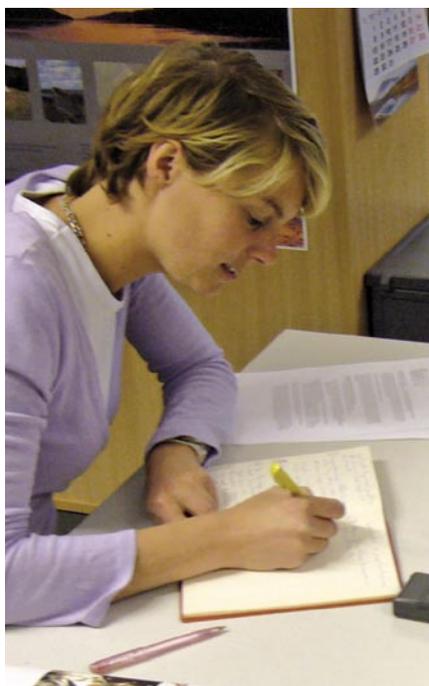


PAN Parks

Lessons Learned Series



4

How to Perform an Analysis of Perceptions and Attitudes

January 2008



Dear Reader,

The fourth issue of the Lessons Learned Series deals with research. It explains why research is important to the PAN Parks Foundation, what we do and how we are doing it. In this document, we will share with you our lessons learned from the study of perceptions and attitudes about PAN Parks, park management and the sustainable development of tourism.

Research is very important to organizations such as ours as it provides the necessary knowledge needed to plan effectively for the future, to be innovative and to deliver results. That is why together with our network of research institutes and universities we are committed to gaining more knowledge about the reality in which we operate. And the reality is interesting.

We hope you find value in the information we are sharing with you.

Sincerely,

Dr. Stuart Cottrell & Mylene van der Donk



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Associate Professor & Global
Tourism Coordinator,
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Background information: The PAN Parks Research Network

Right from the beginning in 1996, PAN Parks has cooperated with research institutes and universities. Our integration of theory and practice, starting with the formulation of our principles and criteria, has made PAN Parks the innovative concept that it is.

Following the initial implementation of the concept in 2002, researchers from several institutions have continued to commit themselves to PAN Park's efforts and serve on our Advisory Council. Among them are representatives from Leeds Metropolitan University (UK), Glion Institute of Higher Education (CH) and the Professional University of Leisure Studies, NHTV (NL). In addition, MSc students from other universities in Europe and the United States have conducted research on behalf of PAN Parks at both verified and candidate parks. To ensure the quality of student research and optimal contribution to the problems we face during the implementation of our concept, a PAN Parks Research Network was created to coordinate a research program in 2003. The Research Network was originally hosted by Wageningen University for life sciences in the Netherlands.

For the most part, graduate and undergraduate students conduct the research and it is often done on a voluntary basis with the student paying their own costs to do the research. Faculty members have also contributed a significant amount and their voluntary support has been a tremendous benefit to our Foundation. Thanks to them, the results we have received have been useful and interesting to management and PAN Parks decision-making in the form of reports, conference presentations and journal articles. However, to implement a successful monitoring programme for PAN Parks, external funding for a more rigorous program of research is necessary.

The research

An important part of the PAN Parks concept is our cooperation with local stakeholders to promote sustainable tourism, in other words, socio-economic aspects. These aspects are examined by our Research Network. The ecological aspects are not the focus of the network since the National Parks (NP) involved in PAN Parks conduct much of their own scientific research related to biodiversity.

In recent years, several topics have been examined: studies related to the verification process, the Sustainable Tourism Development Strategy (STDS), product development, financial mechanisms, collaboration, marketing, visitor management, the meaning of wilderness to Europeans, and many others. Most of the reports are downloadable from our website: www.panparks.org/projects/research

Why is there a need to analyze perceptions and attitudes?

After 10 years of striving to make our unique concept work, we have to ask ourselves if we are delivering the benefits we have promised. We at PAN Parks believe that in addition to improved protection and management practices, that local businesses and communities have profited from PAN Park's status. Yet, the socio-economic benefits are less visible than those for conservation.

