global meeting on protected areas
- Organised by IUCN and WCPA
- 2003 Durban
  - 3000 delegates
- 2014 Sydney
  - 6000 delegates





# PC 2003 and 2014





ancing protected areas



- Visitor number monitoring
- Shift from state funding to tourism fees



## ancing protected areas





 Tourism concession tools: UNDP, IFC, SADC (TFCAs)





TFCA tourism (SADC): – Tour de Tuli,



# ancing protected areas



- artnerships to:
- Manage PAs
- Strengthen constituencies
- Reduce operational costs
- Collect fees



Community development and poverty reduction



Generate enough \$ to change behaviour that damages biodiversity

Good governance of revenue-sharing

Long-term technical & canacity support for



# Community development and poverty reduction



al group sampled	Total no. of people indirectly impacted by camp employment	Average stated monthly amount given to dependents per staff respondent (USD 2011)	Total payments to dependents per month (USD 2011)
na (3 camps surveyed – 52 beds)	1384	\$39.03	\$6752.19
(2 camps surveyed – 50 beds)	864	\$5.78	\$624.24
a (4 camps surveyed – 104 beds)	996	\$31.64	\$5252.24
frica (2 camps – 64 beds)	564	\$20.21	\$1899.74
(1 camp – 18 beds)	161	\$6.15	\$141.45
we (4 camps – 64 beds)	952	\$11.30	\$1344.7
e/Total (16 camps – 352 beds)	4921	USD 19.02	USD 12 990.66

*Snyman, 2014* 

# rmal outputs of WPC



## 2003

Recommendation V12: Tourism s a Vehicle for Conservation & Support for PAs





## 2014

WORLD PARKSTourism mentioned **5 x** in VisionCONGRESS& Stream outputs.

No touriore recommendation

## ner outputs





https://www.facebook.com/pages/Tourism-and-Protected-Areas-Specialist-Group/122961127797095



http://www.slideshare.net/planeta/tapasgroup



http://planeta.wikispaces.com/tapas



UNDP Park Talks: <u>https://www.youtube.com/channel/UC-</u> KOklyprmsuavAE5BMDp2A

ournal f Justainable ourism

Tourism and the IUCN World Parks Congress 2014



Sustainable and inspirational: A decade of progress in protected area

## for the next decade?





N Resolution A/RES/69/233 on sustainable tourism





at's next for TAPAS Group?



**New working group:** Economics of Tourism in Protected Areas. Nominations Oct-Dec 2015; Elections early 2016

## Knowledge Development:

- Develop data models/simulations for analysis of revenue generation for tourism & research agreements with Universities/Business Schools
- Special journal edition on benefit sharing from tourism and protected areas
- IUCN BP Guide for (1) engaging with communities in tourism / (2) maximizing financial benefits of tourism in protected areas
- **Fundraising**: Proposal to 10YFP for Flagship project in


## History and Constraints of Park Visitor Monitoring

Paul F. J. Eagles,

University of Waterloo (Canada) and Murdoch University (Australia)

Workshop on Economic Impacts of Tourism in Protected Areas, Wilhelmshaven, Germany, September 21 to 25, 2015



\* Long term visitor statistics for Algonquin Provincial Park









\*All management is dependent upon information. The better the quality of information; the better the opportunity for good management. Information about the visitors and their activities enables managers to deal with the challenge of changing volumes of tourism.





\*General Management

\*Natural and Cultural Resource Protection

\*Maintenance Operations

\*Visitor Services and Protection

\* Tourism and Economic Impact Calculations

# \*Uses of Data

- \*National Park Service of the United States of America.
- \*Comprehensive visitor use monitoring and reporting.
- \*Online reporting.
- \*Economic impact modeling and reporting.

# \*Who does it well?

\*National Commission of Protected Natural Areas (Comisión Nacional de Áreas Naturales Protegidas, or CONANP) of Mexico.

\*Very little visitor use monitoring and reporting.

# \*Who does it poorly?

- \*Many parks do not count visitation effectively.
- \*Some park systems only count visitation at those parks with the highest levels of use.
- \*Many systems report zero levels of use from some periods and some parks.

## \* Problem of underreporting

\*In order to improve programs of visitor use monitoring and reporting it may be helpful to understand the constraints to effective and efficient monitoring.



\*Financial Constraints
\*Management Constraints
\*Political Constraints

## \*What are the causes of underreporting?

- \*Most parks and most park systems are badly underfunded.
- \*The rapid creation of parks in the last 50 years has far outstripped government's willingness to fund management.
- \*Many parks have no budgets or field staff.
- \*The move to tourism funding of parks provides incentive and the mechanism to better record visitor use.

# \* Financial Constraints

- \*It takes money to collect, correlate, analyze and report visitor use.
- \*The data must be analyzed before being released publicly.
- \*There is demand for more data on many subject areas, to the point of creating very complex and expensive systems.
- \*Walk-in, trail use, and river use data collection is complex and very expensive.

# \* Financial Constraints



\* Lac Du Bois Provincial Park in British Columbia







## \* Examples of a lack of management effectiveness

- \*Five world heritage sites, all national parks, experienced tourism expenditures in 1991/92 of \$1,372,000,000.
- \*The total management budgets were \$48,700,000 (3% of above).
- \*The user fee income to the management agencies was \$4,160,000 (8% of above).



## World Heritage Economics in Australia

\* Protected areas left short-changed by governments

\*11 March 2015 | Article

\* A study, which revealed the most visited protected areas in the world are in the United States and the United Kingdom, has shown that global protected areas generate over US\$600 billion each year while only 2% of this figure is reinvested in the safeguarding of their future.

## Protected Area Economics in the USA and UK

http://iucn.org/about/work/programmes/gpap\_home/?19027 /Protected-areas-being-short-changed

#### **Financial Return Per Visitor Day**



Ontario Provincial Parks' Financial Return per Visitor Day (1995 - 2011)

- \* Many parks have very few field staff.
- \* Staff that do exist often concentrate on resource management.
- \* Most parks and park systems have no staff trained in tourism and tourism measurement.
- \* Many park systems have no tourism monitoring policy or tourism monitoring measurement manual.
- \* Some park staff under report permit sales so as to steal the money.

# \*Management Constraints

- \* Some parks are too remote for electronic access.
- \* Staff training must be continuous.
- \* In both head office and the field, staff must be assigned visitor monitoring responsibilities.
- \* The biggest management problem is the complexity of data collection on non-permit activities, such as trail use, walk-ins, and river use.
- \* The fully integrated permit, data collection, and reporting system is desirable, but complex and expensive.

## \*Management Constraints

#### 60 52 Percent Cost Recovery 50 35 36 40 30 14 19 20 11 12 11 11 7 10 5 0 вс AB SĶ MN ON PQ NB NF NS PE YΚ NT РС 30,000,000 Visitation 25,000,000 20,000,000 15,000,000 10,000,000 5,000,000 0 BC AB SK MN ON PQ NB NF ΡE YΚ NT PC NS

**Disconnect between tourism and finance** 



\* Movement from government grants to tourism fees and charges

- \*Data provides power.
- \*Competing resource management agencies may actively discourage tourism monitoring by the parks agency.
- \*Parks are generally good news politically, but politicians and their staff may be suspicious of park-provided data and information.
- \*The various consumers must be given information, not data.

# \*Political Constraints





### data on provincial

Provincial P parks use. Copies of th

Ministry of N Operations

Po Box 700 Proughout the

2010 Statistics (PDF) 2009 Statistics (PDF) 2008 Statistics (PDF)

- \* Government and park agency policy must require continuous visitor use monitoring.
- \* Manual for visitor monitoring statistics and procedures.
- \* Head office staff personnel dedicated to visitor monitoring.
- \* Field staff personnel assigned to visitor monitoring.
- \* Integrated financial, visitor monitoring, and reporting computer system.
- \* Periodic auditing.
- \* Continuous improvement program.
- \* Ongoing reporting of information to park managers, political masters and the public.

### \*Essential elements of a agency-wide visitor monitoring program

- \*Reliance on national collection and reporting of visitor use data.
- \*Trust between the WCMC and national bodies.
- \*Standardized statistical definitions and methods.
- \*Recognition of under reporting.
- \*Sophisticated data system that allows easy electronic interface between WCMC and national bodies.

\* Essential elements of a global visitor monitoring program operated by the WCMC



 \* Park Visitor Monitoring Policy Collaboration in Action Paul and Cathy Eagles, Bruce van Staalduinen Manager, Operations & Development, Ontario Parks, and Jo-Ann van Staalduinen.

### References

- \* Driml, S. and Common, M. (1995) Economic and financial benefits of tourism in major protected areas. *Australian Journal of Environmental Management* 2 (2), 19-39
- \* Eagles, Paul F. J. and Grace A. A. Bandoh. 2009. <u>Visitor and Tourism Management in Algonquin</u> <u>Park: The Past, Present and Future</u>. Chapter 4 in D. Euler & M. Wilton (Eds), Algonquin Park: The Human Impact.\_Algonquin Ecowatch: Spring Bay, Ontario. Available at: <u>http://www.algonquin-eco-watch.com/book.html</u>.
- \* Eagles, Paul F. J. 2014. Fiscal Implications of Moving to Tourism Finance for Parks: Ontario Provincial Parks. *Managing Leisure* 19(1): 1-17.
- \* Hornback, Kenneth E. and Paul F. J. Eagles. 1999. Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas. First Edition. IUCN, Parks Canada, Cooperative Research Center for Sustainable Tourism for Australia and World Commission on Protected Areas. Cambridge, UK and Gland, Switzerland. 86 pp. (Also published in Chinese). Available at: http://www.ahs.uwaterloo.ca/~eagles/parks.
- \* http://www.ltandc.org/of-us600-billion-generated-per-year-from-protected-areas-only-is-2reinvested/

National Park Service U.S. Department of the Interior

Natural Resource Stewardship and Science



## **United States Case Study**

### Cathy Cullinane Thomas & Lynne Koontz

EXPERIENCE YOUR AMERICA

## Overview

1. How are protected areas organized and institutionally situated?

- 2. What role does tourism play?
- 3. Approaches for visitor monitoring / economic impact monitoring?
- 4. What works well, where do you run into difficulties?5. What aspects might be applicable as global standards?

EXPERIENCE YOUR AMERICA

### **Organization of Federal Protected Areas**

Approximately 640 million acres (28% of land in US) Department of Interior

National Park Service – (13%) preservation & public enjoyment
 Fish and Wildlife Service (14%) wildlife conservation
 Bureau of Land Management (38%) multiple use

Department of Agriculture

 United States Forest Service (30%) multiple use



EXPERIENCE YOUR AMERICA





## What role does tourism play?

 Key indicator of how parks benefit communities and the American public.

Used by the President, Congress, NPS leadership, the media/press, and local communities.

 Essential for planning, management, budget formulation, policy analysis, and public outreach needs.



## **Monitoring Context**



Canyonlands NP



**Glacier Bay NP** 



Yosemite NP



Bryce Canyon NP



World War II Memorial



Niobrara NSR

### **Visitor Monitoring Overview**

Visitor Use

- Annual visitation data since 1904, monthly since 1979
- Ensure data are consistent and reliable throughout all units of the NPS
  - Provided for 377 of the NPS 408 units
- Audits to review park counting procedures every 7 years
   Reports on-line are real-time
- Annual Statistical Abstract distributed each year

Visitor Surveys

Visitor Services Project studies

Sound "snapshot" for park units

Limitations to scaling up results


# Visitor Spending and Economic Impact Modeling

 US NPS has been measuring and reporting visitor spending and economic effects since 1988.

MGM2 (Money Generation Model)
 1998 through 2011

VSE (Visitor Spending Effects Model)
 2012 through present

EXPERIENCE YOUR AMERICA

# Visitor Spending Effects (VSE) Model



# Piloting a New Socio-economic Monitoring Survey Focus on park to national results Stratified sample of parks

- > Improved park-level trip characteristic and spending data
- > Ability to role-up results at the national-level
- Timeline
  - Methods development
     October 2014 August 2015
     Pilot study implementation (15 parks)
     July 2015 July 2016
     Initial reporting
     August 2016 October 2016

# New Data Visualization Web Tool

- Hub for VSE data, reports, and education
- Visitor sending and contribution estimates at national, state, and park-levels
- Year-by-year trend data
- http://www.nature.nps.gov/ socialscience/vse.cfm



## **Global Standards?**

Visitor counting and visitor survey protocols?
 Surveys at World Heritage Sites?

