The annual economics of legal entities trading within Malá Fatra National Park and a proposal for an optimised model for operating the park

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Introduction

The Slovak Republic is a country which, despite its small size, can boast of having a large number of protected areas with a relatively well-preserved natural environment. The conception and realisation of the development of the national economy based on the exploitation of the potential of these protected areas is therefore rather justified. The current trend of the development of tourism and travel, construction activity and infrastructure in almost all protected areas of the Slovak Republic is continuing in a very insensitive manner, while administrators of protected areas do not have a direct impact on the operation of nature and landscape protection within their sphere of action. From the above follows the need for a change in the system of operating and financing protected areas in the country.

In recent years the territory of Malá Fatra NP has been under strong pressure from various investors, whose commercial aims conflict with the fundamental statute of a national park. Malá Fatra NP Administration in Varín, which administers the territory of the national park, has, by its position within the system of nature and landscape protection, markedly limited powers and at the present time insufficient funding from the state budget. A further problem with the development of the territory in question are the attitudes towards nature and landscape protection of the local inhabitants, who do not have basic knowledge and customs from the spheres of ecology and environmentalism.

This paper evaluates the present state of the method of operating Malá Fatra NP, analyses commercial entities within its territory and proposes a new method of administering this protected area in the future in order to preserve its natural values.

Geographical and physical characteristic of the area

The Malá Fatra range, belonging to the Fatra-Tatra region of the inner Western Carpathians, is part of the Carpathian arc. It is located in the northwest part of Slovakia, within the districts of Žilina, Martin, Dolný Kubín and Prievidza. The overall direction of the mountain range is northeast-southwest and its base has the shape of an irregular ellipse. The length of the range as the crow flies is 52 km, its greatest width is 16 km and the highest peak is Veľký Kriváň (1,709 m a.s.l.) (Gargulák *et al.* 1990). Malá Fatra is markedly divided into two parts by the deep river valley of the Váh: Lúčanská Malá Fatra in the southwest and Krivánska Malá Fatra in the northeast. The latter was named after the highest peak of the whole Malá Fatra: Veľký Kriváň (Podolák 2002). Krivánska Malá Fatra was declared a national park in 1988 due to the richness and uniqueness of the species composition of its fauna and flora.

Turčianska Basin and the Váh and Orava Rivers separate Krivánska Malá Fatra from Veľká Fatra. Zázrivská Valley separates it from the Oravská Mountains, Varínske Vale from Kysucká Mountains and Žilinská Basin from the Súľovské Mountains (Belák 1990). The main ridge in Krivánska Fatra begins with Suchý peak (l,468 m a.s.l); the next prominent peaks are: Malý Kriváň (l,671 m a.s.l), Veľký Kriváň (l,709 m a.s.l), Chleb (l,646 m a.s.l), Poludňový grúň (l,460 m a.s.l), Stoh (l,607 m a.s.l), Veľký Rozsutec (l,610 m a.s.l) and Malý Rozsutec (l,344 m a.s.l) (Podolák 2002).

The richness of the geological substrate and the relief of the area, marked differences in altitude above sea level and microclimatic conditions conditioned a diverse species composition of flora and fauna (ŠOP SR 2005). The prevailing vegetation communities are forest communities, which cover 70% of the NP. Of the 9 vegetation levels, 7 are preserved here, from oak-beech to the alpine zone. Bog and spring habitats complete the mosaic. The animals have a Western Carpathian character and are diverse in terms of species. Apart from chamois and marmot, all typical Western Carpathian species live here (Demianová 2003).

Twenty-six habitat types, 6 plant species and 29 animal species of European importance have been identified within the area (ŠOP SR 2005). At the present time there are around 130 km of permanently accessible marked hiking paths within the NP territory. The movement of visitors beyond them is prohibited by law (Malá Fatra NP Administration). Human activity on the territory of the NP is dealt with by Act no. 543/2002 on Nature and Landscape Protection and its subsequent regulations.

