

Visitor massification in the mountains

Access regulation to Pica d'Estats mountain in Alt Pirineu Natural Park

12th Network Meeting ECST



Parc Natural
de l'Alt Pirineu



Parc Pirinenc
de les Tres Nacions | Parc Pyrénéen
des Trois Nations



Generalitat
de Catalunya

Pica d'Estats (3.143 m)









ESTUDI DE LA CAPACITAT DE CÀRREGA TURÍSTICA DE LA CAPÇALERA DE LA VALL FERRERA AL PARC NATURAL DE L'ALT PIRINEU



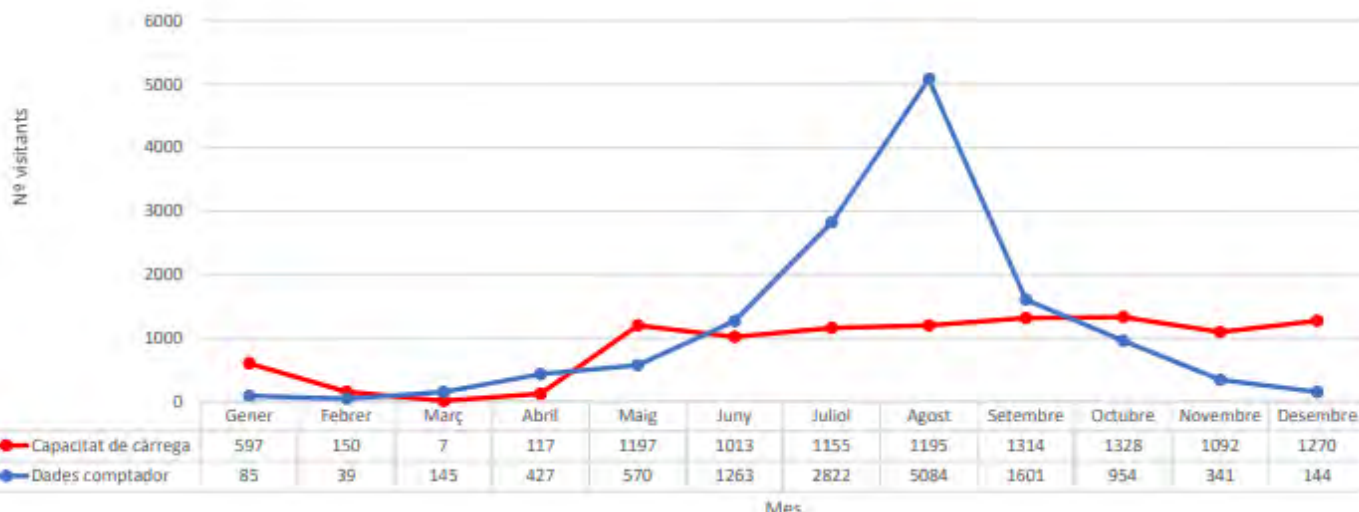
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Parc Natural de l'Alt Pirineu
Generalitat de Catalunya
Departament de Turisme

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Llegenda
 Temporada BAIXA: accés lliure i gratuït. No cal reserva.
 Temporada MITJANA: pagament de pagament. Cal reserva.
 Temporada ALTA: pagament de pagament. Cal reserva.
 Control de cotes a la Pica d'Estats a través de l'emissió de permisos gratuïts (limitat)



INEFC
 Generalitat de Catalunya

Generalitat de Catalunya

www.areupicadestats.com



Income – €11,463
1799 reservations
5,042 people in 39 days
129 people/day with a maximum of 200 people
Not exceeding tourist reception capacity
55 trips by taxi
Reinvestment in improving access



Thank you for your attention
We are waiting for you in Alt Pirineu!

parcsnaturals.gencat.cat/altpirineu



[/pnaltpirineu](https://www.facebook.com/pnaltpirineu)



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[/pnaltpirineu](https://www.youtube.com/channel/UC...)