Spending Effects Modeling protocols?
 Multipliers are site specific

Understanding the Economic Contributions of Protected Area Visitation

World Parks Congress presentation
 Finland and U.S. National Park Service

EXPERIENCE YOUR AMERICA

### National Park Service U.S. Department of the Interior



EXPERIENCE YOUR AMERICA

### Economic Impacts of Tourism in Protected Areas: Kenyan Experiences

Presentation made at the International Workshop "Economic Impacts of Tourism in Protected Areas", Wilhelmshaven, Germany 21-25 September 2015 Joseph K Muriithi

Kenyatta University, Kenya

### **Distribution of Protected Areas in Kenya**



### **Categorization of Protected Areas in Kenya**

#### I. National Parks/Marine parks

- □ There is complete protection of natural resources
- Only tourism and research activities allowed
- Management function vested on the Kenya Wildlife Service (KWS), a national government agency

#### II. National Reserves/Marine reserves

- □ Tourism and research activities allowed
- Human activities allowed under certain condition like issuance of permits (e.g. Fishing in marine reserves, fire wood collection
- Management function vested on county governments with technical conservation support of KWS

### **Importance of Protected Areas Tourism in Kenya**

- Protected areas and tourism in Kenya: "The goose that lays the golden egg": Foreign exchange, employment, GDP etc.
- Conservation/protection of protected areas and tourism development a key pillar of Vision 2030 development blueprint.
- Tourism contributes between 10-12 % of Kenya's GDP. More than half of this incomes generated by park tourism Most tourism in Kenya is wildlife based within the parks and reserves.
- Protected areas represents about 10% of Kenya's land mass.
- Protected areas serve both conservation and development goals and tourism in protected areas is organized to meet these two goals

### **Visitor Monitoring in Kenya Protected Area**

The main aspects of monitoring that receive regular attention of park managers are two:-

- □ Visitor profile categories
  - Adults [Citizens | Residents | Non-Residents]
  - Children [ Citizens I Residents I Non-Residents]
  - Students [ Citizens | Residents | Non-Residents]
  - Staff
- Environmental monitoring inside parks
- □ Hotel bed occupancy

### Visitor monitoring in Kenya PAs: Visitors data collection approaches

	<u>Heccore</u>	-		NUMBER O	FWIIITORI	то ранк	CE AND GAME	RESERVES. 4		ATT IT IS AN	-	N	unitar
Tably 22 PARN GAME		ADULT ADULT			CHALDREN		BEASON TICKET HOLDERS		PAYING VISITORS TO		ISTAL VISITI	FTAL VISITORS	
RE	SERVES	2012	2013	2012	2013"	20	12 2013	2012	2013	2012	2013	2012	2013*
Abin	NAMMAN PAR	85,063 8	1,758	39,381	118.8%	27.86	17 29.140	0				127.171	154.712. 158.001
Astroby Safert Wolk		71,185 7	124	8,477	8,423	66,51, 329,851	2 56,970	0					4/07.361
Alanger Mills Chiphenage		130,509 129	100	AR GLA	85.931	19.639	18 633	6				141.385	141,217
Tismio West National Part		19.409 20.0		38 348	35.932	13,155	12,852	0		0		70.912	88.816
Tsavo East National Park		31,283 34,4	3/1	03,570	90,707	41:551	27,988	0				178,754	153,178
Aberdare		7,692 9,88	3 1	20,063	22,717	16,535	17.523	0		0		4.2%	50,123
Lake Nakuru I	National Park   64	1,767 61,51	12	0.091 1	04,757	68,662	96,227	0				253.520	262.498
Maasa/ Mara	62	145 29,161	3	1.993	52,378	7.825	11,162	0				101,963	103.812
Halers Faix - Demouri 431		336 27,961	20	125 1	3,726	32,265	68,440	29,858	11,281	0		125,465	121,508
I alla Rooma	15.2.	20245 15 55 mm	商	15/ 1	3,775	6,410	7,667	0				41.799	41,881
Mana National Park	5.930	2 2000	9.	387 10	,910 6	9.992	54,978	0				114,605	81.51
Shimba Hills	10.958	0.775	23	02 2	038	7,818	6,559	104	每	638		17:038	14.72
Mount Keniva	8.870	3,112	0,00	09 6,	261	7,671	6,938	1,089	235	356		25.139	
Semburn	1010	3,103	12,13	4 11.	5/2 4	201	3,967	166	75	1.500		77 480	24.6
Kisla Manna	12,510	4,143	9,588	8,1	15	455	675	0		0		14 0.5	c 403
Mamhaca Marina	16,770	12.002	20,718	24,5	25 5,	616	5,613	3.557	1.907	- 11		10,00	e 193
Watami Manno Dark	0.0773	11,005 1	0,863	11,48	7 6,	921	7.720	36		-		42,44	0 41
Halle Chin	0.0/5	9,622 2	.051	19,89	1 45	578	5.396					34,58	19 36
maio usic	30,383	35,571 16	839	17,613	28.4	47	34.426	2 702	1 222			36,3	15 35
upaia sanciuary (Kisumu)	69,859 6,	5,750 2,	230	1.891	174.8	72 4	CA 200	2703		12,045		85.4	17 8
hers	34,612 18	1517 61	07	10.001	114,0	10 1	34.088	0		0			
TAL /	816.836 742	120 000 0	<i></i>	10,984	28,50	14	15,024	834					the eq
sona'		430 028,2	4	624,609	962,15	4 90	04.967	18 247	12.400	31,304	28,31	5 102,	321 10
				-			- and -	99,291	12,233	46,607	29.42	8 2.492	276 23

# Monitoring data of different visitor categories:

- Adults [Citizens | Residents | Non-Residents]
- Children [ Citizens I Residents I Non-Residents]
- Students [ Citizens I Residents I Non-Residents]
- ✤ Staff
- Non-paying
- Visitor data captured at park entrances/point of safari card sale
- Role played by Kenya Wildlife Service in collaboration with county government in the case of Reserves
- Main methods for capturing visitor characteristics data are:
  - Park entry tickets
  - ✤ Safari cards/smart cards

### Visitor monitoring in Kenya's PAs: Visitors data collection approaches



# Why base monitoring on visitor categories?

- Useful in providing data for park branding and niche marketing of parks and reserves.
- Simple comparative criteria for making estimates of the total incomes from different parks/reserves
- The aggregate data from different categories is used to estimating the contribution /impact of protected areas to the total tourism sector and to the GDP

### Visitor monitoring in Kenya's PAs: Visitors/other data collection



- Ecological/environmental impacts monitoring in parks
- This is largely for maintenance of environmental integrity of parks
- Done to ensure parks regulations are adhered to
- Focuses on tour guides/driver and tourists
- Enforcement is by protected areas managers (in most national reserves technical capacity for environmental monitoring is done KWS
- Pilot project: Use smart card which are GIS enabled to help locate tourists inside the park.
- Done through mapping of various routes in the park to ease in the tracking

### **Economic Impacts of Protected Areas in Kenya**

- There are no standardized methods/procedures of monitoring or even assessing economic impacts of tourism in protected areas in Kenya.
- In the absence of a standard method of assessing economic impacts in the two models of protected areas (national parks and national reserves), the economic benefit approach becomes the main way of suggesting the impacts park tourism have on local areas and people.
- The benefit sharing approach focuses on how direct financial and indirect financial benefits affect local people.

### [i].Tourism Benefit Sharing in National Parks

- In Kenya Wildlife Service managed parks and reserves, there are non direct financial benefits extended to communities.
- Direct financial support is only through such things as education bursaries to children from communities living adjacent to the parks (group ranches)
- **Employment.** Of all the jobs attributable to national parks, local communities derive benefits from such things jobs offers as community scouts, and tourism interpretation guides in hotels in the parks
- Other revenues benefit communities indirectly or indirectly through support of various projects.
  - □ Health projects-construction of health facilities and equipping them with drugs
  - Education projects—construction of schools/classrooms and direct financial support through educational bursaries
  - □ Water projects: drilling boreholes, small dams, and piping water
  - **Community fences:** constructing electric fences to help address human-wildlife conflicts
  - □ cattle dips: park tourism revenues supports construction of cattle dips esp. in arid/semi arid areas
- Conservative estimates for Amboseli National Parks in southern Kenya suggest that when all benefits are valued in monetary terms, up to 25% of the park's annual incomes are retained to benefit the seven (7) groups ranches surrounding the park

### [ii].Tourism Benefit Sharing in National Reserves

National reserves are a protected area model managed by county government

- They are establish as to assist community optimal benefit as they are seen as community assets
- Distribution of benefits vary from one national reserve to another

### The case of Maasai Mara National Reserve:

There has been different methods of revenues collection from the reserve

- One of the reserves earning a lot of revenues in tourism revenues from park fees: \$17 million in 2011.
- A huge portion of the revenues are taken up to by firms subcontracted to collect revenues e.g. Equity e-ticketing systems the costs the parks \$1.5 million in commissions irrespective of whether revenues fall below \$20m

### **Distribution of tourism benefits**

- 19% cash disbursement to 11 group ranches
- Employment of local people
- Infrastructure improvement

### Kenyan Tourism Act, 2011 and Protected Area Impact Monitoring

- More recently the Kenyan tourism Act, 2011 has suggested future possibility for a systematic way conducting tourism monitoring studies/surveys on various aspects of tourism including assessment of various impact of Tourism .
- □ The Act establishment of a Tourism Institute in charge of:
  - Conducting research to monitor trends on various aspects of tourism
  - give information on early warning, disaster management, impacts and mitigation and adaptive strategies to climate change
  - organizing symposia, conferences, workshops and other meetings to promote the exchange of views on issues relating to tourism research and analysis
  - Disseminating and sharing annually, research findings and communicate recommendations to the relevant lead agencies, institutions and stakeholders in the tourism sector

# Visitor Spending Effects of Protected Areas in Finland

International Workshop September 21<sup>st</sup> – 25<sup>th</sup>, 2015, Wilhelmshaven

Joel Erkkonen Senior Advisor Parks & Wildlife Finland







### Contents

- Metsähallitus, Parks & Wildlife Finland

- Visitor Information System
- Estimating Visitor Spending Effects
- Experiences



# Metsähallitus manages state-owned areas

- A state enterprise governing all state-owned lands and waters
- Business activities and public administration duties (P&WF) in separate units
- Responsibility covers an area over 12 million hectares, 1/3 of Finland's surface area

Forest land in managed forests Poorly productive land Protected areas (P&WF) Public water areas (P&WF)

### 🕹 metsähallitus

### **National parks in Finland**

- 39 national parks (2015)
- 2.3 million visits to national parks (2014)
- 19 strict nature reserves
- 6 national hiking areas
- 12 wilderness areas
- almost 500 other PAs
- public water areas
- Altogether over 7 million hectares of protected areas



### 💐 metsähallitus

### Finances of Parks & Wildlife Finland in 2014





Total: 65.4 mil. €



### The role of tourism -The starting point is the strategy of P&WF

- 1. The value of our national property increases
- 2. Citizens obtain health and well-being from nature
- 3. Cooperation with tourism industry generates growth
- 4. We work on important things with joy

And and the second s

### We manage and protect Finland's most valuable natural treasures for the best of nature and people

Photo: Metsähallitus/Erkki Ollila

### Contents

– Metsähallitus, Parks & Wildlife Finland

- Visitor Information System
- Estimating Visitor Spending Effects
- Experiences



### Why Visitor Monitoring in Protected Areas?

"Any phenomenon that is not measured and reported does not exist politically. Governments, societies, communities and individuals place more value on that which is documented."

Prof. Paul F.J. Eagles



Paul F. J. Eagles



### **The Foundation of Visitor Spending Effects**

### - Visitor Monitoring System





### Development of Visitor Monitoring System in Parks & Wildlife Finland

Year	Action			
1998 -2000	Standardised surveys start and the first manuals on visitor monitoring were published in Finland			
2002	First MMV Conference			
2005	Nordic and Baltic Project on Developing Visitor Monitoring Methodology			
2006	ASTA database was launched			
2007	Manual of Visitor Monitoring in Nature Areas was published in Nordic and Baltic countries			
2008	ASTA database was sold to Estonia (RMK )			
2010	First economic impacts of park visitation report was published in Finland			
2013	Questions on health and wellbeing benefits perceived by visitors			
2014	MMV7 and World Parks Congress			

### **METSÄHALLITUS**

# Standardised Visitor Monitoring Data across the PA System

### VISITOR MONITORING IN NATURE AREAS



a manual based on experiences
 from the Nordic and Baltic countries

### **ASTA - the Visitor Information System**



### METSÄHALLITUS

### The Current Volume of Data in ASTA

### **Protected Areas**

- 141 visitor surveys since 2000
  - More than 52 000 survey responses
- 400 electronic counters currently in use

### **Visitor Centres**

- 51 surveys since 2000
  - > 16 500 survey responses
- 47 000 continuous feedback responses from nature centres



### METSÄHALLITUS

### Contents

- Metsähallitus, Parks & Wildlife Finland
- Visitor Information System
- Estimating Visitor Spending Effects
- Experiences



### **Method of Estimating Visitor Spending Effects**

A VSE calculation model in ASTA database

- producing annually
  - direct and total income effects (€)
  - employment effects (full-time jobs)

Easy-to use and practical tool

- Developed by the Finnish Forest Research Institute and P&WF in 2009-2010
- Based on the MGM2 model developed by Michigan State University for the U.S. National Park Service


#### The Data Requirements for Estimating Visitor Spending Effects

- Annual number of visits
- Visitor spending in the park and its surroundings
  - Any spending related to the trip: yes / no?
  - Costs per visitor / party?
  - 7 categories (accommodation, restaurants etc.)