Territory administration

The administrative/economic department secures the operation and running of the Malá Fatra NP Administration. The number of employees has changed during the course of development of the organisation and management of Malá Fatra NP Administration (Fig. 1). Financing and annual budget of Malá Fatra NP



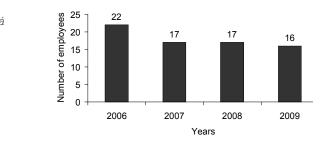


Fig. 1. Number of employees in years 2006 - 2009.

Administration

The extent and accessibility of financial means of Malá Fatra NP Administration are the basic elements on which depends the activity of the organisation itself, and therefore the possibility to administer the territory of Malá Fatra NP itself and the other territories within the territorial competence of the administration, as well as to ensure the protection of nature and landscape within this territory.

Financing of Malá Fatra NP Administration u pto 2008

Malá Fatra NP Administration, as part of the State Nature Conservancy of the Slovak Republic (SNC SR), whose overseer is the Ministry of the Environment, was a non-profit organisation until the end of 2007. The final extent of finance for Malá Fatra NP Administration was determined from the extent of financial means which were allocated from the state budget by the Ministry of the Environment for the activity of the State Nature Conservancy. All protected area administrations drew from this budget, which was fixed rigidly for each year, according to their needs and possibilities. The dependency of these workplaces on the state budget, although it guaranteed a constant financial income for their activity, no longer guaranteed realistic cover of their financial needs.

Financing of Malá Fatra NP Administration since 2008 and the current situation

From 1.1.2008 the SNC SR was transformed from a non-profit organisation to a contributory one and with this the system of financing individual protected area administrations also changed. Its workplaces now receive only a limited amount of financial means from the state budget for their activity and the remaining required part of the finances they secure by their own activity, which anticipates the possibility of creating profit. This activity consists of, for example, charging fees for issuing expert opinions and pronouncements for the needs of physical and legal entities, which are not connected with the direct function of the authorities of state administrations of nature and landscape protection, charging fees for organised guides in protected areas and providing accommodation in facilities of protected area administrations. The latter possibility supposes the existence of buildings suitable for providing accommodation, but in fact only some workplaces (administrations) have these. The system of charging fees for the above activities is ineffective for some workplaces and demotivating in that income from the activities is sent to the account of the SNC SR directorate in Banská Bystrica, from where the funds are divided among the individual administrations.

In practice, the change in the method of financing Malá Fatra NP Administration, and like-wise the other protected area administrations, is not sufficiently resolved. The current situation is complicated by the phenomenon of the global financial crisis, which has already become evident in the economic situation in the Slovak Republic and therefore also within individual branches of the national economy. In April 2009 the administrations of all protected areas received instructions and measures, in a letter from the SNC SR directorate, which should ensure a cost-cutting regime for drawing finances for all activities. In practice, the application of this regime means the gradual attenuation of activity of administrations of protected areas and literally the deactivation of the State Nature Conservancy. Work-related travel is restricted to a minimum: field trips (rangers and expert workers) above all are cancelled, the result of which is that necessary monitoring of the administered area is not done, new employees are not taken on and the material/ technical provision of workplaces is not renewed. While the monthly running costs of Malá Fatra NP Administration in the 1st quarter of 2009 were c. € 700–1,000/month, in the 2^{nd} quarter of 2009 they were only €170/month.

Method of selecting legal entities trading on the territory of Malá Fatra NP

Delineation of the study area

In order to select a sample of legal entities conducting business activities on the territory of Malá Fatra NP it was necessary to delineate a specific area. This area represents above all the territory of Malá Fatra NP itself, which is determined by its borders as defined by the pertinent bylaws of the government of Slovakia and was declared as Malá Fatra NP in 1988. The existence of the NP boundaries is also defined in the pertinent records of cadastral property and authorities of nature and landscape protection. For the sample selection maps which are commonly available to the general public as well as maps provided by Malá Fatra NP Administration were used.