SZKOŁA GŁÓWNA
GOSPODARSTWA
WIEJSKIEGO



Monitoring of tourist traffic in the Karkonosze National Park

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Karkonosze National Park

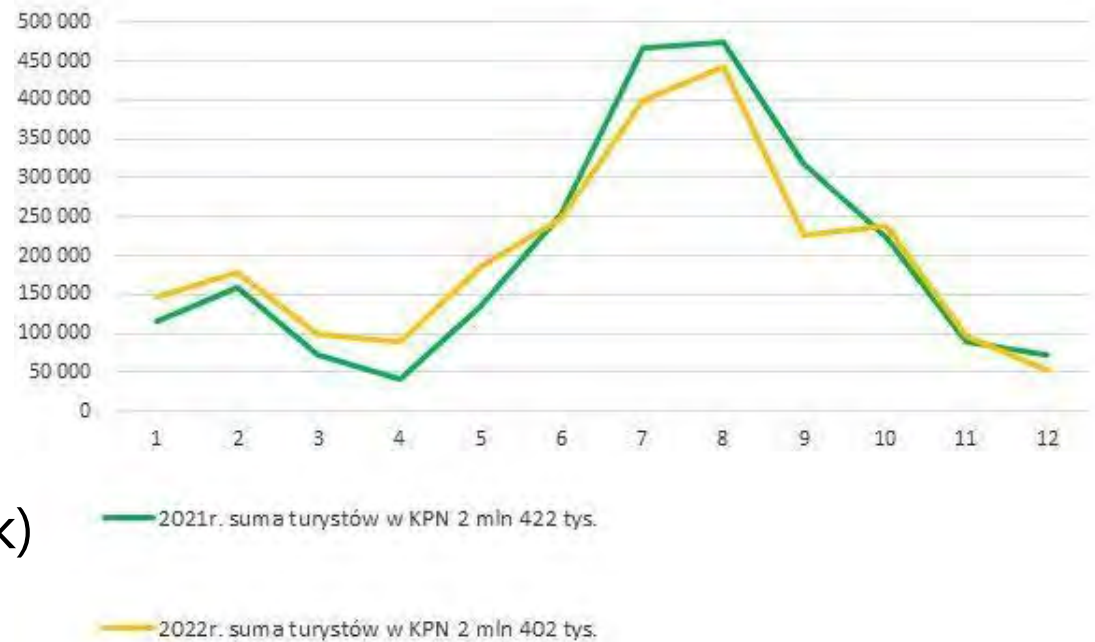
Karkonosze National Park

- Area of 6000 ha;
- 131 km of tourists trails;
- Transboundary national park (KPN PL-KRNAP CZ)



Tourist traffic in KPN

- 2,4 mln visitors in 2022
 - VI to X high season
- The most tourists in:
- 17th June (17,2 k)
 - 14th August (15,1 k)
 - 12th November (14, 7 k)

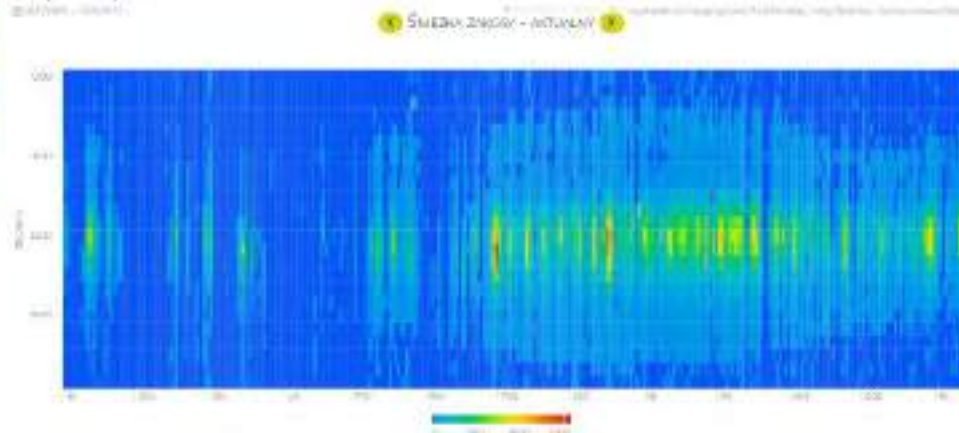


Monitoring methods

Combined approach with use of data from ecocounters (18 locations), statistics of the entry fees and phototraps, and...