#### Other visitor information

- The importance of the NP as a destination
- Municipality (Country) of residence
- Length of stay
- Size of the party

#### Regional input-output statistics

- 4 park categories

(capital area, other built-up area, rural area and tourism destination)





#### Visitor Spending Effects by Spending Categories and Visitor Segments - Koli National Park (2014)

	Domestic n = 4	tourists 464	Foreign n =	tourists 105	Local p n =	people 141	To n =	tal 710
Spending category	Income effect (€, VAT excl.)	Employment effect (Jobs, FTE)	Income effect (€, VAT excl.)	Employment effect (Jobs, FTE)	Income effect (€, VAT excl.)	Employment effect (Jobs, FTE)	Income effect (€, VAT excl.)	Employment effect (Jobs, FTE)
Gasoline and other gas station purchases	50 048	0.8	4 342	0.1	5 785	0.1	60 175	0.9
Local traffic	153 770	1.7	73 747	0.8	43 483	0.5	271 000	3.0
Groceries, other retail shopping	510 890	8.0	72 486	1.1	94 600	1.5	677 977	10.6
Cafes and restaurants	1 801 217	24.1	340 024	4.6	201 687	2.7	2 342 929	31.4
Accommodation	3 683 888	49.4	913 833	12.2	249 043	3.3	4 846 763	64.9
Programme services	430 250	5.1	65 333	0.8	57 227	0.7	552 810	6.6
Other spending	137 865	1.6	42 962	0.5	80 026	1.0	260 853	3.1
Sum of direct effects	6 767 929	91	1 512 726	20	731 851	10	9 012 507	121
Indirect effects	3 976 581	17	878 867	4	461 145	2	5 316 594	23
Total effects	10 744 511	108	2 391 593	24	1 192 997	12	14 329 101	144

#### 💐 METSÄHALLITUS

#### Example of a Summary Report: All National Parks (2014)

Area	Total Impact of Spending (Mill. €)	Total Impact on Employment (FTE)	Economic Impact When Area Priority Target (Mill. €)	Impact on Employment When Area Priority Target (FTE)	Number of Visits
Archipelago NP	5.4	52	1.8	17	54 700
Bothnian Bay NP	0.2	2	0.1	1	9 800
Bothnian Sea NP	1.7	17	0.8	8	48 000
Nuuksio NP	2.2	13	1.4	7	285 200
Oulanka NP	16.9	169	6.0	60	179 600
Pallas-Yllästunturi NP	35.8	359	21.9	220	514 800
Torronsuo NP	0.2	2	0.0	0	12 000
Urho Kekkonen NP	21.3	214	10.1	101	288 600
Valkmusa NP	0.1	1	0.0	0	10 800
Total Number of Visits					2 286 500
Total Economic Impact	125.8	1 256	59.6	588	

#### 💐 metsähallitus

#### The economic Impacts of Visitors' Spending

#### Minimum value\* **Total value** Visits Million € Jobs, FTE Jobs, FTE Million € **National parks** 2 286 500 1 2 5 6 59.6 125.8 588 355 300 National hiking areas 14.7 156 8.3 89 **Cultural heritage** 5.1 51 0.9 172 900 9 sites (top 5)

2014

\***Minimum value** indicates the spending by the visitors to whom the area (e.g. national park) was the only or the most important reason to make the trip to the destination

#### **Visitor Spending Effects**

- Money spent on the management and services of national parks and other PAs comes back many-fold through local private businesses and creates a plenty of jobs
- On average, **1 EUR** public investment in the services of national parks results in **10 EUR** return to local economies

#### Contents

– Metsähallitus, Parks & Wildlife Finland

- Visitor Information System
- Estimating Visitor Spending Effects
- Experiences



#### **Experiences**

ETSÄHALLITUS

- The accuracy of spending and impact estimates depends largely on the input data (visitation numbers, visitor spending figures and multipliers describing the flow of money in the local economy)
- The basic requirement for visitor spending effects on a continuous basis is a comprehensive, standardized visitor monitoring data, including both visitor counting and visitor surveys.



#### Experiences

- Establishing and maintaining a comprehensive visitor monitoring and information system requires significant investment in time and resources.
- It is a necessity for successful management of protected areas.
- Long term strategic goals for P&WF
  - Effectiveness (visitor spending effects and health benefits)
  - Quality (customer satisfaction)
  - Outcomes (number of visits)
- This investment for visitor monitoring and information system can generate high and diverse returns and pays back many-fold in the future.

joel.erkkonen@metsa.fi www.nationalparks.fi www.excursionmap.fi

#### **More information**

#### http://www.metsa.fi/web/en/economicbenefitsofnationalparks

- Local Economic Impacts of Finnish National Parks and Other Protected Areas Year 2014 (pdf)
- Local Economic Impacts of Finnish National Parks and Other Protected Areas Year 2013 (pdf)
- Kajala, L. 2012. Estimating economic benefits of protected areas in Finland. In: Kettunen, M., Vihervaara, P., Kinnunen, S., D'Amato, D., Badura, T., Argimon, M. & Ten Brink, P. (Eds.) Socio-economic importance of ecosystem services in the Nordic Countries. Synthesis in the context of The Economics of Ecosystems and Biodiversity (TEEB). TemaNord 2012:559: 255–259. (www.norden.org)
- Huhtala, M. Kajala, L. & Vatanen, E. 2010. Local economic impacts of national park visitors' spending in Finland: The development process of an estimation method. Working Papers of the Finnish Forest Research Institute. 149. (<u>www.metla.fi</u>)
- Vatanen, E. & Kajala, L. 2015. Update of multipliers used by the method assessing the local economic impacts of national parks, hiking areas and other protected areas valuable as nature tourism destinations, 2014. (In Finnish, summary in English) (pdf, julkaisut.metsa.fi)



Parks & Wildlife Finland

## Economic Impacts of Tourism in Nepalese Protected Areas

**Nabin Baral, PhD** School of Environmental and Forest Sciences University of Washington, Seattle, USA

#### **Protected Areas in Nepal**



Covers 23.1% of country's area (34,187 square km)

## Institutional Arrangement for Parks

- Government agency
  - Department of National Parks and Wildlife Conservation (DNPWC)

- Nongovernmental organizations
  - National Trust for Nature Conservation (NTNC)
  - World Wildlife Fund Nepal (WWF Nepal)

#### **Protected Areas in Nepal**



## **Tourism in Nepalese Parks**

- Major source of revenues
- 4 parks financially self-sufficient through entry fees
- Three tiers of entry fees
  - Foreign visitors (\$10 \$30)
     South Asian visitors (\$2.5 \$15)
  - Domestic visitors (\$0.10 \$1)
- Entry fees: per day or per trip basis
- Central collection and distribution of revenues

## **Visitor Impact Monitoring**

- Counting visitors the number is available
  - Data since the 1970s
- No priority for visitor monitoring political instability 1996 – 2015
- Managers make decisions based on intuitions
- Researchers doing monitoring on an *ad hoc* basis

## **Economic Impact Monitoring**

- Visitor entry fees are not based on sound science
- Fees not revised frequently: 1991 then 2012
- No systematic research and data collection on economic impacts of tourism

#### Annapurna Conservation Area

Economic impact assessment	2006	2012
Visitor days	14.85	8.14
Expenditures	\$20.86	\$32.01
Entry fee	\$27	\$25
# of visitors	35,625	91,685
Economic impact	¢11 007 /21	¢26 191 560
	ŞII,997,43I	\$20,101,505
Willingness to pay	\$ <b>11,997,431</b> \$69.2	\$20,181,309
Willingness to pay Visitor monitoring	\$11,557,431 \$69.2 <b>2006</b>	\$20,181,303 \$116.7 <b>2012</b>
Willingness to pay         Visitor monitoring         Group size of visitors	\$11,337,431 \$69.2 <b>2006</b> 4.8	\$20,181,303 \$116.7 <b>2012</b> 3.67
Contonne impactWillingness to payVisitor monitoringGroup size of visitorsOverall satisfaction from the trip	\$11,337,431 \$69.2 <b>2006</b> 4.8 8.26	\$20,181,303 \$116.7 <b>2012</b> 3.67 8.33

## Other variables

- Whether visitors visited the park before
- How did visitors learn about the park
- Composition of visitors' travel group
- Motivations for visiting the park
- > Activities visitors engage in the park
- Safety rating of the park
- > Whether visitors intend to revisit the park
- Demographic information of visitors

## **Ecotourism Evaluation Scale**

The ecotourism in Annapurna	2006	2012
Minimizes negative impacts to the environment and to local people	7.53	6.70
Increases the awareness of the area's natural and cultural systems	7.43	6.98
Contributes to the conservation and management of legally protected area	7.48	7.05
Directs economic and other benefits to local people	7.63	7.25
Promotes participation and empowerment of local people	7.44	7.05
Provides adequate information to visitors before and during visits	6.39	6.26
Satisfies visitors' expectation towards a successful ecotourism project	6.75	6.58

#### Sagarmatha (Mt Everest) National Park

- Survey conducted in 2011 (n = 522)
- Average visitor days = 13.02
- Average expenditure per day = \$57.01
- Entry fee = \$13
- # of visitors = 34,571
- Economic impact = \$26,110,446
- Willingness to pay = \$90.9

## Conclusions

- Parks' entry fees have not captured visitors' willingness to pay
- Economic impacts of tourism is substantial
- More research on "leakage" and "multiplier effect" is needed
- Monitoring of visitors and economic impact in other parks is recommended

#### Thank You!

#### Questions, Comments, Suggestions



# Marine Protected Areas Case: Australia

Susanne Becken

"Economic impacts of tourism in Protected Areas", 21-25 Sep 2015



## Intro

 The GBR through the eyes of a turtle <u>https://www.youtube.com/watch?v=X2b0K</u> BwafY







# A few quick facts

- Over 70% of the Earth's surface is covered by Oceans
- Oceans are home to 80% of the world's biodiversity
- About half of the Earth's population lives in coastal regions
- Only 2.2% of the world's Oceans are protected compared to15.4% of land under protection (includes inland waters WDPA, 2014).
- Less than half of the area in MPAs is designated as "no-take" reserves, which provides the strongest level of protection many of the most important and vulnerable ecosystems are not yet protected and others are vastly underrepresented.
- Ocean warming accounts for more than 90% of the energy accumulated in the climate system.
- Corals and other marine organisms are likely to be affected by ocean acidification. The world's oceans are approximately 30% more acidic than in pre-industrial times.

(Sources: IUCN, IMPAC, Marine Conservation Institute)



## What is a MPA

 IUCN definition: 'A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.'



## Global extent

10 MPA encompass 74% of the global marine area protected.



# History

- The main impetus for MPAs came with the World Parks Congress on National Parks in 1962, and a follow-up meeting in 1982 calling for the incorporation of marine, coastal and freshwater sites into the worldwide network of protected areas.
- 1982: UN Convention on the Law of the Sea (UNCLOS), provided the fundamental framework for marine governance globally.
- 1995: a four-volume series recommended a globally representative network of MPAs this was followed by a guide for MPA planners and managers in 2000 (Salm et al. 2000).
- 2002: The World Summit on Sustainable Development (WSSD) called for the establishment of MPA networks by 2012 (UN 2002). This was reinforced by setting a global target for at least 10% of each of the world's marine ecological regions to be effectively conserved by 2012 (CBD 2004).
- 2003: Recommendations of the fifth IUCN World Parks Congress resolved to: 'establish by 2012 a global system of effectively managed, representative networks of marine and coastal protected areas' (IUCN WCPA 2003) - maintained in the CBD 2011–20 strategic plan (CBD 2011).
- 2005: UNESCO launched the World Heritage Marine Programme to establish effective conservation of existing and potential marine areas of Outstanding Universal Value.



## Great Barrier Reef Marine Park





WW.AIRPANO.COM



#### Australian and Queensland Reef Governance Structure Legend New Minister Miles Great Barrier Reef Ministerial Forum (MinFo) (QG) Existing (AG/QG) QG GBR Ministerial Informal Standing Committee of Officials (SCO) - Expanded Water Science coordination (AG/QG) groups Taskforce (12 months) Ą↓ QG Inter **RWQPP Intergovernmental Operations** Departmental Committee (IOC) Committee (IDC) (EHP secretariat) (EHP chair) Reef 2050 Independent Reef 2050 Reef Advisory Reef 2050 Integrated Monitoring Expert Panel (IEP) Committee (RAC) and Reporting Program (IMRP) (DoE secretariat) (EHP secretariat) (GBRMPA/EHP chair) (GBRMPA secretariat) **RWQPP** Independent **RWQPP** Partnership IMRP Program Design **IMRP Reporting &** Working Group Synthesis Working Group Committee (PC) Science Panel (ISP) (AIMS) (GBRMPA) (EHP secretariat) (EHP secretariat) IMRP Data Management (GBRMPA) RWQPP Reef **RWQPP Management** Reef Core **RWQPP** Research and Coordination and Practice Advisory Group Communications Development Advisory Committee (MPAG) Group Coordination Group (DAF secretariat) (CAG) (EHP secretariat) (EHP secretariat) (EHP secretariat)

# Understanding visitor trends

Data source Tourism Research Australia (IVS/NVS):

- Year ended June 2014: 1,728,000 (up 27%) domestic tourists have visited the GBR during their trip to Queensland.
- In addition, 2,244,217 (up 6%) international visitors have visited the GBR during their trip in Australia.