Legal entities on the territory of Malá Fatra NP

All physical and legal persons who are owners or users of property or who provide services (owners and users of forest and agricultural land or other plots, owners and users of buildings and facilities, providers of services in the sphere of travel and tourism, etc.) within the defined territory (delineated by the NP boundaries) are considered legal entities on the territory of Malá Fatra NP. Bearing in mind the relatively large scale, segmentation and history of the study area it is apparent that within this territory there are a large number of entities which interest us from the point of view of using the protected area. From this a broad snapshot follows of the theme in question and the need for a sample of individual entities for the analysis of annual economics.

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The annual economics and a model for operating the NP Malá Fatra Select legal entities trading on the territory of Malá Fatra NP

Legal entities of forest management

The majority (83%) of the territory of Malá Fatra NP consists of forest land. The size of this area is 18,805 ha. Of this, 7,016 ha is commercial forest, 10,456 ha is protection forest and 1,332 ha is special purpose forest (Table 1).

Thirty-six legal entities undertake forest management, of which 25 were selected, bearing in mind the size of forest land within the ownership of these entities.

Legal entities of water management

Several productive springs lying within the territory of the NP itself are used for the purpose of supplying homes, recreation centres and industry with water, these being in Vrátna, Belská and Kúrska Valleys, in Mníšá Valley, Kľačianská, Zázrivská and Istebnianská Valleys (Table 2). Negative influences on aquatic habitats are more marked especially during the period of minimal discharge when, due to prioritising domestic supply, ecological discharge in water courses is not maintained. There is also a problem with cleaning waste water in the areas of Vrátna Valley, especially in the villages of Štefanová and Biela. Waste water in Vrátna Valley is only partially cleaned in water treatment plants. This serious problem also affects water courses within the NP buffer zone, which are contaminated with waste water from domestic and recreational facilities (Haluška 2009).

Legal entities of agriculture

There are 2,041 ha of agricultural land within the NP. Of this, 39 ha in Párnica, Zázrivá – Biela and Terchová – Štefanová is used as arable land. The rest, besides 370 ha of used plots, are meadows (439 ha) and pastures (886 ha) and alpine meadows (677 ha; Mala Fatra NP Report 2006).

Forest category	Size of area (ha)	% of Total size
Commercial forests Protective forests Special purpose forests	7,016.38 10,456.31 1,332.41	37.31 55.60 7.09
Total size	18,805.10	100

Table 1. Forest categories participation in the territory ofMalá Fatra (Mala Fatra NP Report 2006).

Source name	Minimal richness (l/s)	Average richness (l/s)
	47.00	50.00
Krivánska rizňa	17.90	73.20
Uhliská	0.68	2.01
Belá- Franekovia 1	5.95	8.70
Belá 2	0.00	14.04
Belá 3	11.00	26.70
Belá 4	0.74	0.74
Krasňany – Kúr	3.00	3.60
Turčianske Kľačany	-	7.50

Table 2. Drink	water	Sources	of NP	Malá	Fatra.
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Despite the return of large areas of land to their original owners, users remain for the most part large-scale producers. Application of agrochemicals, flushing of pesticides into water-courses and leaking of nitrates from industrial fertilisers into surface water seriously damages the hydrofauna. The consequences also manifest within the NP territory.

Legal entities of hunting and fishing management

The territory of the NP is divided according to property relations into 16 hunting grounds, within which 18 legal entities execute hunting rights, of which 13 are hunting associations, 3 are hunting societies of owners, 1 a joint-stock company and 1 a State Forestry enterprise. Hunting grounds are managed in the same way as in unprotected landscape, with the traditional approach to rearing and hunting game animals prevailing. The most significant motivation is obtaining the most valuable trophy and production of game meat. Apex predators are hunted, which weakens their selective and regulatory influence on local ungulate populations. When implementing reduction in numbers of game, biological and ecological principles of selecting individuals for shooting are not upheld. Within the NP a relatively high number of hunters execute hunting rights and a particular problem in recent years is the increasing num-ber of cases of poaching.