Thus, the time has come for PAN Parks to show how we live up to our promises. Research provides insight into existing situations and a basis for making effective decisions and measures that can help the Foundation and park management authorities.

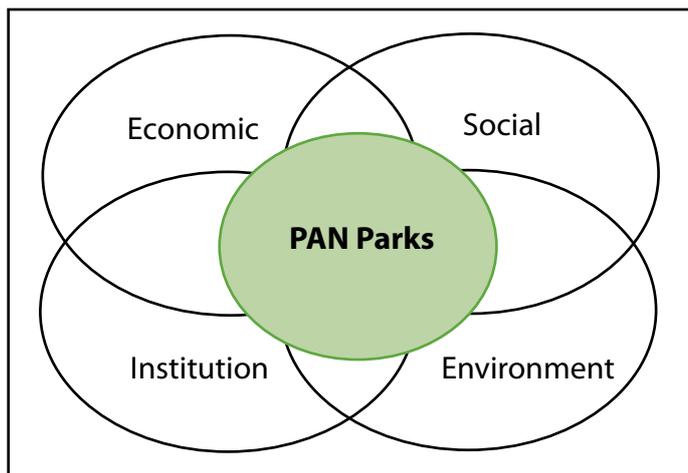


Figure 1. Sustainability Framework & PAN Parks

In 2005, the Research Network began to take this task seriously and created a methodology to measure the social, cultural, institutional and economic impacts of PAN Parks on the region around certified parks and is referred to as the Analysis of Perceptions and Attitudes (APA) (previously referred to as a Cost Benefit Analysis (CBA)).

A sustainability framework provides the theoretical lens to guide the research process (see Figure 1). Figure 1 shows the key dimensions important in following a holistic approach to sustainable development.

Development of the research tool

A mixed methodology including a 4-page questionnaire and 15 question interview protocol was developed by Dr. Stuart Cottrell, Associate Professor, Colorado State University, USA. In 2005, he pilot tested the study at Bieszczady NP in Poland using a Polish translation of the study. Based on the pilot study, the questionnaire was simplified slightly and the interview questions reduced to 10. A PAN Parks methods manual was written as a guide to conduct similar studies in all certified PAN Parks. Baseline studies among all of the parks using a similar methodology will allow the PAN Parks Foundation to compare data between parks and to help us learn from the different studies. The methodology will be repeated over the years to measure change in beliefs, opinions, attitudes, values and impacts over time.

We aim to conduct the study at all certified parks with certified local partners. To date, the research has been done at Bieszczady NP in Poland (as a pilot test), Retezat NP in Romania, Central Balkan NP in Bulgaria and Oulanka NP in Finland. Rila NP in Bulgaria and Majella NP in Italy are scheduled for 2008.

What is the PAN Parks Analysis of Perceptions and Attitudes?

The APA methodology is a tool used to gain insight into who the protected area stakeholders are, in what way they are involved in tourism development, and in what way they perceive the four dimensions of sustainability. Several sub-questions are included to measure general feelings about tourism development, PAN Park benefit to local businesses, local communities, and sustainable development. In addition, questions address social change and perceptions of those changes, company involvement in the decision making processes in the park region, and economic benefits for local entrepreneurs. Both PAN Park partners and non-partners are included in the study which consists of two phases as a mixed methods approach:

- ✓ **Quantitative** → Questionnaire with local residents
- ✓ **Qualitative** → Semi-structured interviews with different stakeholders

Quantitative: Seeks information guided by the following questions:

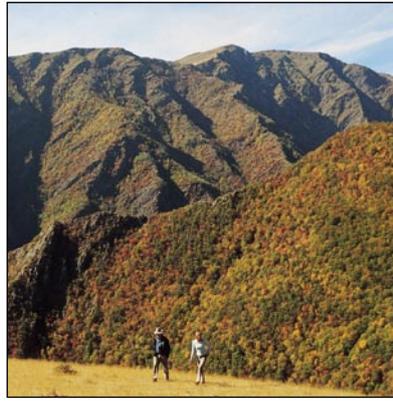
1. What is the profile of tourism stakeholders in this particular PAN Park region?
2. To what extent are tourism stakeholders familiar with the PAN Parks concept?
3. What are the benefits of PAN Parks status?
4. Who benefits most from PAN Parks status?
5. How important do stakeholders feel the institutional, economic, socio-cultural and environmental aspects of tourism are to the PAN Parks region?
6. To what extent are stakeholders satisfied with the institutional, economic, socio-cultural and environmental aspects of tourism to the PAN Parks region?
7. To what extent is local participation in sustainable tourism development evident?
8. Is there a relationship between PAN Parks status of the park and stakeholder satisfaction with tourism development?



Borjomi-Kharagauli National Park, Georgia



Rila National Park, Bulgaria



Central Balkan National Park, Bulgaria



Retezat National Park, Romania

Qualitative: Provides insight into the following areas (research questions are adapted based on each setting):

1. What is your general opinion of tourism development in the region?
2. What is sustainable development according to you?
3. Do you think that the tourism development in your area is developed according to sustainable ideals?
4. Do you know the concept of PAN Parks?
5. How would you evaluate the overall sustainability of tourism to the PAN Park?
6. What do you think the role of businesses should be in promoting tourism to the PAN Park?
7. To what extent do secondary business products benefit from tourism to the PAN Park (economic, institution, social, environmental benefits)?
8. How does the PAN Park affect other businesses in the surrounding region?
9. How does the PAN Park contribute to local community development? In general and specifically?
10. How can local inhabitants contribute to the overall positive image of the PAN Park (volunteers, friendliness, attitudes towards tourists, etc.)?
11. Is there open communication/cooperation between the PP and local inhabitants?
12. What is the economic contribution of PAN Park's to your business?
13. What is your opinion about the social-cultural contribution of the PAN Park to the local community?
14. What is the environmental contribution of the PAN Park to the local area?
15. Are there any conflicts between the PAN Park and local people now?

Note: The full methodology and reports are downloadable from www.panparks.org/projects/research.

Our Lessons Learned

✓ RESEARCH METHODOLOGY

The mixed methods have thus far been adaptable to the different regions with lessons learned from each location.

Sampling Technique

→ Sample methods include onsite self-administered surveys and mail surveys with follow-up mailings (e.g., post card reminder). An email or online survey has not been tried at this point.



Majella National Park, Italy

An onsite self-administered survey was conducted in Poland and partially in Bulgaria and in Finland, and was primarily directed towards PAN Park's partners and tourism stakeholders that participated in the interviews as well. This was done as a means to corroborate findings between the questionnaire and stakeholder interviews. A mail survey with a postage paid self-return envelope was done in Romania, Bulgaria and Finland. An 80% response rate was received from a convenience sample (n=92) in the Central Balkan NP region of Bulgaria. In Finland, we received a 31% response rate from a random sample of households that was made in the summer of 2007. This is a moderate response level considering the post card reminder with its drawing for prizes; however the modified mail survey approach (2 mailings versus 3 or 4) resulted in a response rate equivalent to other studies using a mail survey and postcard reminder only. In Romania only a few returns were received with most of the surveys done onsite.

The studies at both Retezat NP in Romania and Central Balkan NP in Bulgaria were done by Masters students and would be considered pilot studies with small samples. The study recently completed at Oulanka NP in Finland is the first study with a relatively robust sample and serves as a model approach for future APA studies. Researchers from the Oulanka Research Station, PAN Parks Foundation, and Colorado State University conducted the study as an interdisciplinary team and represents the ideal approach sought for future studies.

Onsite surveys and mail surveys are costly as they involve the need for trained researchers. Although a general methodology has been established, the expectation that park personnel will be able to conduct a similar study without technical assistance from the PAN Parks Foundation is unrealistic for a successful monitoring program. Therefore if you are planning to conduct your own research, we advise that you seek assistance from an experienced researcher.