## More on visitation

- GBRMPA: numbers from tourism operators logbooks. In the year ended June, GBRMPA recorded 2,017,604 (down 1%) visitors to the Marine Park.
- Stagnating monthly trend (see Figure below).
- In 2008, more than 14 million recreational visitors were estimated to visit the GBRMP from surrounding areas every year.





## **Economic contribution**

- Visitors contribute directly to the MPA through the environmental management charge (EMC). This charge is associated with most commercial activities, including tourism operations, non-tourist charter operations, and facilities, operated under a permit issued by the GBRMPA.
- The EMC is collected per visitor (\$6 per full-day, \$3 per part-day visitor. In the financial year 2014, this amounted to a total of about \$8.5 million.
- In addition, a Deloitte Access Economics model shows that, in 2012 visitors contributed \$6.4 billion in direct expenditure.

Activity	2006–07 Value added (\$million)	2011–12 Value added (\$million)
Tourism	\$5117	\$5176
Commercial fishing	\$139	\$160
Recreational use (including fishing)	\$153	\$244
Total contribution	\$5409	\$5580
### Griffith

344400

100

Zoning	CUEENELAND

1 : 250 000	Zone Name	Equivalent IUCN category	Objectives	Area (km²)	% of GBRMP
Cons Des	Preservation Zone	la	to provide for the preservation of the natural integrity and values of areas of the Marine Park, generally undisturbed by human activities.	710	<1
	Scientific Research Zone	la	<ul> <li>(a) to provide for the protection of the natural integrity and values of areas of the Marine Park, generally free from extractive activities; and</li> <li>(b) subject to the objective mentioned in paragraph (a), to provide opportunities for scientific research to be undertaken in relatively undisturbed areas.</li> </ul>	155	<1
	Commonwealth Islands	II	<ul> <li>(a) to provide for the conservation of areas of the Marine Park above the low water mark; and</li> <li>(b) to provide for use of the zone by the Commonwealth; and</li> <li>(c) subject to the objective mentioned in paragraph (a), to provide for facilities and uses consistent with the values of the area.</li> </ul>	185	<1
	Marine National Park Zone	II	<ul> <li>(a) to provide for the protection of the natural integrity and values of areas of the Marine Park, generally free from extractive activities; and</li> <li>(b) subject to the objective mentioned in paragraph (a), to provide opportunities for certain activities, including the presentation of the values of the Marine Park, to be undertaken in relatively undisturbed areas.</li> </ul>	114530	33
	Buffer Zone	IV	<ul> <li>(a) to provide for the protection of the natural integrity and values of areas of the Marine Park, generally free from extractive activities; and</li> <li>(b) subject to the objective mentioned in paragraph (a), to provide opportunities for:</li> <li>(i) certain activities, including the presentation of the values of the Marine Park, to be undertaken in relatively undisturbed areas; and</li> <li>(ii) trolling for pelagic species.</li> </ul>	9880	3
	Conservation Park Zone	IV	<ul> <li>(a) to provide for the conservation of areas of the Marine Park; and</li> <li>(b) subject to the objective mentioned in paragraph (a), to provide opportunities for reasonable use and enjoyment, including limited extractive use.</li> </ul>	5160	2
	Habitat Protection Zone	VI	<ul> <li>(a) to provide for the conservation of areas of the Marine Park through the protection and management of sensitive habitats, generally free from potentially damaging activities; and</li> <li>(b) subject to the objective mentioned in paragraph (a), to provide opportunities for reasonable use.</li> </ul>	97250	28
	General Use Zone	VI	to provide for the conservation of areas of the Marine Park, while providing opportunities for reasonable use.	116530	34

- Multi-use area
- Permit system
- Incentive for environmental management
- Interpretation requirements

Total



SDC131114\_53 16 Jun 14



#### About Us

Home > About Us > Legislation, regulations and policies > Policies and position statements

#### > Our Board

- Message from the Chairman
- Great Barrier Reef Intergovernmental Agreement
- > Corporate information

#### Legislation, regulations and policies

- Legislation
- Policies and position statements
  - Guidelines for commercial dugong watching
  - Guidelines for the Management of Artificial Reefs in the Marine Park
  - Emergency disposal of foreign fishing vessels
- Vessel sewage regulations
- Whale and dolphin watching regulations
- Regulator Performance Framework

Reef Advisory Committees

#### Policies and position statements

#### Policies

Our policies give effect to the agency's responsibilities, functions and powers outlined in the *Great Barrier Reef Marine Park Act 1975*. A policy will only be developed where there is an identified need that has been approved by the Marine Park Authority (Board), or if urgent - the Chairman.

#### Tourism

- Cruise Shipping Policy for the Great Barrier Reef Marine Park [PDF 126KB] policy under review
- Managing Tourism Permissions to Operate in the Great Barrier Reef Marine Park (including Allocation, Latency & Tenure) [PDF 420KB]
- Policy on Moorings in the Great Barrier Reef [MSWORD]
  - Supporting information on the policy on moorings [MSWORD]
- Policy on Managing Bareboat Operations in the Great Barrier Reef Marine Park [PDF 394KB]
- Marine Tourism Contingency Plan [MSWord 305KB]
  - · Supporting information for the Marine tourism contingency plan
  - Marine Tourism Contingency Plan application form for operations impacted by a severe environmental incident

#### Scientific research

 Policy on Managing Scientific Research in the Great Barrier Reef Marine Park [PDF 487KB]

#### Free Zoning Maps



If you're heading out on the water, don't forget your free <u>Zoning Map</u> so you know where you can go and what you can do.







> View our Facebook feed



### The problem is not tourism





### Evaluation of the Economic Impacts of Tourism in German Protected Areas

#### International Workshop "Economic Impacts of Tourism in Protected Areas"

21.-25.09.2015, Wilhelmshaven

Hubert Job, Manuel Woltering

# Large Scale Protected Areas in Germany

#### 16 National Parks / 214.588 ha (terrestrial)

Two main types:

- 1. Strong integration in tourism marketing
- 2. Weak integration and cooperation

### 16 Biosphere Reserves / 534.646 ha (terrestrial)

Different types from small up to big, traditional tourism regions.

- → Managed by the federal states
- Problem of common quality standards and uniform monitoring methods





### **Questions to be Answered**

... on the way to the evaluation of regional economic impacts of tourism:

- 1. How many tourists visit the protected area?
- How important is the protected area as tourist attraction?
- 3. Which economic impact does tourism in the protected area generate?

23.09.2015 Lehrstuhl für Geographie und Regionalforschung, Univ.-Prof. Dr. H. Job / Dr. M. Woltering

### Evaluation of Regional Economic Impacts: A Brief History

- 2001/02: First attempt to evaluate tourism economic impacts within the Berchtesgaden National Park region
- 2003-05: Development of a standardized method for the evaluation of economic impacts of tourism in German large scale protected areas based on three case study regions
- 2006-2019: Application to national parks and biosphere reserves by a series of research projects
- Funding was always granted by by the Federal Environment Ministry and Federal Nature Conservation Agency (BfN) as well as some of the local management bodies
- → Lot of empirical results have been generated, but...
- To date, it still does not exist a compulsory monitoring standard for each of the protected area types!



### **Survey Design for Evaluation**

Destination Survey	Computation	Official Statistics
Countings Visitor Days per Year	Gross Tourist Spending	Direct & Indirect Multiplier
Short Interviews Visitor Structure		
Long Interviews Expenditures & Motivation	Total Income & Income Equivalents	

- There are no visitor numbers in German protected areas → countings
- Visitor structure is not known → short interviews
- What are the expenditures and the motivation of visitors → long interviews



### Analysis of Visitor Structure with Countings and Short Interviews

#### Example

Location: Wyk 3-1-1

6



Wyk 3-1-1 means summer, weekend and good weather

#### **UNI** WÜ Visitation in Biosphere Reserve Schaalsee on 18 Survey Days





### Visitation in Biosphere Reserve Schaalsee 2011/12 – Extrapolation

Visitor days per,week



# UNI Visitors with a High National Park Affinity – Example: National WÜ Park Schleswig-Holstein Wadden Sea



[in comparison: National Park Lower Saxony Wadden Sea: 10,9% National park tourists]



23.09.2015 Lehrstuhl für Geographie und Regionalforschung, Univ.-Prof. Dr. H. Job / Dr. M. Woltering

#### UNI WÜ Economic Impact Assessment: Value Added Analysis



11



Different options:

- Empirical survey on economic structure of the study area (high effort)
- National multipliers derived from official statistics (bad quality for regional evaluation if used "raw")
- Regional multipliers from official statistics or other studies (mostly not available in Germany)
- Regionalization of Input-Output-Table (high effort)
- → Regionalization of national multipliers

### Visitor Days and Income Equivalents of German National Parks

## All National Park Tourists (Core Group)

- 51 (10) mill. visitor days/year
- 2.1 (0.43) bn. € gross turnover
- 69.000 (14.000) income equivalents



Thank You!

LEHRSTUHL FÜR GEOGRAPHIE UND REGIONALFORSCHUNG JULIUS-MAXIMLIANS-UNIVERSITÄT WÜRZBURG			WÜRZBURG
		Zählbogen Biosphärenreser	vate
Beobachter/Interviewer:		Dafnm:	Standort
Uhrzeit Zähl-/Bi	itzinterview-Beginn:	Uhrzeit Z ähl-/Blitzinterview-Ende:	(je Z ählintervall einen neuen Bogen verwenden!)
Frequenz	Anzahl	Anzahl Übernachtungen/Kategorie (Tage	
Spaziergānger/ Nordic/Jogger			LEHRSTUHL FÜR GEOGRAPHIE UND REGIONALFORSCHUNG JULIUS-MAXIMILIANS-UNIVERSITÄT WÜRZBURG
1 5 10 15 20 25 30 35 40			WORZBOR
			Liebe Gäste, ich bin Student der Universität Würzburg und führe im Rahmen eines Forschungsprojekts eine Befragung zum Tourismus in der Re durch. Bitte nehmen Sie sich kurz Zeit, um die folgenden Fragen zu beantworten. Natürlich werden Ihre Angaben absolut vertra
(Schneeschuh-) Wanderer/			Ner Datas Ultracit
Trekker			Infersioner - Dallil Vil 222
1 5 10 15 20			
25 30 35 40			<ul> <li>With a start of the start of th</li></ul>
Padfahrar/MTD			Bemerkungen
1 5 10 15 20			(1) Wasiat day Augustan Ibrasha di an Danata?
25 30 35 40			D II' Hauritanshirita odar II' Excinence till barrashtmarrast
			1a) In weichem Ort übernachten Sie? (Tagestouristen weiter bei Frage 2)
			G Il Hauptwohnsitz oder Il?Ferienort/Übernachtungsort:
Renter/Kremser			1b) Wie viele Nächte sind sie bisher bzw. insgesamt in diesem Ort?
15101520			D Bisher Nachte Insgesamt Nachte
			1d) In welcher Art von Unterkunft übernachten Sie?
Ski/Langlauf			to I' Hotel (garn) I' bis 30€ IP bis 50€ IP bis 75€ II' über 75€ pro Person/Übernachtung
1 5 10 15 20			00 02 Gasthof 05 Knrklinik 08 Bekannte/Verwandte
25 30 35 40			U° Jugendherberge U° Son stiges:
Flugsportler			1 1 Camping U Camping U Keine Angabe
1 5 10 15 20			□ 1 <sup>1</sup> Reine Mahlzeit 11 <sup>2</sup> Frühstück 11 <sup>3</sup> Halbpension 11 <sup>4</sup> Vollpension 11 <sup>0</sup> %keine Angabe
25 30 35 40			11) Ist die Reise
Badegāste			U panschal gebucht oder U <sup>2</sup> selbst organisiert (Weiter <i>Dei Frage 2</i> ) U <sup>3</sup> Knr (Weiter <i>Dei Frage 2</i> ) 100 Dei Deuestalburte nor 100 Weiter bei Ange 2
1 5 10 15 20			niji ce razu Mouting. niji we cre Lestingen sna in rie Sindegrinen? Communication 6
25 30 35 40			für Personen
			2) Eitte nermen Sie die zwei wichtigsten Gründe, warum Sie in die Region gekommen sind!
			1 i) ii)

D<sup>1</sup>ja D<sup>2</sup>nein (Weiter bei Frage 8)

#### **Paper-and-Pencil-Countings** and -Interviews

3) Wissen Sie, ab die Region unter einem besanderen Schutz steht? I st die Region…. (Mehrlachnennungen möglich)(Rotation) []<sup>1</sup>Naturschutzgebiet D<sup>2</sup> Landschaftsschutzgebiet <sup>1</sup><sup>3</sup>Biosphärenreservat II<sup>4</sup>Naturpark 1<sup>5</sup> National park. 116 kenne ich nicht 4a) Ausweichem Grund sind Sie jetzt in der Region? <sup>1</sup>Urlaub/Freizeit <sup>1</sup>geschäftliche Gründe 03Km □<sup>4</sup>Sonstiges: 4b) Welchen Aktivitäten gehen Sie in der Region nach? i)\_ ii). iii). 5) Mit welchem Verkehrsmittel sind Sie hierher gekommen? **D**<sup>1</sup>Pkw Bahn/ÖPNV **D**<sup>3</sup>Reisebus 0<sup>4</sup>Fahrrad D<sup>5</sup> Motorrad D<sup>6</sup> Sonstiges: 6) Kennen Sie die Bezeichnung "Nationale Naturlandschaften"? 1 ja Wenn ja, bitte nennen Sie Beispiele von "Nationalen Naturlandschaften": i) **D**<sup>2</sup>nein ii) 7a) Wissen Sie, ob es in der Region ein Biosphärenreservat gibt?