There is also a similar situation in fishing. All watercourses in the NP are managed for fishing; native species are sometimes fished-out and in their place inappropriate species of fish are introduced from abroad (e.g. rainbow trout and brook trout). Quantitatively impoverishing the ichthyofauna causes disturbance to the food base of several animal species such as the otter, black stork and others.

Legal entities trading in the sphere of tourism, hiking and recreation

In the last 50 years the territory of Malá Fatra NP has been used for recreation and sport, among which hiking and skiing have dominated. In recent years, however, pressure has developed to expand forms of sport/recreation, the use of the area for cycletourism, paragliding, alpine skiing and hang gliding, in which interest is focused on the central parts of the NP. Unregulated and in many cases insensitive sport/recreational use of the NP accompanied by urbanisation processes in currently among the most damaging anthropic influences on nature of the NP. The location of sports, accommodation and catering facilities in the centre of the NP, a dense network of hiking trails which covers the whole territory of the NP and enormously high visitation, which from an ecological point of view exceeds the carrying capacity of the environment several times over, cause irreversible changes. The most affected are animal species which are sensitive to disturbance by human presence, require large areas and at the same time are the least abundant. The destructive influences of recreational centres and individual buildings are not only apparent at the places where they are located but also in the wider surroundings and several kilometres from these busy centres. A not inconsiderable degrading and devastating influence of hiking is accelerated soil erosion. Concerning

personal mountain transportation facilities, besides ski-lifts, there are 3 chair-lifts in the NP in Vrátna and Malá Lučivna.

Extraction of non-plant resources

Bystrička Quarry (in Kralovany), which was founded before the declaration of special protection of the territory with the category of Protected Landscape Area, is located in the territory of Malá Fatra NP. A plan for its liquidation was elaborated before 2000, but extraction was renewed in 2008. Besides this extraction, the extraction of riverine material (gravel) is also conducted on the basis of special permission on the Varínka and Zázrivka watercourses (Malá Fatra NP Administration 2006).

Annual receipts of selected legal entities

Legal entities trading in the sphere of tourism

Štefanová, which is an administrative part of Terchová village, and Biela, which is an administrative part of Zázrivá village, lie directly within the NP territory. Štefanová lies in the central part of the NP, in Vrátna Valley, and cannot be separated from it if we want to preserve the territorial integrity of the NP. Biela was incorporated into the actual area of the NP with the aim of preserving the traditional management of a montane landscape. Development of construction activities is not possible within the settlement; only the repair of existing housing is permitted or the reconstruction and change of purpose of existing family houses into recreational cottages. However, cases occur of illegal construction of family houses and cottages. A particular problem is the construction of facilities for tourism and recreation. There are two tourism centres with sleeping capacity on the territory of the NP - Vrátna Valley and Malá Lučivná – and four solitary buildings: the Cottage below Suchý, the Cottage on Klačianská Magura, the Cottage below Chleb and the Cottage on Grún (Table 3).

For the calculation of annual receipts, only accommodation facilities, restaurant facilities and mountain transportation facilities (ski-lifts and chairlifts) which occur within the territory of Malá Fatra NP were included in the model selection. The model selection includes the facilities in Table 4.

Private accommodation

The settlements of Štefanová and Biela, which contain a lot of private accommodation, are located directly within NP territory. Eleven entities were selected from among those with the largest sleeping capacity for the calculation of annual receipts.

Štefanová – 7 accommodation facilities Biela – 4 accommodation facilities

Calculation of annual receipts of restaurant facilities

The number of large restaurant facilities in Malá Fatra NP is identical to the number of accommodation facilities: they are the same facilities. Annual receipts of restaurant facilities, which represent a sum of ϵ 2,207,000, were calculated on the basis of the number of accommodation facilities in the NP and the number of accommodated persons.

