

Insight into Carrying Capacity in Danube Delta Biosphere Reserve



Project details and objective



„DANUBEPARKS STEP 2.0 – Anchoring the Danube River Network of Protected Areas as Platform for Preservation of Danube Natural Heritage” project, Work package 6. Building mutual quality for tourism services. The project was financed through the SEE Programme 2007-2013 and the Danube Delta Biosphere Reserve Authority implemented it as a partner between 01.10. 2012 – 30.09.2014.

Activity 6.4. Implementing quality: Carrying capacity for visitor management.

Conceptual framework: Principles

“How much is too much?” (Ioannides & Billing, 2005)
a threefold concept: ecological, local socio-economical, users/visitor.



”How much of the change from the natural conditions is accepted, function of the main objectives of a destination” (Stankey & Cole, 1985),
Limits of Acceptable Change.



CC is not about obtaining a unique quantifiable and comparable value, but about

- **a working/monitoring framework;**
- **a process oriented tool;**
- **a set of standards and criteria** defining LAC specific for destination.

(I) Indicator for ecological carrying capacity: species

A. Sensitive species/ecosystems to tourism / attractive

1. Water bird colonies – breeding season March-June(-July)
2. White tail eagle nests – breeding season March-June(-July)
3. Moulting bird period - June-July
4. Large bird flocks on lakes - all year round (feeding, resting)
5. Water lily surface covered
6. Endemic plants / rare plants. * Sf.Gheorghe-Sulina: volbura de nisip
7. *Vipera ursini moldavica* (?) - Letea, Sf.Gheorghe, Periteasca - Apr-Oct
8. Turtoise (țestoasa de uscat) – Vadu, Istria, Dolosman
9. Terapin (țestoasa de apa)
10. Sturgeon
11. Fish
12. Letea & Caraorman Forest

Indicator for ecological carrying capacity: locations

B. Strictly protected zones:

1. Letea (South) - T 10%. R+L 90% (guide training, group size, walking, horse carriage)
2. Caraorman - T < 10%
3. Belciug - fishermen / angling (L 95%)
4. Saraturi - watching infrastructure. Resolving the old garbage site
5. Popina (local visitors ?) - L
6. Sacalin-Zatoane - T 40% L 60% (pasunat, pescuit)
7. Garla Turceasca
8. Garla de Mijloc
9. Periteasca-Leahova (Portita Jurilovca) - L: ? T: waste management
10. Capul Dolosman (localnici + arheologie) - T < 5%
11. Grindul Lupilor (not allowing grazing) - T: road access. R: anglers
12. Insula Ceaplace (pelicani)
13. Chituc - 90% T - camping – valorisation
14. Istria – Sinoe - L

II. Indicator for socio-economical carrying capacity



C. Community issues

1. Sf.Gheorghe - sturgeon prohibition;
2. Land ownership - outsiders;
3. Mila 23, Crisan, Uzlina - architecture;
4. No. bed nights per type of accommodation.

(III) Indicator for user/visitor carrying capacity

D. Sensitive leisure versus tourism

1. Motorised – water vehicles
2. Small planes traffic (300m?) - Sf.Gheorghe
3. ATV / enduro - Chituc, Portita, Sf.Gheorghe, Sulina
4. Camping -- regulations: - leisure
 - outdoor