7b) Welche Rolle spielte das Eliosphärenreservat bei Ihrer Entscheidung die Region zu besuchen?

 $\Pi^i$ ja, spielte eine sehr große Rolle  $\Pi^2$ ja, spielte eine große Rolle  $\Pi^3$  spielte kaum eine Rolle  $\Pi^4$ nein, spielte keine Rolle

### **Bird Watching**

- 74,5% of visits only because of the canarys
- 88,5% overnight guests, 11,5% day trippers
- 2013: 6.246 visitor days through crane day trippers, 127.340 visitor days through canary overnight guests
- Special nature event rises national park affinity of visitors in a significant way: among crane tourists 46% had a high national park affinity compared to 31,5% annual average



# TOURISM IN INDIAN PROTECTED AREAS :

**OVERVIEW & CHALLENGES** 

Manoj V. Nair, IFS Scientist F, UNESCO C2C, Wildlife Institute of India

Wilhelmshaven , 22 September 2015

### **Presentation Outline**

- Introduction to India
- Tourism in India
- PAs in India
- Governance
- Policy & Legal Framework
- Ground Situation
- Positives & Negatives
- Two case-studies
- Way ahead ?
- Strengths & Weaknesses

### India

- It is the seventh largest country by area, the second most populous country with over 1.2 billion people, and the largest democracy in the world.
- Geographically, it is very diverse, having distinct 10 biogeographical zones ranging from the high Himalayas to coral islands.
- 30 states, 7 Union Territories.
- India is one of the world's 17 mega diversity countries, supporting both high biological diversity (and also high densities of people).
- Rapid economic growth (6–9% annually), globalization, and urbanization have resulted in a growing middle class that doubled from 1990 to 2005 (Beinhocker *et al. 2007;* Gandhi & Orr 2007; Das 2009).

### **Protected Areas in India**



103 National Parks, 531 Wildlife Sanctuaries, 65 Conservation Reserves, 4 Community Reserves and 48 Tiger Reserves

10 Biosphere Reserves, 7 World Natural Heritage Sites



# Himalayas



### **The Great Indian Desert**



### **Coral Attols**



# **Tropical Evergreen Forest**



### Semi-arid Savanna Grassland



### **Cloud forests**



## Lagoons & Backwaters



## **Tourism in India**

- The World Travel & Tourism Council calculated that tourism generated 6.4 trillion or 6.6% of the nation's GDP in 2012.
- It supported 39.5 million jobs, 7.7% of its total employment.
- The sector is predicted to grow at an average annual rate of 7.9% till 2023 making India the third fastest growing tourism destination over the next decade.

# Policy and legal framework

- India has a stringent set of federal and state laws regarding forest and wildlife, both of which come under the Concurrent list of the Indian constitution.
- All PAs come under the ambit of the stringent federal law for Wildlife Conservation, The Wildlife (Protection) Act, 1972. Consumptive use of wildlife is prohibited.
- No separate law for eco-tourism.
- There is only a draft Ecotourism Guideline by MoEFF & CC and a final one is awaited.
- However, almost all states have their own Ecotourism guidelines.
- National Biodiversity Action Plan promote sustainable tourism by multistakeholder partnerships favouring local communities.



- Management of all PAs including tourism are essentially overseen by Govt agencies through the officers of the Indian Forest Service and subordinate State services.
- The Ministry of Tourism designs national policies for the development and promotion of tourism.
- However, Ecotourism, particularly in P.As come under the purview of Ministry of Environment, Forest & Climate Change.
- However, all tourism activities outside PAs and which does not concern scheduled species are open to private parties.

## **Ground situation**

- India is a rapidly growing emerging economy and domestic tourism is on the rise because of economic liberalization, resulting in a new middle class with greater disposable income (Bhardwaj, 1998).
- Research on tourism trends in Indian parks suggests that wildlife tourism is growing (mean growth rate was 14.9% from 2002 to 2008) and is largely domestic (Karanth & DeFries, 2011).
- Ecotourism occupies a rather peripheral role in the overall ambit of wildlife management, except for certain high profile Tiger Reserves such as Kanha and Ranthambore
# Ground situation (contd'...)

- Growth in income has increased demand for tourism, including nature-based tourism.
- The 28 tiger reserves alone receive >1 million visitors a year (Tiger Task Force 2005).
- Yet, India's 590 PAs cover <5% of total land area, are small (average size <300 km2), highly fragmented, and surrounded by high densities of people (Rodgers et al. 2003).
- A key challenge is managing these PAs under pressure from commercial interests (mining, roads) and local human activities (fuel wood and forest product collection, grazing, and hunting) (Karanth & DeFries, 2010)
- Data is PA-based. No centralised database for country

# Positives

- Economic benefits (employment and entrepreneurship opportunities)
- Infrastructure benefits (access to improved roads, transportation, health care and education)
- Social welfare benefits (political, psychological, economic and social empowerment; Ross & Wall, 1999; Scheyvens, 1999; Archabald & Naughton-Treves, 2001; Sandbrook, 2010).
- Increased Awareness & Constituency for conservation

# Negatives

- Disturbance to habitats, species
- Changed behaviour patterns of species (Bugun Liocichla)
- Commodifcation of people and places,
- Affects social fabric of local people (King & Stewart, 1996; Stronza, 2001; He et al., 2008).

## lssues

- Carrying capacity : the existing methodology (NTCA) is rather arbitrary and fraught with subjective issues
- Effective benefit sharing to local people. A recent study in 10 Protected Areas across India found only tiny proportions of local people employed in tourism-linked jobs. The number was just two per 10,000 population at Sariska in Rajasthan, seven per 10,000 at Bandipur in Karnataka and 10 per 10,000 at Kanha in Madhya Pradesh.
- Inequitable wealth accumulation from tourism can increase class division, social tensions and economic marginalisation.

# Kaziranga



### High on tourism, low on ownership

Kaziranga (Hussain et al, 2012)

- A favourite tourist destination in the state of Assam
- Big five : Tiger, Rhino, Elephant, Wild Buffalo & Swamp Deer
- Yearly tourist inflow to Kaziranga during the last ten years (2000 - 2009) rose from 37,696 Indian tourists to over 100,000 and from 1,623 to 6,000 foreign tourists.
- Revenue realized by the forest department from visits of these tourists also increased (though not proportionally) from US\$ 49,539 per annum in 1999/2000 to US\$ 249,348 per annum in 2008/9.

- The total expenditure by tourists in Kaziranga National Park area was calculated to be US\$ 5,747,640 per annum of which US\$ 177,216.64 per annum was received by the Assam Forest Department.
- US\$ 3 million per annum accrued to people involved in tourism activities.
- The balance amount of about US\$ 2 million per annum was spent on non-local goods (food, handicrafts, restaurants) and services (public transport – national and international travel), which flowed as leakage to supplies and logistic support outside the protected area impact zone (Sandbrook, 2010).

- However, increase in revenue did not translate to conservation of Rhinos on ground. Rhino poaching continued unabated including the recent spurt.
- In the case of Kaziranga, the powerful and wealthy service providers are reaping the benefits of tourism because the ownership of infrastructure resides with them. The basic services needed to support tourism are provided by the people who have traditionally not been dependent on the resources of the Kaziranga and who bear no direct costs of conservation. On the other hand, the poor and the vulnerable stakeholders—namely the farmers, craftsmen and cottage industry workers who are dependent on resources from the Kaziranga National Park and bear the direct costs of conservation such as crop loss to wildlife and loss of access to resources from the Park—are often involved only in indirect economic activities associated with tourism and receive few benefits.

# Summary

 This case study of KNP provides an insight into the tourism dynamics of a Protected Area tourism that generates substantial revenue but where the revenue is neither equitably distributed among the local people nor does it serve its primary objective of contributing to biodiversity conservation.





## Policing to Social Fencing

Periyar Tiger Reserve (Mathew & Kuriakose, 2015)

- Dense tropical forests and lake famous for its rich biodiversity located in the Western Ghats section of Kerala.
- Unregulated tourism threatening to derail management in early 90s.
- Forest Department in loggerheads with local people and many of the local villagers were in debt trap
- Launching of "India Eco-development Project", a World Bank funded participatory bio-diversity conservation programme initiated implementing sustainable development initiatives during 1996-2004.

# Periyar (Contd'...)

- Forest Department at PTR intervened to pay outstanding loans and allowed traditional resource use
- Organised EDC based livelihood activities ranging from women's micro-credit groups to regulation of the collection of minor forest products.
- After the ending of IEDP, a Govt-supported Periyar Foundation was founded to carry on with the supervisory functions of the IEDP.
- An amount of Rs.10 (approximately US\$ 0.17) for domestic tourists and Rs.100 (approximately US\$ 1.70) was added to the ticket for the PTR entry as an eco-development surcharge to the Periyar Foundation.

# Periyar (Contd'...)

- Activities have resulted in the overall increase of income for the participating community by 24%, specifically benefitting the User group eco-development committees, whose income went up by 70%.
   Collection of NWFPs (or non-wood forest produce) that included fodder, grass used for thatching, bamboo etc. fell significantly. Bhardwaj (2008).
- Illegal poaching of animals and valuable trees like sandalwood has significantly reduced by the surveillance by villagers. An excellent example of social fencing.
- Community Based Tourism (CBT) products such as Homestays, Visit to tribal hamlets, exhibition of tribal culture through museum, tribal art form performances etc., have been added to the tourism experience increasing ownership.
- In October 2012, the United Nations Development Programme (UNDP) and the Government of India honored PTR with 'India Biodiversity Governance Award' for the best managed Protected Area in the country.



- Planned Ecotourism : Policy backed by Law (Give it the importance it deserves).
- Work out carrying capacity in case to case basis.
- Make ecotourism real (low impact, spartan facilities etc.)
- Meaningful and gainful participation of local people with a sense of ownership.
- Divert tourists from over-crowded PAs by developing alternative destinations.
- Conservation Cess' from Hospitality Industry.



- It is important to recognise that ecotourism by itself, even if wellplanned, will not be enough to address the myriad problems facing PAs and thus should not be seen as a panacea.
- Given the demography in India, community support is a must in any PA.
- Hence integrating ecotourism into sustainable livelihoods through participatory management is crucial to gain long-term community support for conservation.
- Finally, managing the 'politics of conservation' !

# **Strengths & Weaknesses**

- Legal backing for PAs strong, well-structured governance and well-organised and reasonably adequate workforce for conservation.
- Increasing constituency from educated middle class for ecotourism and conservation.

- Ecotourism largely considered a threat and less an opportunity among PA managers
- Starved for data; no organised data collection or analysis as dedicated work force not available.
- Highly heterogenous country making uniform guidelines difficult to implement.

## Thank You & Welcome to India !

#### manojnair74@gmail.com



# High-quality nature experiences as precondition for PA tourism: Certifying interpretive trails in Austrian PAs



**Michael Jungmeier** 

INTERNATIONAL WORKSHOP "ECONOMIC IMPACTS OF TOURISM IN PROTECTED AREAS" Wilhelmshaven, Germay September, 22nd, 2015



E.C.O. Institut für Ökologie

Kinoplatz 6, 9020 Klagenfurt

www.e-c-o.at

office@e-c-o.at

#### **Overview**

- Introduction
- Theoretical framework
  - How to link parks and people ?
  - What do we know about the PA of the 21<sup>st</sup> century?
- How to deliver appropriate quality of nature experiences
  - What are the constituing elements of PA tourism ?
  - Interpretive trails in Austrian PA
- Answer to questions



#### PEOPLE, PARKS AND MONEY

Stakeholder involvement and regional development: a manual for protected areas

Michael Getzner Michael Jungmeier Sigrun Lange



### How to link parks and people?



PARKS 3.0 Protected Areas for the next Society

> Heike Egner Michael Jungmeier (eds.)



What do we (already) know about PAs in the 21<sup>st</sup> century?

At the horizont: a new generation of parks.