Mapa ciepła



Monitoring methods

... and social media



Source:

<https://www.heytcats.com/>,

<https://strava.com>



Key problems and threats

- Increasing level of antropopression resulting from mass tourism (also ski touring off –piste);
- Disturbance of the animals esp. (off trails) and littering;
- Illegal movement around inaccessible areas incl. overnight tourism
- Illegal use of drones (for the recreational purposes);

Need for development of new approach to the management including possible limitations schema based on carrying capacity indicators

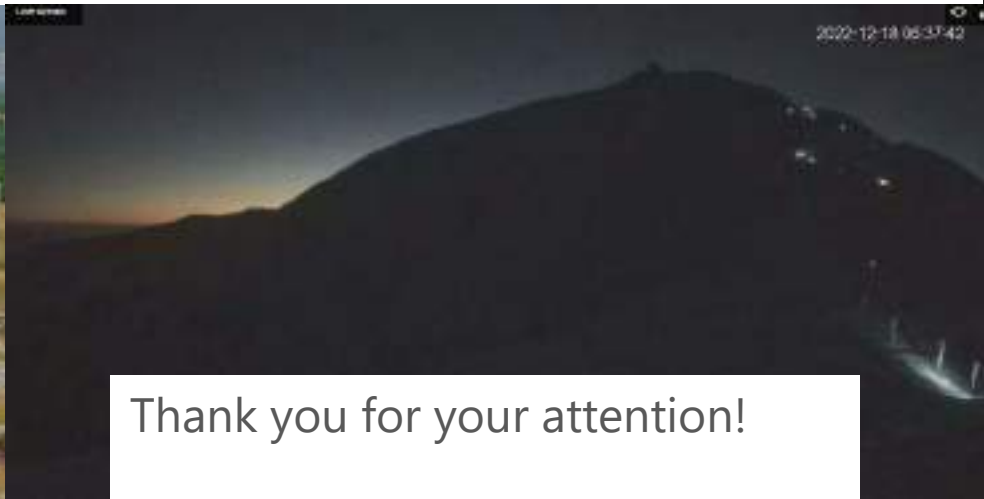


Current challenge – on what basis we can limit tourist traffic?

Environmental carrying capacity index expresses the natural resistance and resilience of the environment to degradation and devastation related to tourist traffic.

We are developing carrying capacity indicators in order to estimate maximum number of people participating in tourist traffic who can stay/move through a given area at the same time, without negative impact and degradation of the natural environment.





Thank you for your attention!

monika.rusztecka@kpnmab.pl





MEDVEDNICA

Park prirode
Nature Park



PARKOVI Parks
of Croatia
HRVATSKE

MEDVEDNICA NATURE PARK

Challenges in the management of protected area –
Medvednica Nature Park, Croatia

12th ECST Network Meeting, Bled

16 – 18 May 2023



MEDVEDNICA

Park prirode
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Medvednica Nature Park Identity Card



YEAR OF PROCLAMATION: 1981

AREA: 17,938 ha

NUMBER OF POPULATION: approx. 7400

ALTITUDE: 120-1035 m

HIGHEST TOP: Sljeme

BASIC PHENOMENON: well-preserved natural forests and forest communities

TERRITORIAL BELONGING: City of Zagreb, Zagreb and Krapina-Zagorje counties

AREAS OF SPECIAL PROTECTION: 8 special reserves of forest vegetation, 2 monuments of park architecture, 3 monuments of nature (single tree), 1 geomorphological monument of nature; POVS area of the **Ecological Network Natura 2000** Medvednica (HR2000583)

MANAGEMENT: Public Institution Nature Park Medvednica

HEADQUARTERS: Zagreb, Bliznec 70

DATE OF ESTABLISHMENT: September 8, 1998

NUMBER OF EMPLOYEES: currently 22



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Pressures of urban area to the Nature Park Medvednica

Pressures/Strengths and threats

Croatian forests
Croatian waters
Transmitters and
connections (OIV)
Hunting societies
Quarries
Caterers
Tourist agencies
Zagreb Holding
County roads
and others



1 005 000 visitors per year: 99 % domestic visitors



Excursionists
Mountaineers
Experts and scientists
Field trips
Athletes
Skiers
Cyclists
School children
Local population
Tourists



Population of the City of Zagreb, Zagreb and Krapina-Zagorje
counties - approx. 1,250,000 inhabitants, **28% population CRO**

Public Institution Nature Park
Medvednica, 22 employees



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Challenges

- property - legal relations = poor condition/deterioration of facilities/tourist infrastructure
- illegal activities (stone, wood and fir branches collecting, waste disposal, poaching, vandalism, off-road driving)
- concentration of visitors at the peak zone
- not enough human capacities
- no entrance ticket to the Park = insufficient financial resources
- traffic/parking
- crowd, noise and pollution
- climate changes
- a large number of stakeholders - different interests



Klizište ispod ceste



Oluja Teodor, 11.11.2013.