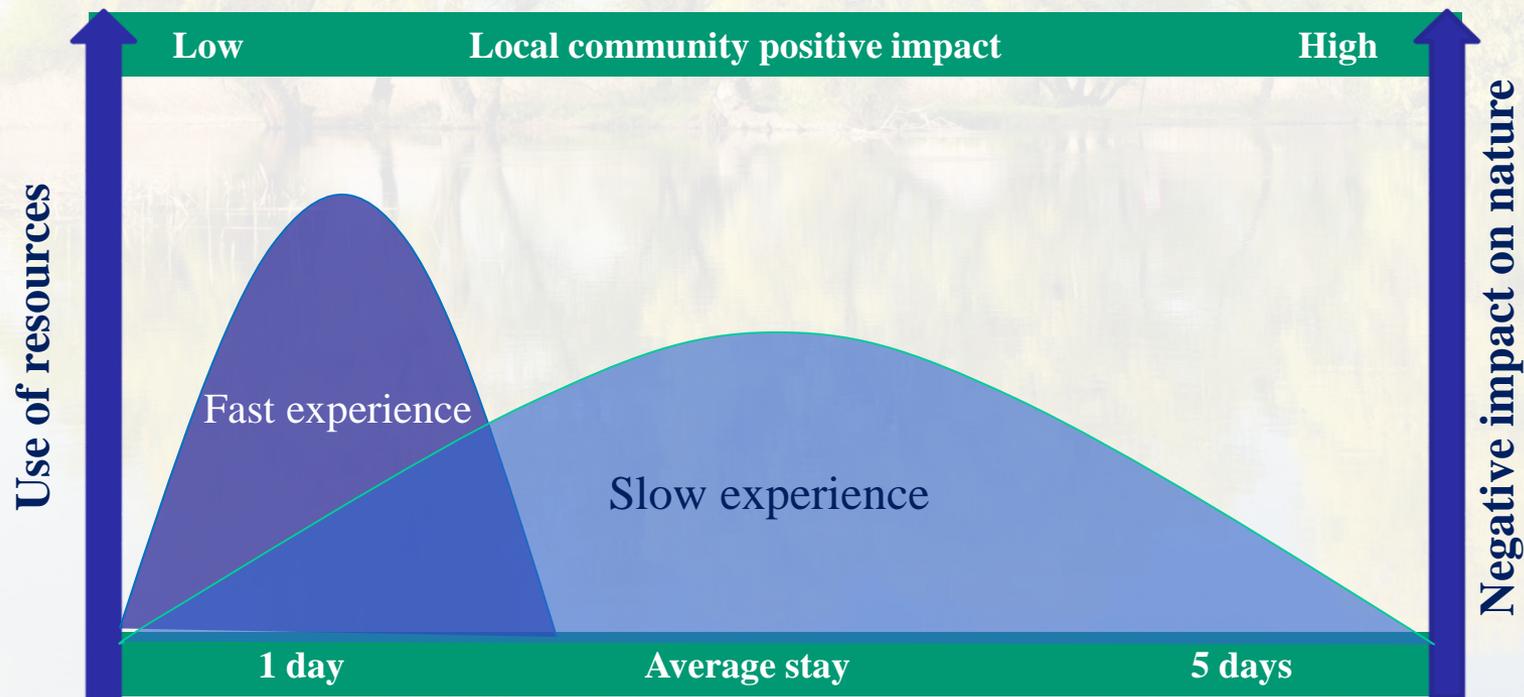
Camping site with minimum services. Wash, toilets, information

5. Not registered accommodation

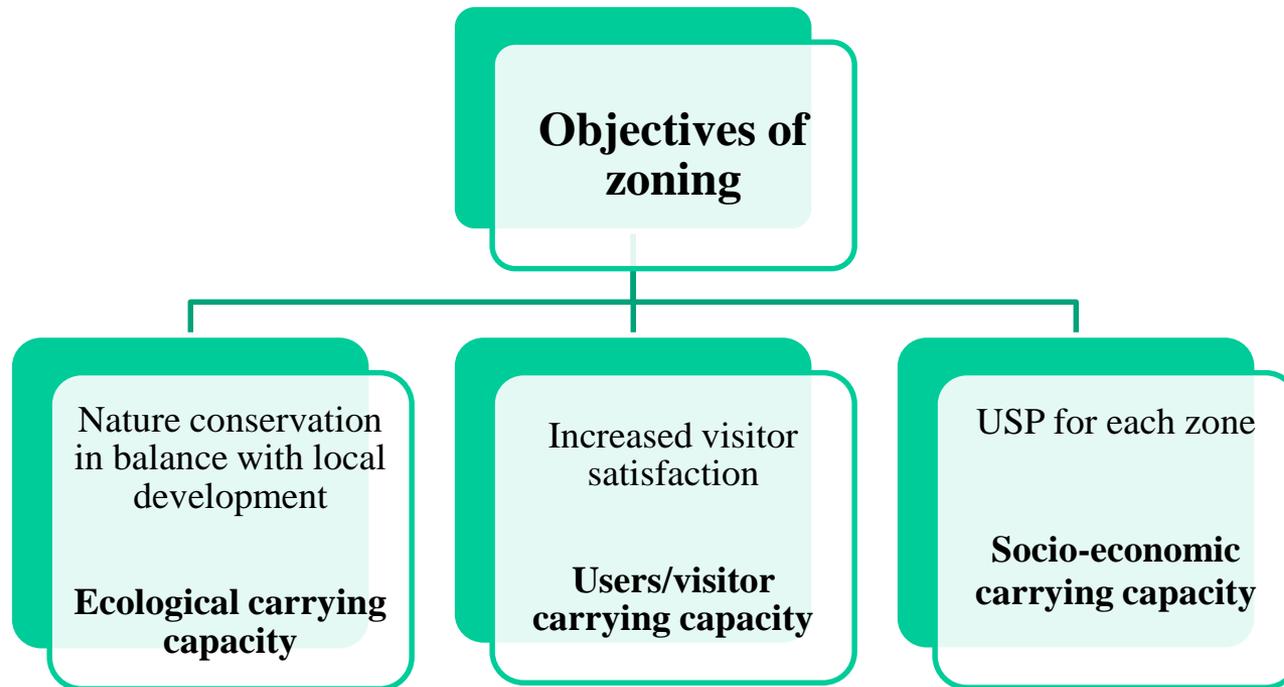
Context of the assignment: Danube Delta

Recreation and Tourism Zoning Study (2009) funded by WWF and developed in partnership with Detant Consulting

Type of experience.