Calculation of annual receipts for accommodation facilities

For each accommodation facility, the number of beds was determined and this was multiplied by the average price of accommodation per person per night. Prices and occupation of accommodation facilities were divided according to the pricelists of individual accommodation facilities and by season. Annual receipts of hotels in the NP represent a sum of $\pounds2,500,000$, receipts of mountain cottages $\pounds100,000$, cottages and guesthouses $\pounds500,000$ and private accommodation represents receipts of $\pounds180,000$.

Total annual receipts of accommodation in the NP represent €3,280,000. The calculated receipts are arranged clearly in Table 5.

Vrátna ski centre

Vrátna Free Time Zone centre is situated in the heart of Malá Fatra NP. It is divided into sev-eral localities: Tižinka, Paseky, Poludňový grúň, Vrátna – Chleb, Oštiepková mulda. Besides these localities, in which there are ski slopes with mountain transportation facilities, the centre also includes part of the main ridge of Krivánska Malá Fatra with side ridges and gullies designated for alpine skiing and off-piste skiing (Table 6).

Total annual receipts for running ski-lifts and chair-lifts

Prices of ski tickets by pricelist and number of people were divided by season (Table 7) then the number of people transported was calculated, which amounts to 120,000 people in the winter period and 40,000 people in the summer period. The average price of a ski ticket is €20 in winter and €9 in summer. From this calculation, annual receipts from ski tickets amount to €3,500,000.

Malá Lučivná ski centre

Basic information about Ski centrum Malá Lučivná are in Table 8.

Calculation of annual receipts from running ski-lifts and chair-lifts:

Types of accommodation	Number	Types of food	Number
Hotels	19	Restaurants	18
Pensions	14	Pubs	1
Cottages	37	Wineries	1
Private accomodation	26	Pizzerias	1
Kempings	1	Bars	4
Total Number	97	Total Number	25

Table 3. Accommodation and restaurant facilities in Terchova village (Terchová, 2009).

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Types of accommodation	Number	Total Number of beds
Hotels	6	237
Mountain cottages	4	119
Cottages and pensions	10	270
Private accommodation	11	75
Total Number	31	701

Table 4. Accommodation facilities in NP Malá Fatra.

Accommodation type	Annual receipt		
Hotels	2,500,000 Euro		
Mountain cottages	100,000 Euro		
Cottages and pensions	500,000 Euro		
Private accommodation	180,000 Euro		
Total	3,280,000 Euro		

Table 5. Accommodation Annual receipts.

Number of chair-lifts	2
Number of ski-lifts	14
Number of cabin-lifts	1
Number of Downhills	17
Total length of Downhills	10.6 km
Carrying capacity/hour	10,454 persons

Table 6. Basic information about Ski centrum Vrátna.

Season	Numbers of Days
Top season	20 days
Veekends	80 days
Major season summer + winter	65 + 65 days
Out of season	135 days
	Total number 365 day

 Table 7. Year distribution of the attractiveness of seasons.

Number of chair-lifts	1
Number of ski-lifts	5
Number of Downhills	6
Total length of Downhills	3.8 km
Carrying capacity/hour	4,800 Persons

Table 8. Basic information about Ski centrum Malá Lučivná.

Commercial activity	Annual receipts		
	/Euros		
Accommodation facilities	3 280 000		
Restauration facilities	2 207 000		
Chair, cabin and ski-lifts	4 706 000		
Guide services	657 500		
Forest management	5 031 000		
Water management	5 361 120		
Total	21 242 620		

Table 9. Annual receipts outcomes.

Prices for ski tickets were determined from the pricelist of Malá Lučivná ski centre, the number of transported persons was divided according to season (Tab. 9) and the number of transported persons was then calculated, which amounts to 67,000 persons. The average price of a ski ticket is €18. From these calculations, annual receipts from ski tickets amount to a sum of €1,206,000.

