

Perception of the National Park Stilfserjoch by the Local Population

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Abstract

Several studies confirm the finding that nature conservation can not be successful without the involvement of the local population (COLCHESTER 2004; GRAINGER & GRAINGER 2003; TRAKOLIS 2001; WHITE & LOVETT 1999). Our study was conducted within the Nationalpark Stilfserjoch, which is due to its history and the very complex landscape with high human influence and wide altitude range predestined for an acceptance study (GAFTA & PEDROTTI 1997). In 2001, a representative survey of 1100 residents of the National Park has been carried out in face-to-face interviews, and acceptance has been evaluated considering ecological aspects (attitude towards natural resources and conservation), social aspects (effects of the national park on various groups of people and land use, relevance of and satisfaction with the park authorities), as well as political and economical aspects (management of protected areas, clash of economic and ecological interest).

Only 5.6% of the interviewees were against the Nationalpark Stilfserjoch, but we determined restricted support among 41% of the interviewees. By discriminant analysis, we elaborated the significant influence factors, which led to restriction of the protected area. The results exhibit a great importance of personal and general welfare. We further detect a high influence of culture and also of the attitude towards nature protection in general. With this knowledge it will be possible to develop instruments for politics and administration to increase acceptance.

Keywords

national park, acceptance, influence factors, local population, management, nature conservation

Study area

The Nationalpark Stilfserjoch covers an area of 134.620 ha (Fig. 1) and surrounds the entire massif of the Ortles-Cevedale group and its valleys. The Park's altitude is ranging between 650 m and 3899 m (Ortler). The conservation area borders with others (Swiss National Park, Nature Park Adamello-Brenta, Regional Park Adamello) and thus is of great strategic importance regarding its location in the centre of the Alps. The conservation area extends over two Autonomous Provinces (Bozen-Südtirol and Trentino) and one Region (Lombardia).

Because of the following reasons this National Park is predestinated for such a research: The National Park was pushed through in the year 1935 without any consultation of the population and partly against a strong objection. Besides imposing glaciers and high-altitude pastures, also low-lying valleys with extensive forests, farming areas and villages are located within the National Park. It is thus clear that conflicts arise in the contact zone between nature and managed areas. The population within the Park partly belongs to the Italian and the German speaking ethnic group. Hence also the cultural differences may affect the acceptance.

Methods

To collect the survey questionnaire data we decided to carry out personal, face-to-face interviews to obtain a high return rate (BERNARD 1994). In spring 2001, 1100 residents were questioned within the entire National Park (400 in Bozen-Südtirol, 300 in Trentino, 400 in Lombardia). People of all municipalities belonging, at least partly, to the National Park were selected. The number of persons to be questioned per municipality was calculated in relation to the total inhabitants of the municipality and the respective proportion of area belonging to the National Park.

All questions were used as independent variables in a stepwise discriminant analysis. The objective was then to analyse the influence factors for the voting behaviour of the interviewees. As dependent variable the 'Sunday question' was used: 'If you have to vote about the continued existence of the Nationalpark Stilfserjoch on next Sunday, how would you vote?'

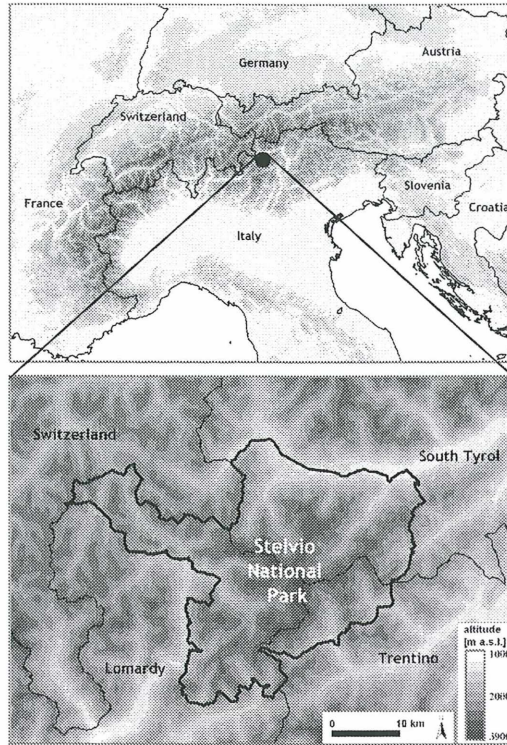


Fig. 1: Location of the Nationalpark Stilfserjoch.

Results

Approximately half of the local population was in favor of the national park and only 5.6% did not vote for the continued existence (Fig. 2). Remarkably 41.3% of the interviewees would vote for the continued existence in case of new demarcation and zoning of the national park area. The amount of people who would abstain from voting was not taken into account for further analyses.