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Challenges



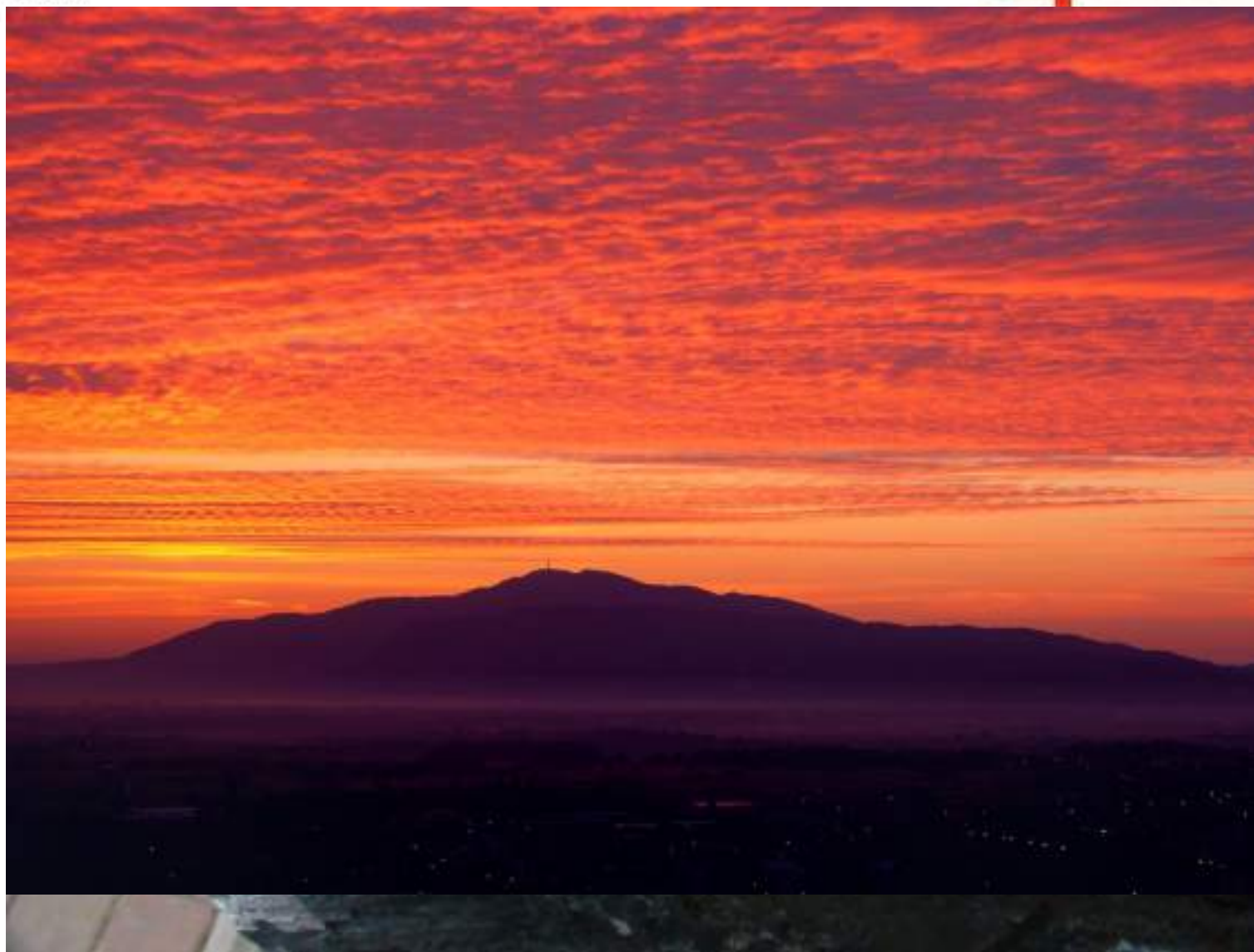


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MOBILE APPLICATION

Mobile application for a single territory

- Nature reserve or National park
- Resort
- Tourist point of interest
- Town

Mobile application for a group of territories

- Department of regional Protected Areas
- Cross-border protected areas



BENEFICIARIES



Heat maps



Visitation statistics

Tourists:

Convenient services, increased comfort

State:

Digitalization of natural and ecological tourism, transparent activities of protected areas

Protected area:

Nature conservation, increased income from visitation, tourist flows analysis, recreational pressure monitoring

Local communities:

New opportunities for small business, tourist flows control

Tourist business:

Wider range of tourist activities, feedback from tourists, analytics & statistics

Protected areas management

Optimization of the employees' workload. Recreational

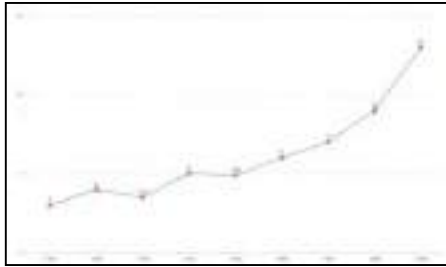


Online payment

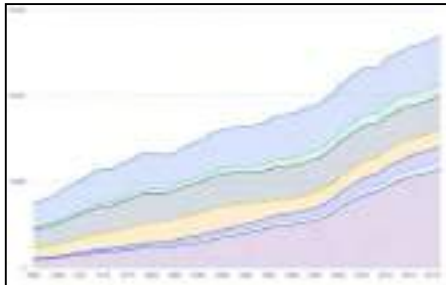


Trails and routes

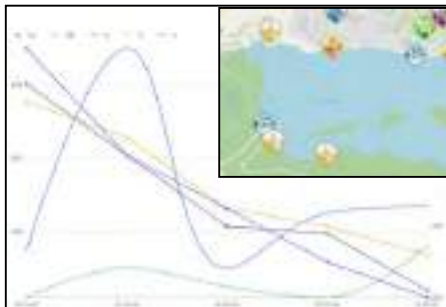
SCIENCE, STATISTICS & CONTROL



General statistics on visitation to a protected area by years/months. Sociological studies of the visitor's behavior.



Detailed visitor statistics by different socio-demographic groups



The most detailed statistical data: tourist flows for each trail, location or object. Statistics and data in different time ranges: year, season, month, week, day, hour

General statistics

Helps calculate your KPI and other efficiency rates. Evaluate protected area's contribution to the socio-economic development of the region.

Detailed statistics:

Allows to plan a general strategy for the protected areas management and development.

Helps to understand customer needs. Allows small business to make decisions based on the visitor (customer) needs.

The most detailed statistics:

Provides data about recreational loads on natural complexes for the scientists. Helps to plan infrastructure to minimize anthropogenic impact and mitigate risks from tourists, local residents and businesses.

TOURIST FLOW MANAGEMENT



Heat maps of the PA visitation allow you to see the exact distribution of tourist flows in the area, determine informal points of interest and potential “tourist jams”



An accurate understanding of the distribution of tourist flows, awareness of user scenarios and detailed statistics is a key for the conservation of natural complexes and the creation of a sustainable tourism model for the territory as a whole



Bubble maps allow you to identify any patterns associated with recreational impact.