Guiding services

Current offers of 19 travel agencies and 1 physical person presented on the internet were used for the calculation of receipts from guiding services. Each entity had an average of 110 clients in one year, who spent on average 5 days (6 hours per day) in the NP. The current price for one hour of guiding costs on average €9.96 per person (the original price of 300 SKK/hour at an exchange rate of 30.126 SKK = €1). Average annual receipts from the current offers of travel agencies and physical persons for guiding services represent €657,500.

Legal entities trading in the sphere of forestry and water management

Forest management sphere – the majority of land is in private ownership, in the ownership of land management consortiums and only a small part is in the ownership of the state forests. Considering the fact that within the territory of the NP there are many and varied owners and users who manage forests of all categories (commercial forests, protective forests and special purpose forests), this sphere is very complicated from the point of view of quantifying the annual economics and exceeds the scope of the present work. Despite the possibility of identi-fying specific owners and users and the dimensions of the forest plots they manage, due to the inaccessibility of the required data on the extent of annual income from the extraction of timber, it was not possible to quantify the exact value of total income from managing forests in the NP. It is also not possible to calculate, for example, the average annual profit per ha, when different owners or users manage different sized plots and different categories of forest.

Calculation of annual receipts from timber extraction in commercial forests

For the reasons given above, in the model calculation only the area of commercial forests was considered, which in the case of Malá Fatra NP represent a size of 7016.38 ha (37.31% of the area of the NP). From this total area of commercial forests, the area of all stands in the felling period in a given year was considered for the final calculation. If we consider a re-newal/ felling period of 60 years, the area of commercial forest will be reduced by 1/60 in one year. The total area of stands in the felling period in one year will then represent 117 ha.

The average volume of timber extracted from such stands per ha is 1,000 m³. If the average price of timber is €43/m³, then receipts from 1 ha represent €43,000. Receipts from the total area of felled stands are then €5,031,000.

Water management sphere – The Krivánská Malá Fatra area belongs among the significant water man-

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agement areas of Slovakia. The Beskýdy and Javorníky area has been declared a protected area of natural water accumulation within which the majority of Krivánská Fatra has been incorporated.

Calculation of annual receipts from drinking water

In calculating receipts from drinking water the data shown in Table 6 was used, in which the average capacity of individual springs suitable for the off-take of drinking water is shown. The average capacity of these springs together represents 170 l/s (0.17 m³/s). If water was collected continuously throughout the year, 5,361,120 m³ of water would be obtained during one year. At the current price for drinking water (€1/m3) this represents annual receipts of €5,361,120.

Summary of results for annual receipts

Commercial activity is focussed on two main spheres, those being the tourism sphere and the sphere of forestry and water management.

1. Restaurant and accommodation facilities, skilifts, sports equipment hire, guiding services and the like represent the sphere of tourism.

Receipts in this branch represent a total sum of $\in 10,850,500.$

2. The sphere of forestry and water management represents the direct exploitation of natural resources within the NP. It concerns the extraction of wood from commercial forests and the off-take of water from suitable springs for the purpose of supplying the inhabitants of the region with drinking water as well as supplying recreation facilities and industry.

Receipts in this branch represent a total sum of €10,392,120.

By summing annual receipts within individual spheres of commercial activity conducted on the territory of Malá Fatra NP, a total figure of \pounds 21,242,620 was calculated. We have used this figure in proposing a method for financing Malá Fatra NP Administration in an optimum model for operating the NP.

Proposed model for operating Malá Fatra NP

A new model for operating Malá Fatra NP was proposed on the basis of an analysis of the current status of the NP Administration, the effectiveness of nature protection in practice and new possibilities for financing and implementing the elements of an operating system which has proven itself in national parks abroad. The presented model also presupposes the unavoid-able change in legislation and granting of legal decision-making powers to the NP Administration, without which this model could not be implemented in practice.