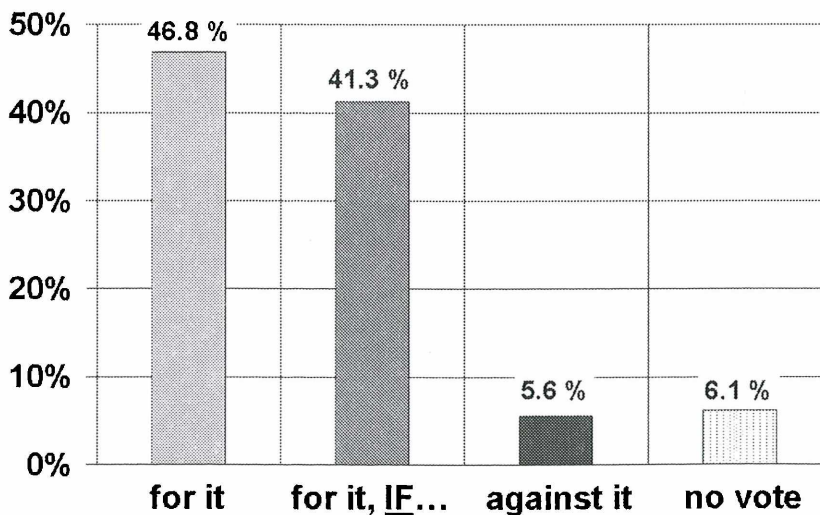


Fig. 2: Voting result to the 'Sunday question': If you have to vote about the continued existence of the Nationalpark Stilfserjoch on next Sunday, how would you vote?

Subsequently, the interviewees were classified into three groups according to their answer to this question by discriminant analysis. Altogether, 70 independent variables (answers) were available and 718 observations (interviewees) were valid for classification.

Tab. 1 exhibits that more than two third of original grouped cases were classified correctly (68.4%).

Vote about the continued existence		Predicted Group Membership		
		For it	For it, if..	Against it
Count (%)	For it	353 (81.0%)	80 (18.3%)	3 (0.7%)
	For it, If new demarcation and zoning	99 (28.6%)	176 (50.9%)	71 (20.5%)
	Against it	0 (0.0%)	10 (20.4%)	39 (79.6%)
68.4% of original grouped cases are classified correctly.				

Tab. 1: The overall classification result of stepwise discriminant analysis using all answers as independent variables exhibits the correctly classification of 68.4% of original grouped cases. Dependent variable: 'Sunday question'

The most important influence factors for the successful separation of the groups were (1) effects on one personally, (2) effects on the population generally, (3) cultural group, and (4) reasonableness of nature protection.

Discussion

Our results infer, that personal or general disadvantages resulting from provisions of the national park management lead to the rejection of the national park. To compromise existing problems will eliminate most doubts and is still confirmed by different administrations of protected areas (BURNS & HOWARD 2003; CONFORTI & CESAR CASCELLI DE AZEVEDO 2003; PULLIN & KNIGHT 2003). If there are no respectively accepted disadvantages for one personally and the population in general, exceeding 80% of the locals will accept the National Park Stilfserjoch. Apart from that: if not all doubts are eliminated, nearly 50% of the population would reject the national park.

Simultaneously, cultural differences must be widely considered (MEHTA & HEINEN 2001). Our results reveal that both the Italian speaking and the German speaking culture group overlap in the question of hunting and the effects on the population generally: hunt should be forbidden and negative effects must be minimized by communication and discussion. Besides, in the Italian speaking population, elder people are more skeptically than the young ones and the personal effects of the national park play the most important role. However, the German speaking population attached importance to the regulation of activities within the national park. Sensitive spots in this context were traffic, alpine pasturing, and collecting fruits.

Finally, the reasonableness of environmental protection must be communicated. Environmental education should be one of the key issues of activities within the protected area, to embed environmental protection in the consciousness of the local population (PALONIEMI & KOSKINEN 2005; DAOUTOPOULOS & PYROVETSI 1999).

Besides our results about significant factors influencing the attitude among local population, we would add another interesting aspect from the point of view of scientific research. We could proof that most people are not aware about the value of the scientific output from the national park. The results of question 3 of our questionnaire revealed, that the scientific research within a protected area/national park is only for 5.6% of the interviewees among the three most important goals, which should be pursued. Additionally, only 18.2% thought, that the reintroduction of extincted animals should be a goal. Consequently, it must further be the aim of all scientists to provide the local population and the management of protected areas with every important detail, which could strengthen a positive attitude in addition to abovementioned measures (BONAIUTO et al. 2002). Nature reserves are the hot spots to promote the value of nature.

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