#### Magic moments – the touristic promise



## Delivery of a high-end touristic product / service

Outstanding nature experience

Appropriate accommodation, food and service

Product development, branding, marketing

Training, capacities, investment

Legal frame, conservation, security







#### Nature experience

- Nature experience as "strategic communication in the management of Protected Areas" (Ham & Sandberg, 2012)
  - Authentic contact to nature
  - Awareness for nature conservation
  - Influencing visitors' behaviour
  - Generation of income
- Four types of outdoor offers
  - Guided tours, walks, rides, safaries, ..
  - Special formats, e.g. camps, events, citizen science, ...
  - Interpretive trails, info points, ..
  - Find out yourself, individual visit



#### Interpretive trails as tools for visitors' management

- Uncomplicated outdoor-offer
- Supporting nature experience without staff
- Ready made information to be used any time
- Preventing visitors from using sensitive or dangerous areas
- Potential for (cross-)marketing of services and products
- Widely spread, not always in a good shape
- Broad variety of different ways to present nature



#### Acoustic furniture – The sounds of nature





#### **Elusive Shades - Attitudes of a Wild Cat**





#### **Outdoor experiments – interacting with nature**



E. C. O.

#### **Interpretive trails in Austria**





### **Dimensions of quality of an interpretive trail**

Quality of contents

Quality of service and maintenance

Relevance and potential of the topic
Information content
Reference to PA

Quality of presentation Quality of presentation Technical workmanship

Servicing and maintenance Extended offers (services and products) Provision of information



#### **Topics of the trails**





### **Quality components**





#### **Overview of final result**

Quality	No	%
Outstanding: awarded	34	21,4
Medium: improvements suggested	98	61,6
Low: improve or remove	27	17,0
Total	159	100,0



### **Certification system**

- Demand for certification is evident
- Scheme of certification
  - For all types and categories of PA
  - Baseline and a follow-up every second year
  - 99 criteria in 9 clusters
  - Awarded with a certificate
  - Promoted via a homepage, a booklet and PR
     (www.themenwege.e-c-o.at)



Expected stimulus for quality and economic impact



#### Walk the best trails. Hope to see you in Austria.







Presentation title can go here Secondary text

## TOWARDS TO EVALUATION OF ECONOMIC IMPACTS OF TOURISM IN PROTECTED AREAS IN RUSSIA

#### Dr Evgeny Shvarts, WWF Russia



INTERNATIONAL WORKSHOP "ECONOMIC IMPACTS OF TOURISM IN PROTECTED AREAS" Bremen, September 22, 2015






## **Russian Protected Areas system in nut-shell**

	Federal PA	Regional PA
249 Federal PA with total area 65,7 mln. ha (3.9% of Russia territory).		Above 8% of Russia territory
Zapovedniks (IUCN Cat. I)	104 (>33,2 mln ha, 26,9 – terrestrial (1,6%), 6,3 – marine)	-
National Parks (IUCN Cat. II)	47 (12,3 mln ha, 10.9 – terrestrial (0,6%), 1,3 – marine)	-
Nature Parks (IUCN Cat. II)	-	Above 30
Wildlife sanctuaries (IUCN Cat. IV- VI)	+(70 total, 20,1 mln ha; 10,4 terrestrial (0,6%), 9,7 - marine)	+
Nature monuments (IUCN Cat. III)	+ (28 total; 34,3 t. ha)	+
Presentation to Company Name		23-Sep-15 / 3



## **International recognition**

- 8 World Heritage Sites (11 zapovedniks, 4 National Parks и 3 federal wildlife sanctuaries;
- 40 UNESCO biosphere reserves 34 zapovedniks, 6 National Parks (Vodlozersky, Smolenskoe Pooserie, Ugra, Valdaisky, Kenosersky, Samarskaya Luka) и 1 Nature Park «Volgo-Akhtuba floudplain» (Astrakhan region).
- 35 Ramsar wetlands sites including 23 Federal PA 12 Zapovedniks, 1 National Park («Meshersky»,) and 11 Federal Wildlife sanctuaries.
- 4 Zapovedniks (Kostomukshsky, , Daursky. Khankaisky, Pasvik) and 1 National Park ("Kurshskaya spit") are parts of international transboundary Protected Areas).



- ig. 2: Planned and actual designations of zapovedniki and national parks in Russia (Source: KREVER et al. 2009)
- *Fig. 2: Planned and actual designations of zapovedniki and national parks in Russia (Source: KREVER et al. 2009)*



PA: Federal, regional, local

Federal:

- 104 Zapovedniks (State Strict reserves)
- 47 National Parks

Regional: Nature Parks (above 30) in some cases can compete with National Parks (Kamchatka, Yakutia, Krasnoyarskiy kray, Astrakhan, etc)

Financing of ecotourism infrastructure, mln rubles	2011	2012	2013	2014
2324,7	569,3	599,4	829,4	325,8



## Visitors in National Parks, 2001-2014





## Visitors in State strict reserves (Zapovedniks), 2001-2014





## **Ecotourism infrastructure development in National Parks**





## Ecotourism infrastructure development in State Reserves/ Zapovedniks in 2001 – 2014





## National Parks: Structure of Financing - 2002 vs 2009



- Federal Government funds
- Regional Government funds
- Income from its own activities
- Foreign funds (state and private)
- National (domestic) sponsors / donors funds



### 2014: Data for 40 National Parks (from 47)

### 3.382,3 Mln rubles (\$US - 32 rubl in 2009, 33 - 45 rubl in 2014)





## Structure of ecological tourism in Russian Far East (Primorskiy Kray) (Martyshenko, 2013, p. 59-65)

Type of visit	Purpose of visit	% in total number of ecological tours
Scientific	study of natural, archaeological and ethnographic objects	1%
Informative, research	Becoming familiar with ornithological, botanical, geographical, archaeological, ethnographic objects	60%
Adventure	Foot, horse, river, mountain walks and recreation travels	29%
Summer camp for school students	recreation	5%
Weekend tours	recreation	5%



## European bison, NP "Orlovskoe Polesie"





## Mole rat (Spalax) in NP "Samarskaya Luka"





## NP "Samarskaya Luka", Middle Volga





## Water trail, NP "Orlovskoe Polesie"





## Ugra NP







### **WWF IN SHORT**

#### +100

WWF is in over 100 countries, on 5 continents

**1961** 

In 1961 -

WWF was founded



#### +5000

WWF is in over 100 countries, on 5 continents

**∔5M** 

WWF has over 5 million supporters

# Tourism and Protected Areas in New Zealand:

## A summary of visitor monitoring approaches, current sucesses and future challenges

Stephen Espiner, Lincoln University, New Zealand



# Presentation outline

- Tourism and the New Zealand economy
- The organisation of Protected Areas (PAs) in New Zealand
- The significance of national parks and PAs in tourism
- Visitor monitoring in PAs
  - Types of data collected
  - Examples of approaches used
  - Successes and challenges



## The New Zealand Economy



#### VISITOR EXPENDITURE

MARKET SPENDING

Domestic visitor expenditure grew by 3.2% to \$13.4 billion. Provisional results show that international visitor expenditure increased by 7.4% to reach \$10.3 billion. Growth came largely from the US, Chinese and German visitor markets.

# TOTAL SPEND \$237

#### HOW DOES TOURISM COMPARE WITH OTHER EXPORT SECTORS?

#### 4 MEAT & MEAT PRODUCT OD & WOOD PRODUCTS DIRECT Contribution to GD INTERNATIONAL VISITORS Arrivals from our number one market, Australia, TOTAL INTERNATIONAL climbed 4.3% to 1.221 million visitors, while fastgrowing arrival numbers consolidated China's ARRIVALS position as our second largest visitor market. There was a strong recovery in the number of visitors from the USA. Visitor numbers from Japan fell slightly, resulting in Germany moving up to become our fifth largest visitor market. 5.4% INTERNATIONAL VISITOR EXPECTATIONS OF THEIR NZ HOLIDAY HOLIDAY 39% 56% J. MET **KEY INTERNATIONAL**

Tourism Industry Association New Zealand (TIA) and Lincoln University, New Zealand, 2014



Combined with solid growth in the last 12 months, Tourism 2025 gives New Zealand tourism a strong base from which to leverage opportunities that will be presented in the year ahead.

The State of the Tourism Industry 2014 is the latest in an annual series produced by Lincoln University and the Tourism Industry Association New Zealand (TIA), with data support from Statistics New Zealand and Tourism New Zealand. To read the full report, go to www.tourism2025.org.nz/making-it-happen/state-of-the-tourism-industry-/

Tourism Industry Association New Zealand (TIA) and Lincoln University, New Zealand, 2014

**GROWING VALUE TOGETHER** 

WHAKATIPU UARA NGATAHI

M

# The organisation of Protected Areas (PA) in New Zealand

- Approximately 9,000,000 hectares of land has formal protection
  - More than 30% of New Zealand's total land area

Key agencies and institutions responsible for protected areas in New Zealand

Agency	Role	% <b>PA</b>
Department of Conservation (DOC)	Central government agency responsible for conserving natural and historic heritage	96%
Regional Councils	Regional-level governance of natural resource areas for bio-diversity, recreation, flood control	< 1%
QEII Trust	Works with private land owners to secure enduring protection using covenants	1%
Ngā Whenua Rahui	Promotes protection of native ecosystems on Maori land using covenants	2%



Type of Protected Area	Number	Area (hectares)
National Park	13	2,882,878
Conservation Park	30	1,944,463
Nature Reserve	54	114,243
Scientific Reserve	88	16,003
Scenic Reserve	1619	397,501
Historic Reserve	217	18,265
Other conservation land	7342	3,221,914
Recreation or local purpose reserve	7961	354,107
Total	17,324	8,949,374

#### Sources: DOC, 2015; Te Ara NZ; MfE, 2013

# Distribution of public conservation lands



Distribution of public conservation lands Source: Ministry for the Environment, 2013 Source: Ministry for the Environment, 2013

Stewardship land

# Tourism and Protected Areas in New Zealand

- Close alignment between PAs and tourism
- Tourism (and recreation) has specific acknowledgement in key PA legislation
- Good evidence for PA focus among international visitors in particular:
  - Landscapes and scenery key motivator
- NZ government aims to increase domestic and international visitor use of PAs



# Visitor monitoring in New Zealand PAs

Data Type <sup>i</sup>	Monitoring Approaches	Status (NZ)
Visit numbers	Mechanical or electronic counters / observation / survey; various scales	Good systems in place but coverage is uneven; good international data
Visit & visitor characteristics	On-site and population-based surveys; various scales	Site-specific data is uneven; recent national surveys very detailed
Visitor experience	On-site surveys / qualitative interviews	High level of site-specific detail; mostly national parks
Visitor impacts	On-site surveys / qualitative interviews; bio-physical surveys	Social impacts monitored at popular sites; some ecological data
Visit outcomes & benefits	On-site and population-based surveys; economic valuation methods	Limited data; small number of economic benefit studies
Visitor demand & supply	Population-based surveys / qualitative interviews	Improving data on participation; limited data on demand
Visitor management processes	Evaluation approaches	Limited data

# International visitor data (IVS)

Selected Activity Data: New Zealand International Visitor Survey (June 2014)



per cent

60

# Visitor counting and observations (site-based)





Source: Department of Conservation, New Zealand

## Data on domestic use of Protected Areas



Frequency of using DOC areas for recreation (%)

#### DOC Survey of New Zealanders (Nielsen, 2014)

Proportion who have visited a national park in the past 12 months (%)



Base: All respondents (n=4535 (excl not answered) in 2014, n=4909 (excl not answered) in 2013, n=3885 in 2012 and n=3614 in 2011)

DOC Survey of New Zealanders (Nielsen, 2014)

## Social Impact Monitoring: Westland *Tai Poutini* National Park, NZ



## Social Impact Monitoring: Importance-Performance Analysis, Westland *Tai Poutini* National Park, NZ

Figure 1: IPA Matrix





#### Legend:

a) Crowding

b) Peace and Quiet

c) Disturbanced) Standard of Facilities

e) Learning about Nature & History – Tour Guide
f) Learning about Nature & History – Other Info
g) Provision of Track/Trail and Safety Information

Visitor Monitoring Report, Franz Josef (TRC, 2007)

## Social Impact Monitoring: Effects of aircraft over-flights, Westland *Tai Poutini* National Park, NZ



Espiner & Wilson (2015)

## Social Impact Monitoring: Effects of aircraft over-flights, Westland *Tai Poutini* National Park, NZ



Espiner & Wilson (2015)
# Social Impact Monitoring: The experience of crowding in Westland *Tai Poutini* National Park, NZ



Espiner & Wilson (2013)

# Data on domestic sport and recreation activity



http://www.sportnz.org.nz/

# NZ PA economic impacts and benefits

	Impact on gateway communities	Regional impact	National impact
Facility or Activity	Mt Hutt Ski Area (NZTRI, 2000) Mt Ruapehu skifields (NZTRI, 2002)	Queen Charlotte Track Butcher (2005) Otago Peninsula WL viewing (Tisdell, 2007) Otago Central Rail Trail (Jellum & Reis, 2008) Waitaki River Recreation (Kerr, 2004)	Southern Lakes ski areas (NZTRI, 2005) Sika / Thar hunting (Kerr & Abell, 2014)
Protected Area	Aoraki / Mount Cook NP (Kerr, 1986) Rakiura NP (Booth & Leppens, 2002) Akaroa Marine Reserve (Rose, Espiner & Shone, 2014)	Abel Tasman NP (Butcher, 2005) Fiordland NP (Butcher, 2006) Concessioned tourism in NPs (Wouters, 2011)	Fiordland NP (Butcher 2006)
Region		West Coast conservation land (Butcher 2004)	
Nation			Value of outdoor recreation (Kaval & Yao, 2007) Value of sport & recreation (Dalziel, 2011) Tourism Satellite Account (NZ Govt)

# Visitor Monitoring in New Zealand's PAs: Successes and challenges

	Successes & Advantages	Challenges
Generic	Scale and nature of governance; visibility of tourism and PAs	Organisational focus on specific outcomes only
	DOC's organisational openness to partnerships and information sharing	Issues of representativeness (sampling / non- response)
		Free access to PAs; multiple points for entry and egress complicate monitoring
Specific	Reliable tools & systems for data capture, transfer & storage	Limited strategy for data collection and analysis
	Longitudinal data on international visitation to generic 'national parks'	Expenditure not easy to link to PAs
	Good national data on domestic use of DOC PAs and NZ recreation participation	Missing expenditure data; Limited information on non-users (latent demand)
	Range of site-specific monitoring data for social impacts; visitor information needs	Highly site-specific and fragmented
		No single monitoring method for assessing economic impact / value of tourism in PAs

conservation sustainable use home equitable benefit sharing

Towards Global Monitoring Standards for Tourism in Protected Areas

Convention on

CBD

**Biological Diversity** 

Oliver Hillel Programme Officer Convention on Biological Diversity oliver.hillel@cbd.int

International Workshop "Economic Impacts of Tourism on Protected Areas

21 2E Contomberry Mindday Control Comments

item © of decision XII/11 "To monitor and review recreation, visits and other tourism activities in protected areas, as well as impacts and relevant management processes in ecologically sensitive areas, and to share results through the clearing-house mechanism and other relevant mechanisms"

Existing monitoring mechanisms and tools in the CBD -

- Guidelines on Biodiversity and Tourism Development offers template, User's Manuals offer guidance
- National Biodiversity Strategies, Action Plans and Reports on implementation of PoWs
- COP Decisions and in-depth review of implementation (Decision XI/6 item E)
- Voluntary reporting on the Aichi Biodiversity Targets

Opportunity of including basic tourism monitoring tools in IUCN's World Database on Protected Area, combined with capacity building in WHSites, Ramsar, IBAs, etc. - Basics?