Interviewing Techniques

→ Semi-structured interviews tend to provide the most insightful knowledge about the effectiveness of PAN Parks. There have been modifications to the questions given at each study site due to the type of interviewees, cultural context and experience of the interviewer. Interviews were conducted in Romania and Poland using onsite native speakers as the interviewers with direct translation into English at some point following the interview. In Bulgaria, the researcher was a Bulgarian while both Finnish and English speakers conducted the interviews in Finland. Interviews are meant to be voice recorded, however as was the case in Romania, interviewees were much more open to talk when the voice recorder was turned off.

Although a standard interview protocol is available, onsite conditions such as language, terminology, and interviewer experience should always be considered.

Analysis

→ The larger the sample, the more reliable your results will be. However, several studies such as Bieszczady NP in Poland and Central Balkan NP in Bulgaria had small samples yet have yielded valuable insights and recommendations for park management and the PAN Parks Foundation. Consistent results among studies allude to the value of the theoretical/analytical approach used to guide the research.

Data Collection

→ Mail surveys are the easiest way to collect information from larger samples. However, it is more expensive and does not work in all destinations. Valuable results and insights can be obtained from varying sample sizes. We have learned that some destinations require local researchers that understand the culture and local customs, especially in villages and locations where people are very critical. Well-respected and trusted (by the locals) interviewers should be used to help and/or conduct the interviews to gain reliable data. We found this to be the case in both Poland and Finland.

Language

→ Surveys and interview questions must be translated into the local language and pilot tested to check for appropriate meaning. This means that both the survey and interview should be conducted among local people to test for understanding, reliability and validity. In Poland and Romania for instance, a translator/interpreter was necessary because the researchers did not speak the local language. This is of course more time consuming and runs the risk of misrepresentation because of the translator's interpretation.

Economic Data

→ The economic component of the methodology has yet to be implemented due to the need for further elaboration to measure concrete economic benefits of PAN Parks. One of the challenges we face is reluctance to share financial data among business owners and the micro versus macro scale of the data sought.

Timing

→ Study timing is crucial. Most tourism stakeholders are too busy during their high season, which varies between countries (i.e., winter is the low season in Poland while it is the high season in Finland). Site specific activities such as berry picking, hunting season, or religious holidays may influence resident willingness to participate.

Interviewees

→ Background knowledge of the interviewees is important. The semi-structured interview questions demand some background information. Interviewees are expected to understand the concept of sustainable tourism, and be informed to some extent about business benefits and tourism numbers.



Interviewing a stakeholder of Oulanka National Park, Finland



Oulanka National Park, Finland



National Park Paanajärvi, Russia

✓ TIME & COSTS

The total cost of a study with a mixed methodology is high. The number of man-hours increases quickly because of the time necessary to conduct interviews and transcribe the content of the interviews (1 hour interview = 3 hours transcribing on average) and entering survey data (4 to 5 surveys per hour) as well as analysis, interpretation, and report writing. Dependent on knowing the size of the sample population and local prices for postal service, sample generation, labor, supplies/materials, and travel costs, time and costs can be estimated. The key to be time and cost effective is through local support and coordination.

For instance, at Oulanka NP in Finland in 2007, 273 out of 908 surveys were returned and 40 semi-structured interviews were conducted with an estimated cost of €20.000 for labour, travel, materials and sample generation estimated on a commercial basis. This estimate does not include the time necessary for analysis of survey and interview data nor report writing.

✓ THE RESEARCHER

An important point to consider is who will do the research. Interviews in some cases are best carried out by local researchers who are familiar with the culture and preferably with the people as well. This avoids language barriers and interviewees feel more comfortable and confident giving their answers. When we worked in Romania with students who did not speak the local language (where the locals spoke little to no English) we had the most difficulties.

In Bieszczady NP, local stakeholders were very pleased that somebody from the park came to visit them to ask for their opinions along with an international researcher. It provided opportunities for integration and greater exchange of information which would not have happened otherwise, and the information from the interviews has been very valuable to park staff. In addition, further information and local insights were shared between the interviewee and local researcher not specific to the APA, but to help gain an overall view of sustainable tourism development in the region. By doing the research ourselves from PAN Parks or with third parties (students from foreign countries as volunteers) we risk losing valuable context specific information because it stays in the heads of people not further involved with the PAN Parks project or with the National Park.