Introducing the proposed model therefore presupposes fulfilment of the following:

- adoption of new legislation in the sphere of the performance of nature and landscape protection and the granting of legal decision-making, inspecting and sanctioning pow-ers to protected area administrations in Slovakia,
- change to the organisational and staffing structures of the SNC SR,

- change in the method of financing protected area administrations in Slovakia,
- changes in interdepartmental cooperation,
- change to pro-environment thinking of the public.

Position of the NP Administration within the nature and landscape protection system of Slovakia

At present the NP Administration is an expert organisation which does not have a direct impact on nature and landscape protection. New legislation should secure the transfer of legal powers from the nature and landscape protection authorities (the Ministry of the Environment, county and district offices, Slovak Environmental Inspectorate) to the NP Administration.

The NP Administration would be changed from an organisation to an authority, which would within its area of operations:

- manage and inspect the performance of administrations in issues of nature and landscape protection,
- procure protected area protection projects,
- issue decisions and permissions,
- issue exceptions from the law on nature and landscape protection,
- perform state supervision,
- impose sanctions on legal entities,
- order remedial measures for the elimination of deficiencies.

Through these means a substantially more effective performance of nature and landscape protection would be achieved in the administered protected area.

Change in the organisational structure of SNC SR

By a change in the organisational structure we mean the independence of the NP Administration in the SNC SR system and obtaining legal status. The following are connected with this:

- entering the NP Administration as a legal person in the business register,

- issuing of a company registration number,
- issuing of a tax identification number (VAT ID),
- opening its own bank account.

Obtaining legal status is the basic presumption for the NP Administration to be able to produce profit from its activities, the use of which the administration would decide itself. From this follows a change in the job description of the department director. This position would call for a person who has the abilities of a manager/entrepreneur rather than the knowledge of an expert.

From the mentioned change from an organisation to an authority with its own legal status new duties and responsibilities would arise such as, for example, responsibility for damage caused by protected species and subsequent compensation of those persons or entities that suffered the damage.

Securing staffing of Malá Fatra NP Administration

Securing Malá Fatra NP Administration from the personnel capacity point of view is currently markedly under-dimensioned. As is clear from Fig. 3, the number of administration staff has fallen markedly over the last three years. This trend is caused on the The annual economics and a model for operating the NP Malá Fatra one hand by the current political situation in Slovakia and on the other hand by the "unattractiveness" of working in this branch, especially from a financial perspective. The size and segmentation of the NP territory and other areas within the jurisdiction of Malá Fatra NP Administration call for a sub-stantially higher number of staff. The present number (16) of employees of Malá Fatra NP Administration is not sufficient for the consistent provision of basic activities.

Considering the size and character of Malá Fatra NP and the new system of operating the Administration as an independent legal entity, we propose the number of staff be adjusted as follows:

The present number of 16 would be increased 3.5-fold, representing 56 employees, which realistically covers the personnel needs of Malá Fatra NP on the one hand within the sphere of executing nature protection and in expert activity and on the other hand in the sphere of management and operations.

Change in the financing of Malá Fatra NP Administration

In all spheres of human activity, possibilities for planning and realising goals depend on the amount of finances available and the subsequent system for dividing them.

At present the annual running costs of Malá Fatra NP Administration together with work expenses amount to on average \pounds 117,000 + \pounds 83,000 = \pounds 200,000. This budget does not sufficiently cover today's needs. We therefore propose a 3-fold increase in this budget, which represents a sum of \pounds 600,000 per year.

We propose dividing the method of securing the above annual budget into thirds as follows:

- The first third will be secured by subsidies from the state budget.

- With the proposed annual budget this represents a sum of €190,000.

Annual receipts of legal entities trading in Malá Fatra NP would form the second third. In order to cover the proposed annual budget a levy would need to be set at the level of 1% of the total annual receipts of all legal entities of the selected model. With annual receipts of €21,242,620 this represents a sum of €212,426.