TERRITORY MANAGEMENT

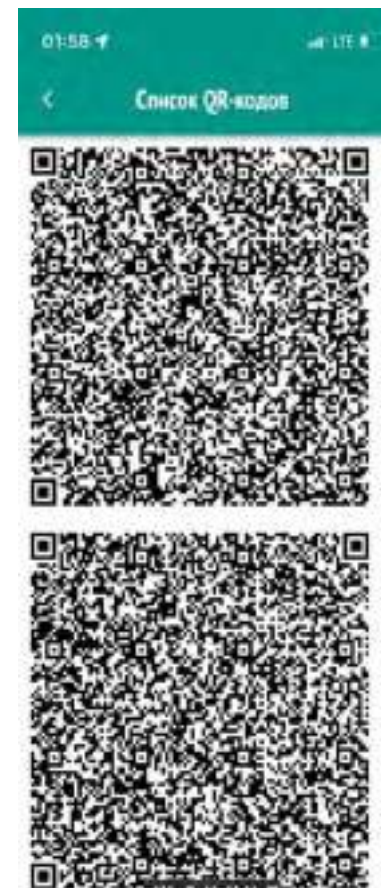
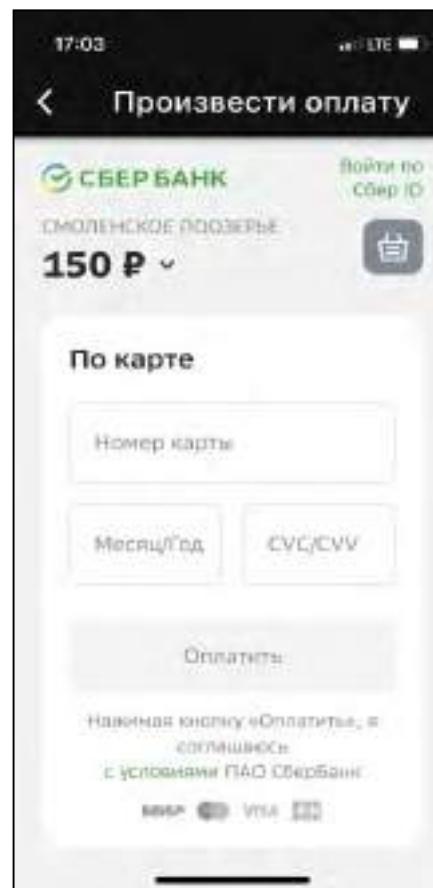
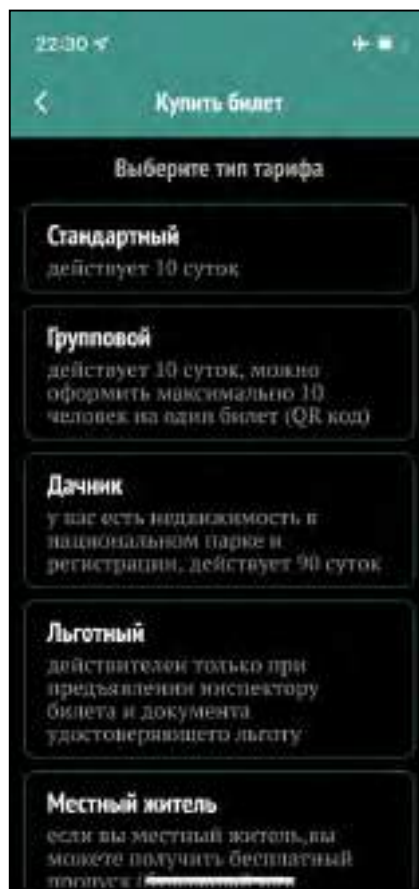
Real time information
about tourists in the
territory

Control outside of the
mobile coverage area

Online payments for tourist
services

Time saving for employees
in **ЗАПОВЕДНИК** — ЭКОЦЕНТР — **плементах,**
security, economics.

Detailed statistical for
reports.



BASIC FUNCTIONALITY

ONLINE MAP FOR SINGLE OR MULTIPLE TERRITORIES

ONLINE MAP OF TOUR OBJECTS

ONLINE MAP OF TOUR ROUTES

DIFFERENT MODES FOR DIFFERENT SEASONS

GPS NAVIGATION

ONLINE PAYMENT FOR PARK SERVICES

VISITATION CONTROL

NEWS AND ANNOUNCEMENTS

COLLECTING DATA

INTEGRATION WITH EXISTING WEB PLATFORMS

ONLINE APP ADMINISTRATION



ADDITIONAL FEATURES

PAID FEATURES

AUDIO GUIDES

ONLINE GIFT SHOP

TOURIST INSURANCE

LOCAL TOURS

HOTEL AND CAMPING BOOKING

SAFETY AND ACCESSIBILITY

SOS SIGNAL (fire, accident)

REGISTRATION IN RESCUE SERVICES

TRANSLATION INTO FOREIGN LANGUAGES

EDUCATION AND SCIENCE

PLANT AND BIRD FIELD GUIDE

SOCIOLOGICAL RESEARCH

LANDSCAPE VULNERABILITY

VOLUNTEER PROGRAMS

MANAGEMENT

TERRITORY MANAGEMENT CENTER



THANK YOU!