✓ LESSONS FOR SUSTAINABLE TOURISM DEVELOPMENT

People living around protected areas expect the park to serve as a magnet for tourists. Is tourism marketing the park's responsibility for the region? Local expectations are often too high with short term expectations. For instance, a study at Bieszczady NP in Poland in 2003 showed that local businesses expected an increase in domestic and international visitors to the park since its verification in 2002. Obviously unrealistic, such expectations led to local dissatisfaction and disillusion with PAN Parks.

Direct contact between local stakeholders and park management is necessary for the Sustainable Tourism Development Strategy's (STDS) to work effectively. All stakeholders feel better informed and more committed to achieving the set goals, and the process contributes to the feeling of having a say in the decision making process.

Indicators and standards for sustainable tourism: Survey questions measuring the four dimensions of sustainability (see Figure 1) in essence represent potential sustainable tourism indicators. Indicators are measurable and manageable variables that reflect the essence or meaning of management objectives. Study items have been consistent across research locations validating the application of a sustainability framework to monitor resident beliefs in the value of PAN Parks, benefits derived and feelings about sustainable tourism development. The next step is to create standards for the indicators. Standards are the minimum acceptable condition for each indicator variable. For example, what percent of local residents need to be satisfied with each dimension to claim that PAN Parks has made a positive contribution to the local region? Development of indicator specific standards is only possible with continued monitoring of tourism development.

✓ LESSONS FOR PARK MANAGEMENT

The various studies provide insight and understanding of the local situation and provide data that may be useful for park management and tourism development in the region. Although, most of the results are park or site specific, findings show that people find it important to be informed about issues and to be involved in decision-making processes. Often opportunities exist for local participation, yet awareness of or familiarity with those opportunities is limited. The need for improved communication from park representatives to local communities has been a key recommendation in many of the studies.

All over the world, people living close to protected areas tend to be less satisfied with tourism development. The Oulanka NP study revealed similar findings in a location well noted for quality management, nature protection, and tourism development. This alludes to the importance of communication strategies and the goals of the areas STDS – which forces parks to look externally to the buffer zones and local regions while thinking internally.

✓ LESSONS FOR PAN PARKS

At this point, local knowledge about PAN Parks is very limited, as you might expect for any initiative in its infancy. People know about PAN Parks but are not familiar with what the concept actually represents; this will take more time. However, in all the studies done, local expectations are quite positive, especially as it pertains to the environmental contribution of the PAN Parks certification as well as the socio-cultural contributions.



Fulufjället National Park, Sweden

Although we do not claim cause-effect, research consistently shows that when familiarity with PAN Parks increases, satisfaction and positive feelings about tourism development in the region is higher than in those respondents not familiar with PAN Parks. As beliefs in the benefits of PAN Parks increases, so do the positive feelings about the various aspects of sustainable tourism in the PAN Parks regions. We cannot claim that increases in satisfaction with tourism development and the various aspects of sustainability are solely because of PAN Parks certification; however, study results allude to potential attitudinal changes which support the need for further research.

Local people tend to have limited knowledge about the activities the Foundation engages in to support their region. Improved communication and cooperation with the park are key aspects of the Foundation's criteria: the Sustainable Tourism Development Strategy (principle 4) and the work with local businesses (principle 5). This work is done behind the scenes and will not be seen by local people as an outcome of the PAN Parks partnership. Although not important, this may deter local beliefs in the benefits or value of PAN Parks contribution to local and/or regional development.

Conclusion

The Analysis of Perceptions and Attitudes process has only just begun and results encourage us to seek more knowledge. In particular, what is the situation in the other parks, and should we focus on studying similar aspects in those parks? It will take more time to determine if PAN Parks status benefits sustainable development in PAN Park locations. Our initial results provide benchmarks for future studies. Based on the APA, valuable information is produced for potential investors, to satisfy board members and to guide management of certified PAN Parks. It defines focus areas and shows our strengths.