The final third will be composed of the sum of €197,574, which will be secured from income from the NP Administration's own economic activities and from projects funded by the European Union.

Financial income from the Administration's own economic activities will be secured by charging for the following actions, work and activities of the NP Administration:

- issuing of expert opinion, permission, exceptions
- the sale of the NP logo in tourism (guiding

services, accommodation, etc.)

- receipts from the provision of services (seminars, guides, accommodation)

- sales of own products (souvenirs with the NP logo)- admission charges to the NP

The charge for entering the NP will be rather symbolic, its significance resting largely in continual monitoring of NP visitation by individual groups of visitors.

Besides the presumptions defined above, which are conditions for the implementation of the proposed model in practice, it is also necessary to resolve issues in other areas which directly or indirectly relate to the activity and protection of the NP territory. This mainly concerns:

- close inter-departmental cooperation, which consists above all of communication and joint solving of problems resulting from conflicts of interest. In securing more effec-tive protection and rational use of the NP it is necessary to tie in, deepen and maintain cooperation of the NP Administration with forestry, water and hunting management bodies, agriculturalists, communities, private land owners and also with the Mountain Rescue Service.

- Raising the environmental awareness of the inhabitants of the protected area region, which consists of educational activities among three main groups of citizens:

- inhabitants permanently living within the NP and its buffer zone,

- visitors to the NP and its surroundings,
- children and youth.

Conclusion

Systematic nature protection and the effort to preserve natural and cultural values should be the priority of every society. During the current period in our country, with constant develop-ment of society we perceive ever greater pressure on the natural environment not only in socalled open country but especially in protected areas. In protected areas this pressure is connected above all with development of tourism and travel, which at present is proceeding in an uncontrolled and insensitive way. The need for intensive and effective nature protection is therefore very current. In the case of protected areas in Slovakia the problem is above all the socio-political situation in the country, the currently valid legal norms and lastly a general lack of interest in nature protection.

Elaboration of environmental legislation, an effective structure of authorities managing the performance of the administration in matters of nature and landscape protection and a favourable method of financing are necessary for a functional system. The individual approach to their surrounding natural environment of inhabitants, who are constantly reshaping it directly or indirectly through their actions, is also important. We know from experience, however, that especially people living in protected areas lack basic knowledge and customs from the sphere of ecology and environmentalism. For this reason it is essential to educate the populace in the spheres of environmentalism and nature protection.

The aim of the present work, focussed on Malá Fatra NP, was to propose an optimal model of operating the NP and new possibilities for financing and thus to achieve more effective protection of this territory, with the possibility of generating a profit.

For the realisation of the proposed model and its application in practice, change in legislation, change in the organisational structure of nature and landscape protection authorities and change in the method of financing protected area authorities is required. We have proposed a new model for optimal operation of the NP on the basis of an analysis of

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16 P. Pogányová & M. Hatala the current state of Malá Fatra NP Administration from the point of view of its position in the SNC SR system, the point of view of the current financing of NP Administration activities and an analysis of the business environment in the NP territory.

Reserves in the further development of the system of nature protection in Malá Fatra NP, as well as in Slovakia, can be sought in closer cooperation on the interdepartmental level. The process can also be strengthened by developing cooperation with other entities whose activities influence the natural environment (entities trading in the sphere of tourism, forestry, agriculture and water management bodies, the Mountain Rescue Service). However, at present such cooperation is often held back by deep differences in opinion and unwillingness to communicate.

Without significant changes and solutions of the problems tabled, the worsening state of not only protected areas and other parts of the country but also the environment in general will continue.

Systematic nature and landscape protection has significance mainly from a long-term perspective.

By its effective application in practice, damage and destruction of the natural environ-ment, the rectification of which is usually very financially demanding or impossible, can be avoided above all in protected areas and this allows the preservation of natural and cultural heritage values for future generations.

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