- Arrivals/volume
- Visitor and tourism fees/revenue
- Surveys Expenditure, motivation, satisfaction, willingness to pay
- Composites income/multiplying factor
- Brightspots lessons learned testimonies

#### Mechanisms

- official requests but also low-cost strategies and campaigns for knowledge generation -
- G Adventures/voluntourism,
- Social media,
- Cooperation from operators/hoteliers that help park managers and the IUCN's World Database on Protected Areas

#### Format project/proposal for showing around: tourism mainstreaming in Cancun

# Other perspectives for Cooperation on Sustainable Tourism (from CBD decision)

- CEPA activities on sustainable travel choices (eco-labels, standards and certification schemes, among others)

- regional-level projects to reduce negative impacts and increase positive impacts in "tourism and conservation hotspots" in particular in the least developed countries and small island developing States, as well as countries with economies in transition

- building the capacity of national and subnational park and protected area agencies to engage in partnerships with the tourism industry (concessions, public-private partnerships, payback mechanisms and other forms of payments for ecosystem services)

- studies of the cumulative impact of tourism on sensitive ecosystems and of the consequences on other sustainable livelihood initiatives UNESCO World Heritage Mechanisms of the Convention



- Operational Guidelines
- Periodic Reporting (6 years)
- State of Conservation Reporting
- Reactive Monitoring
- Nominations



Policy on the integration of sustainable development into the processes of the World Heritage

Convention, for possible inclusion in the future Policy Guidance document.

# UNESCO World Heritage Policy Guidelines



Tourism that generates sustainable socio-economic benefits to communities in ways that are consistent with the conservation of the properties.

# UNESCO World Heritage Policy Guidelines



Relevant public agencies and Site Management should apply a sufficient proportion of the revenue derived from tourism and visitor activity to ensure the protection, conservation and management of their heritage values.

Tourism infrastructure development and visitor activity should contribute to local community empowerment and socio-economic development

English Français



#### Welcome to the UNESCO World Heritage Sustainable Tourism Toolkit

Sustainable planning and management of tourism is one of the most pressing challenges concerning the future of the World Heritage Convention today and is the focus of the UNESCO World Heritage and Sustainable Tourism Programme.

These 'How To' guides for World Heritage Site managers and other key stakeholders will enable a growing number of World Heritage Site communities to make positive changes to the way they proactively manage tourism.

 $\rightarrow$ 

How to use this toolkit

# UNESCO World Heritage Sustainable Tourism Toolkit





# UNESCO World Heritage Sustainable Tourism Toolkit







#### **1. ORGANISATION AND MANAGEMENT**





2. MONITORING

Monitoring
Inventory of attraction sites
Protection of sensitive environments
Economic benefits
Local community opinion



#### 3. LOCAL COMMUNITIES

Local access
Support for community
Supporting local entrepreneurs and fair trade
Local career opportunities
World Heritage awareness
Tourism awareness
Intellectual property



#### 4. ENVIRONMENTAL ISSUES

Environmental risks
Solid waste reduction
Low impact transport
Light and noise pollution

Water management



#### 5. VISITOR MANAGEMENT

**Visitor management** 

Access for all

**Visitor behaviour** 

# Expectations and Requirements for a Global Monitoring Standard from the WCMC's perspective

Marine Deguignet







powered by the World Database on Protected Areas



- ✓ Joint product between the United Nations Environment Programme (UNEP) and the International Union of Nature Conservation (IUCN)
- ✓ To provide authoritative and up-to-date information about protected areas and to support protected area decision-making
- ✓ To support countries in their provision of coverage statistics towards reaching the quantitative aspect of Aichi Target 11:

By 2020, at least <u>17 per cent of terrestrial and inland water areas</u>, and <u>10 per cent of coastal</u> <u>and marine areas</u>, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes





#### ✓ Geodatabase:

- Spatial boundaries (point or polygon format)
- Tabular information (28 descriptive fields)

 ✓ IUCN definition of a PA as primary criterion for inclusion in the database

le Of Contents 🛛 📮 🗙						
9 😔 📮 🗉						
😅 Layers						
■ WDPA_poly_Aug2015						
Layer Properties				23	Л	
					1	
General Source Selection Display Symbology	Fields	Definition Query Labels	Joins & Relates Time	HTML Popup		
📄 🔚 🔄 🛉 🕈 🗣 🗣 Options 🕶						
Choose which fields will be visible	E	Appearance				
WDPAID		Alias	OBJECTID			
WDPA_PID		Highlight	No			
PA_DEF	E	Field Details				
NAME		Data Type	Object ID			
	=	Name	OBJECTID			
DESIG		Allow NULL Values	No			
						State State State
V IUCN CAT						
▼ INT_CRIT					A CARL CONTRACTOR	and the second
MARINE						
REP_M_AREA						
GIS_M_AREA						
REP_AREA					A State of the state of the state	
GIS_AREA						
	-					a 👝 🦉 🖓 👘 🗛
						÷.
					•	
		0	K Cancel	Apply		
				-	J •	
						• • •
			•		•	





Currently storing over 217,000
protected areas from more than
190 countries and territories

✓ Approximately 8% of sites as point records













- ✓ Current WDPA is a result of long term work and improvement
- ✓ Started very simple, with compiling only a few information for each site

	1998	2000	2002	2003	2004	2005	2006	2007	2009	2010	2011	2012	2013	2014
DESIG_ENG														
DESIG_TYPE														
GOV_TYPE														
ISO3														
IUCN_CAT														
MARINE														
METADATA_ID														
NAME														
REP_AREA														
REP_MARINE_AREA														
STATUS														
STATUS_YR														
WDPA_PID														
WDPAID														
VERSION														
DESIG														
GIS_AREA														
GIS_M_AREA														
INT_CRITERIA														
MANG_AUTH														
MANG_PLAN														
NO_TAKE														
NO_TK_AREA														
ORIG_NAME														
PARENT_ISO3														
SUB_LOC														





- ✓ For each site, information on status year, name, designation, IUCN category, area, governance type, management information
- ✓ In March 2015, schema was expanded to include information on the other effective area-based conservation measures i.e. conservation areas that do not meet the IUCN definition of a PA but nevertheless have long term commitment for nature conservation
- ✓ Examples of changes:
  - > STATUS\_Established: applicable to sites that are not designated or proposed in a legal, official sense
  - Ownership type: ownership of a PA is often different from its governance type. Particularly in the context of non-government governance types, where the ownership type can be anything from state-owned to communally owned by a community.



 $\implies$  Fields are not definite yet – try and see process



Importance of integrating these sites in the WDPA as their contribution in some countries makes a significant difference in terms of global coverage protected.
E.g Namibia







### **WDPA Data standards**

- ✓ Five requirements to meet the WDPA data standards:
  - 1. All sites must be either protected areas or other effective area-based conservation measures
  - 2. Spatial data from geographic information systems (GIS) and an associated list of attributes must be provided
  - 3. Source information must be provided
  - 4. WDPA data contributor agreement must be signed
  - 5. Statement of compliance needs to be completed (non government data providers only) : to indicate whether a site meets the IUCN definition of a PA, and if not, whether it complies with the WDPA's criteria for other effective area-based conservation measures (OECMs)





### **WDPA** data standards

- ✓ Importance of WDPA schema and clear data standards :
- Interoperability
- Consistency
- Common format usable by all
- Importance of the WPDA\_ID as a unique identifier
- Some countries and international secretariats are adopted the WDPA schema to manage their own datasets

Table 1.1 Summarised description and allowed values for the WDPA attributes. For detailed descriptions see <u>Appendix 1</u> in the WDPA User Manual 1.0 (UNEP-WCMC, 2015)

No	Requirement	Provided by	Field Name	Туре	Length	Accepted values
1	Minimum	UNEP-WCMC	WDPAID	Number (Long Integer)	12	Assignedby WCMC. Unique identifier for a protected Area.
2	Minimum	UNEP-WCMC	WDPA_PID	Number (Long Integer)	12	Assignedby WCMC. Unique identifier for parcels or zones within a protected area.
3	Minimum	Data provider	PA_DEF	Text (String)	20	Allowed values: 1 (meets IUCN and/or CBD PA definition) ; 0 (does not meet IUCN and/or CBD PA definition).
4	Minimum	Data provider	NAME	Text (String)	254	Name of the protected area (PA) as provided by the data provider.
5	Minimum	Data provider	ORIG_NAME	Text (String)	254	Name of the protected area in original language.
6	Minimum	Data provider	DESIG	Text (String)	254	Name of designation.
7	Complete	Data provider	DESIG_ENG	Text (String)	254	Designation in English. Allowed values for international-level designations: Ramsar Site, Wetland of International Importance; UNESCO-MAB Biosphere Reserve ; World Heritage Site. Allowed values for regional-level designations: Baltic Sea Protected Area (HELCOM) ; Cartagena Special Protected Area ; Marine Protected Area (CCAMLR) ; Marine Protected Area (OSPAR) ; Site of Community Importance (Habitats Directive) ; Special Protection Area (Habitats Directive) ; Specially Protected Area of Mediterranean Importance (Barcelona Convention). No fixed values for protected areas designated at a national level.
8	Minimum	Data provider	DESIG_TYPE	Text (String)	20	Allowed values: National, Regional, International.
9	Complete	Data provider	IUCN_CAT	Text (String)	20	Allowed values: Ia, Ib, II, III, IV, V, VI, Not Applicable, Not Assigned, Not Reported
10	Minimum	UNEP-WCMC	INT_CRIT	Text (String)	100	Assigned by WCMC. For World Heritage and Ramsarsites only.
11	Minimum	Data provider	MARINE	Text (String)	20	Allowed values: 0 (Terrestrial PA), 1 (Coastal: marine and terrestrial PA), and 2 (100 % marine PA).
12	Minimum	Data provider	REP_M_AREA	Number (Double)	12	Marine area in square kilometers.
13	Minimum	UNEP-WCMC	GIS_M_AREA	Number (Double)	12	Assigned by WCMC.
14	Minimum	Data provider	REP_AREA	Number (Double)	12	Area in square kilometers.
15	Minimum	UNEP-WCMC	GIS_AREA	Number (Double)	12	Assigned by WCMC.
16	Complete	Data provider	NO_TAKE	Text (String)	50	Allowed values: All, Part, None, Not Reported, Not Applicable (if Marine field = 0).