Although cause-effect (PAN Park concept) cannot be claimed, perhaps those stakeholders familiar with the ideals supported by PAN Parks have a better understanding of what sustainable tourism involves; consequently they tend to value the importance of the various aspects of sustainability more than those people not informed about PAN Parks.

PAN Park's primary benefit tends to be environmental sustainability, yet there is evidence that it contributes to aspects of socio-cultural sustainability as well. Institutional benefits regard the development of a sustainable tourism network via linking park policy and activities to that of local businesses and communities. Stakeholders value the PAN Park concept and this will improve and spread to other stakeholders in the future.

PAN Parks, with its sustainable tourism development strategy process, is viewed as a driving force for sustainable development combining protected area concerns for environmental protection with active involvement of tourism businesses. The PAN Parks Foundation will continue to examine the benefits of PAN Park certification with studies at park locations in Bulgaria and Italy in 2008. Similar results found at Central Balkan NP in Bulgaria and Retezat NP in Romania imply that PAN Park status enhances resident involvement in tourism development, improved park management and belief in the value of nature conservation due to international recognition.

If you wish to know more about PAN Parks various research activities, go to www.panparks.org/projects/research.

Upcoming Lessons in the Series

- ✓ Building Awareness for Your Protected Area.....February
- ✓ How to Lobby Decision Makers.....March
- ✓ Conducting Independent Audits.....April
- ✓ The Value of a Research Network.....May

Contact Details

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To download past lessons in the series, go to www.panparks.org/projects/lessonslearnedseries.

To find out more about PAN Parks visit panparks.org.

An additional list of PAN Parks research related publications

- Cottrell, S.P. & Raadik, J. (2008), Research note: Socio-cultural benefits of PAN Parks at Bieszczady National Park, Poland, *Finnish Journal of Tourism Research (Matkailututkimus)*, 1, 56-67.

- Cottrell, S.P. & Cutumisu, N. (2006). Sustainable tourism development strategy in WWF Pan Parks: Comparison between a Swedish and Romanian National Park. *Scandinavian Journal of Hospitality and Tourism*. 6(2), 150-167.

- Huayhuaca, C., Cottrell, S.P., Gradl, S. & Mateev, P. (2007). Resident Perceptions of Sustainable Tourism Development: A Comparison of Two European Parks. Paper presented at for Nordic Tourism Conference, Helsingborg, Sweden, Sept. 2007.
Available at http://www.msm.lu.se/fileadmin/files/msm/bilder/Nordic16/Huayhuaca__Cottrell_et_al._08-30-07.pdf

- Raadik, J., Bosangit, C., Shi, L. & Cottrell, S.P. (2005). Perceptions of Wilderness: Comparison among Finns and Estonians, In *Book of Abstracts for the 11th International Symposium on Society and Resource Management, From Knowledge to Management: Balancing Resource Extraction, Protection & Experiences*, Östersund, Sweden, June 2005, p. 139.

- Berg, C. van den, Bree, F. van, & Cottrell, S.P. (June 2004). PAN Parks principles: cross-cultural comparison - Poland/Slovakia. pages 227–234 in: Sievänen, Tuija, Erkkonen, Joel, Jokimäki, Jukka, Saarinen, Jarkko, Tuulentie, Seija & Virtanen, Eija (eds.) *Policies, methods and tools for visitor management – proceedings of the second International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas*, June 16–20, 2004, Rovaniemi, Finland.
Available at <http://www.metla.fi/julkaisut/workingpapers/2004/mwp002-32.pdf>

- v/d Donk, M. & Cottrell, S.P. Developing a visitor management framework for WWF's PAN Parks project – case study of a National Park in France. *Monitoring and Management of Visitor Flows in Recreational Protected Areas Conference Proceedings*. Ed by A. Arnberger, C. Brandenburg, A. Muhar, January 2002, pp. 320-327.
Available at http://ifl.boku.ac.at/veranst/mmvconference/docs/proceedings/Visitor_and_Park_Management.pdf