#### ✓ Data verification process:

✓ Frequency of the update:➢ Every five years

		DATASET DESCRIPTION	N:			
	Marine			Check a fixed value is assigned. If not,		
DATASET DESCRIPTION.			1	assign fixed value.		
DATASET DESCRIPTION:				Check if the value assigned is consistent		
GENERAL OUALITY CHECKS		RESULTS	1	with the data provided and geographic		
Check dataset and repair geometry	γ.		1	location		
Transform dataset to WGS84.			1	Check area is in square kilometers		
Check all sites are within the coun	try for which the protected areas dataset		1	Check and is in square knoniceers.		
was sent including terrestrial and	marine protected areas.			Check not larger than Reported Area.		
Check if there are sites within over	rseas territories.		1	Check area is in square kilometers.		
Make sure data provider confirms	which sites meet the IUCN definition of		1	Compare to GIS area		
protected areas. Those that do not	should go through a verification process to			Check a fixed value is assigned. If not,		
either label them as other effective	area-based conservation measures or			assign fixed value.		
exclude them.			-			
Check if zones or parcels within th	e protected area have been submitted.			Check completeness		
Check for protected areas to be me	erged.		-	Check completeness.		
Check if WDPA IDs and WDPA PI	Ds are provided.			Check displayed as year not date.		
Match data set to WDPA schema	s and wDPA PIDs.			Check a fixed value is assigned. If not,		
Check sites to be removed from W	IDPA		-	assign fixed value.		
Calculate GIS areas	DIA.		1			
Ensure dataset complies with WD	PA data standards: Check all attributes are		1	Check a fixed value is assigned. If not,		
complete including all fixed values	are correctly spelled. Do basic quality			assign fixed value.		
checks for all minimum and comp	lete attributes (see below).			Check a fixed value is assigned. If not		
Send final formatted dataset to dat	ta provider to get their final approval.		1	check a like value is assigned. If not,		
Send dataset to staff in charge of n	nerging all countries data into the WDPA		1	assign fixed value.		
and performing final quality check	before release.			Check a fixed value is assigned. If not,		
QUALITY CHECKS FOR ATTRIB	UTES	RESULTS		assign fixed value.		
WDPA PID	Check there are no points and polygons			Check a fixed value is assigned. If not,		
	using the same WDPA PID.			assign fixed value.		
Country codes: ISO3, PARENT	Check ISO3 and PARENT ISO3 codes are		ory	Check a fixed value is assigned. If not,		
ISO3 and Sub-national location	correct and the protected area's location			assign fixed value		
Name a Name of A Califord	is consistent with the codes.			Check a fixed value is assigned. If not		
Name : Name and Original	Check Name is complete.		4	Check a fixed value is assigned. If hot,		
Name	Check for duplicate names.			assign fixed value.		
I	Check codes/humbers not listed.		1	Check completeness and consistency.		
		Management plan		Check either link or reference is		
				provided.		





 $\checkmark$  How do we collect the data:

 Quality of data provided and information available varies hugely from one country to another



Figure 3.3 Key phases for verification and formatting of spatial and tabular data before being integrated in the WDPA.





### **Uses of the WDPA**

- ✓ Importance of well represented country protected area networks
- ✓ Uses of the WDPA for selected reporting mechanisms and periodic reports:
  - UN List of Protected Areas
  - UN Millenium Development Goals
  - CBD Global Biodiversity Outlook
  - Protected Planet Reports
- ✓ Korea project: Spatial conservation planning project that aims to identify most suitable areas for national PA network expansion







### **Connectivity Conservation Area** Database – draft database

Field Number	Field Name	Proposed Definition		Proposed Values			
1	CCA_ID	A unique ID assigned by UNEP-WCMC to Con Conservation Areas within the Global Connec Database (this ID will be linkable to the WDPA	nectivity tivity Conservation A)	Assigned by UNER	P-WCMC		
2	MetadataID	A unique ID assigned by UNEP-WCMC to link the source table	the CCA main table to	Assigned by UNE	P-WCMC		
3	CCA_Name	The name of the Connectivity Conservation A characters	16 CC	CA_Mgmt	The management undert	aken within the Connectivity	<b>Draft Values</b> : To be defined (modified IUCN protected areas categories e.g. strict wilderness
4	Orig_Name	The name of the Connectivity Conservation A language			Conscivation Areas		species specific, landscape, sustainable use etc.)
5	ISO3	The country, territory or other administrative interest that a Connectivity Conservation Area resides within.	17 Go	оv_Туре	A description of the gove Conservation Areas, write types, described in the IU	rnance structure of a Connectivity en as one of the 11 governance sub- CN Guidelines on protected areas.	<b>Draft Values:</b> To be defined (modified IUCN PA governance categories e.g. National ministry or agency, transboundary governance.
6	Region	The region within which the Connectivity Con resides.					Collaborative governance, Indigenous peoples,
7	Realm	The biogeographic realm within which the Co Conservation Area resides	18 M	gmt_Auth	The agency, organisation	individual or group that manages the	Free Text
8	Scale	The spatial extent of the Connectivity Conserv			Connectivity Conservation Area		
9	Area	The reported area of the Connectivity Conserved kilometres	19 M	gmt_Plan	Link or reference to the C management/ guidance p	onnectivity Conservation Area's lan	Free lext
10	WDPA_Count	The number of WDPA recognised protected a the Connectivity Conservation Area	20 Er	abling_Mech	The enabling mechanisms in place to support the Connectivity Conservation Area?		<b>Draft Values:</b> To be defined e.g. National legislation; National policy; Lower government
11	Origin_Yr	The year in which the CCA was first delineated					programmes; International agreements; NGO
12	Status	The current legal or 'official' standing of the C Conservation Area					programmes; Protected Areas legislation
13	Status Yr	The year in which the current CCA status was	21 CC	Criteria	The number of global cor	inectivity conservation	Number out of To be defined
14	CCA_IUCN	Does the CCA meet the IUCN definition of a C			foundations/criteria met	by the Connectivity Conservation Area	
15	CCA_Type	The type of Connectivity Conservation Area	22 Su	pporting_Info	Is there supporting inform Area? (If yes please provi	nation on this Connectivity Conservation de separately)	Draft Values: Y/N
			23 Sp	atial_Data	Is there spatial information Connectivity conservation	on available on the location of this n area? (If yes please provide separately)	Draft Values: Y/N





### **Benefits and challenges**

- ✓ Not just a one-way process. Countries need to see the benefits for them in taking part in this exercise:
  - $\checkmark$  Importance to clearly communicate the benefits
  - ✓ Importance to make the data review process for countries as simple and easy as possible (people are busy, if too time-consuming or if
  - ✓ Capacity building
  - ✓ Provide GIS trainings
  - ✓ Provide database management trainings
  - ✓ Challenges: technical capacity, political situation, language, data sharing





- ✓ Doesn't currently include any information on tourism in protected areas
- ✓ Several issues to consider:
  - $\succ$  What is the best way to compile the information
  - > What information to collate
  - > Lots of sites might not have any visitor potentials
- ✓ Inconsistency in using the IUCN management categorisation system:
  - Process is voluntary > not all countries decide to assign IUCN cat
  - Different meanings in different countries
  - > A PA without an IUCN cat assigned is still a PA!




# Towards collating tourism information globally

- $\checkmark$  Questions to bear in mind:
  - Scope of the database > only natural sites or include cultural sites ?
  - What attributes can realistically be collected from a representative sample globally ? Is it temporal, objective, consistent ? Is it sufficiently unbiased to make a global indicator ?
  - Some sites don't have any visitor potential (and it might not be desirable) > how to handle and communicate these gaps in the dataset
  - ➢ Financing of such a database ?





Thank you!

Marine Deguignet marine.deguignet@unep-wcmc.org

Protected Areas Programme UNEP-WCMC

http://www.protectedplanet.net/







#### **Michael Harbrow**

New Zealand Department of Conservation

Department of Conservation Te Papa Atawbai

www.doc.govt.nz



## Introduction

- Organisational overview
- How we use monitoring information
  - Visitor counts
  - Economic impact analysis
- Expectations and requirements for a global monitoring standard



## **DOC manages:**

•30% of New Zealand's land area

13 National Parks

•3 World Heritage Areas



Department of Conservation *Te Papa Atawhai* 

#### Te Wāhipounamu South West New Zealand World Heritage Area



### The Sub Antarctic Islands of New Zealand



## **Tongariro National Park**



## lwi are our Treaty partner

The Conservation Act 1987 requires we give effect to the principles of the Treaty of Waitangi in all aspects of our work.

### **DOC's facility network**



14,700 km of track



> 200 vehicle accessible campsites



22 Visitor centres



964 back country huts



Thousands of bridges, boardwalks, signs, toilets and other infrastructure

### DOC's wider mandate

- •Biodiversity protection and advocacy
- •Pest and weed control
- •Marine protection
- •Protecting freshwater species and habitats
- International agreements





Department of Conservation Te Papa Atawhai

### Historic and cultural heritage















## **Partnerships**



Developing partnerships and growing conservation engagement is an important part of our work

Department of Conservation *Te Papa Atawhai* 

- Budget of approx \$347 million NZD (€187 million).
- 40% for recreation / tourism
- We earn \$34 million from concession fees, donations, user charges and retail.

Just under 2000 full time equivalent staff.



## HOW DOC USES VISITOR COUNT DATA



Percentage of New Zealanders who have visited public conservation lands and waters in the previous 12 months



Base: All respondents (varies)

Source: Pre-2011 - UMR survey; 2011/12 - CB survey, 2013 & 2014 - Nielsen, 2015 - Ipsos.

## Percentage of New Zealanders who have visited an historic site administered by DOC in the previous 12 months



Base: All respondents, excluding not answered: 2015 (n=3,416), 2014 (n=4,479), 2013 (n=4,814). All respondents: 2012 (n=3,885). \*Note: Question in 2012 was different to current question.

#### phv case study #1

### GAINING ALTITUDE...

DOC's Great Walks and the Air New Zealand partnership







#### Sharing information with the public and stakeholders





## CAMPING IN NEW ZEALAND



## DRIVERS FOR MEASURING THE ECONOMIC IMPACT OF PARK TOURISM

Department of Conservation Te Papa Atawbai





## Conservation enriches people's lives.

## **Natural Capital and Ecosystem Services**











#### Te Papanui Conservation Park

## Whangamarino wetland

Millions of dollars

in avoided flood

control costs.

Drinking water \$93m

Hydro-electricity \$31m

Irrigation \$12m

#### Total \$136m

(NPV 2005)

Carbon storage from afforesation / reforestation of conservation land. Ecosystem services of MPAs

\$403 billion

2.07 times GDP

231-682 Mt CO<sub>2</sub>e

# Other studies on natural capital / ecosystem services

Author(s)	Year	Title
Eppink et al.	2015	An exploration of the impacts and dependencies of New Zealand's key export commodities on the ecosystem services provided by New Zealand's native ecosystems.
Roberts et al.	2015	The nature of wellbeing: how nature's services contribute to the wellbeing of New Zealand and New Zealanders
Blaschke	2013	Health and wellbeing benefits of conservation - The contribution of natural environments to our health and wellbeing
NZIER	2013	Valuing natural assets Essential for decision making: A public discussion document
McAlpine & Wotton	2009	Conservation and the delivery of ecosystem services: a review

#### 2. Demonstrating that parks are not "locked up" or "non productive."

Year	Park	Est. # visitors	Community	Total Output	Value add (income)	Employment (FTE)
2004	Abel Tasman National Park	150,000	Nelson / Tasman region	\$45 million	\$18 million	370
2004	Queen Charlotte Track	53,000 visitor nights 12,000 day visitors	Picton & Marlborough Sounds area	\$9.4 million	\$4.3 million	98
2004	West Coast conservation land	Not stated	West Coast Region	\$136 million	\$73 million	1220
2005	Fiordland National Park	593,000	Southland Region & Queenstown Lakes District	\$196 million	\$78 million	1600
2011/12	Taupō Fishery	8,650 adult season licenses 6,949 adult week licenses	Taupō District	\$29 million	\$11 million	294
2012	Ahuriri Conservation Park	8,800	Omarama & Twizel townships	\$1.34 million (direct)	\$0.4 million	4.8
2014/15	Otago Central Rail Trail	14,956	Otago & Central Otago	\$10.4 million	\$5.3 million	102.4









#### 3. Assisting with resource allocation



Department of Conservation Te Papa Atawbai

	Impact on gateway communities	Regional impact	National impact	
Facility	Mt Hutt ski area (NZTRI 2000) Mt Ruapehu skifields (NZTRI 2002)	Queen Charlotte Track (Butcher 2005) Otago Peninsula wildlife viewing (Tisdell 2007) Cape Rodney Okakari Pt Marine Reserve (Hunt 2008) Southern Lakes ski areas (NZTRI 2005) Taupō Fishery (APR Consultants 2013) Otago Central Rail Trail (Jellum & Reis 2008, Central Otago District Council 2011, 2015)	Southern Lakes ski areas (NZTRI 2005)	
Park	Rakiura NP (Booth & Leppens 2002) (Tourism Resource Consultants 2010) (Predator Free New Zealand 2014) Ahuriri Conservation Park (Tourism Resource Consultants 2012)	Abel Tasman NP (Butcher 2005) Fiordland NP (Butcher 2006) Concessioned tourism in three NPs (Wouters 2011)	Fiordland NP (Butcher 2006)	
Region		West Coast conservation land (Butcher 2004)		
Nation			Value of outdoor recreation (Kaval & Yao 2007) Value of sport & recreation (Dalziel 2011) Tourism satellite account (Statistics NZ 2014)	Department o Conservation Te Papa Atawba

## EXPECTATIONS AND REQUIREMENTS FOR A GLOBAL MONITORING STANDARD

Department of Conservation *Te Papa Atawbai* 

## **High level needs**

- Comparable (ability to benchmark)
- Credible
- Timely
- Able to be applied at different scales
- Cost effective
- Easy to understand and apply
- Appropriate reporting frequency
- Covers both cost and benefit



## **Technical aspects**

- Standardisation of various aspects of the analysis would be very welcome e.g.
  - Measuring visitation
  - Spend categories
  - Defining park affinity and affect of park on length of stay in the region
  - Treatment of spending by locals
- A global standard could provide guidance on sampling
  - NZ tourism is highly seasonal with separate defined peaks for domestic and international tourism in summer
  - Tongariro NP has winter ski activity