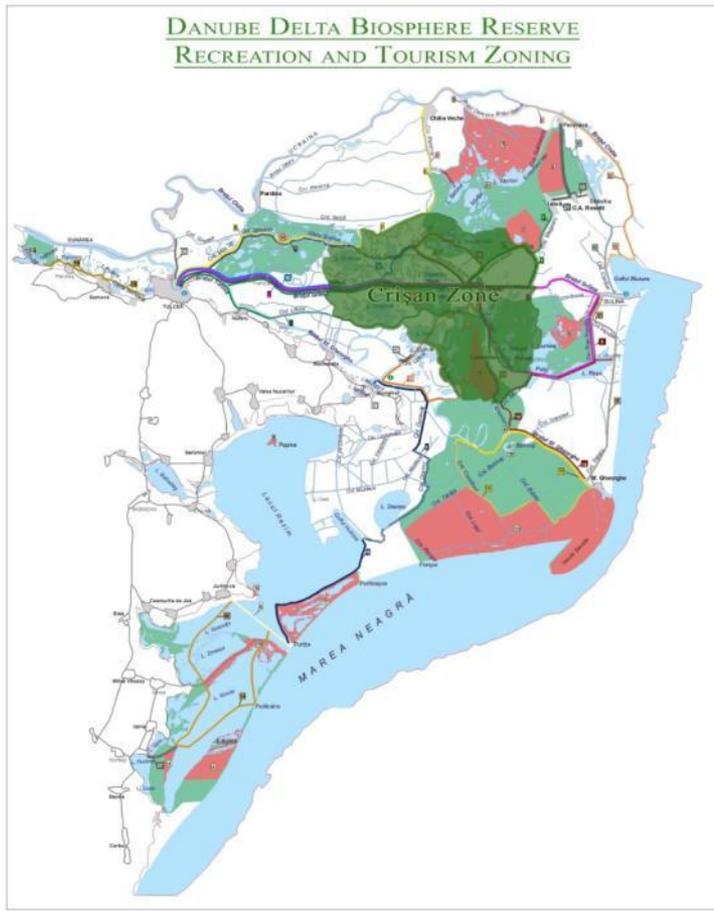
Zoning: a tool for nature conservation and tourism management, proposed in 2009 (study)



Recreation and Tourism Zoning of DDBR



Crisan - Mila 23 - Caraorman Zone



The premier destination for the *slow nature experience* type of tourism

1. Establishing / enhancing **the right type of infrastructure** that would trigger only slow nature experience;
2. Developing and promoting tourism activities that will **integrate into slow nature experience**.

Example: Crisan zone

User/activity and impact

User	Activity	Pressure/threats/ Local settings	Benefits	Measures
Anglers	Leisure and sports (mainly FAST)	A1, A2, A3, A4, A5, A9, A11, C2, C3, D1, D4, D5	Transportation, boat hiring, accommodation, local guides	Reduce litter, noise, quantity and size of the fish Legalise camping spots, legalise angling spots
Birdwatchers in small groups (max 20 pers)	Tourism (SLOW)	A1, A2, A4, D1	Transportation, boat hiring, accommodation, local guides	To increase the money spending into communities, develop local offer Environment friendly transport
Nature lovers	Tourism (canoeing, small engine boats) (SLOW)	A1, A2, A4, D1	Transportation, boat hiring, accommodation, local guides	To increase the money spending into communities Environment friendly transport
Fun seekers	Leisure/tourism (FAST)	A1, A2, A3, A4, A5, A6, A9, C2, C3, D1,	Transportation, boat hiring, accommodation	

Preliminary conclusions on carrying capacity for DDBR

The conclusions are the result of the workshops with experts and partners

1. The ecological CC is below the critical point in relation with tourism;
2. In some situations leisure and recreation activities are having an increased negative pressure;
3. Socio-economical CC is critical considering the high rate of natural resources and the low average of stay;
4. The visitor CC is exceeded because of the conflict between leisure and sport activities (*fast experience*) and nature and outdoor activities (*slow experience*) .

Advantages/innovativeness of the good practice

1. Bringing the CC study into relation with already existing visitor management planning and other studies (2009);
2. Creating a tool and a framework for further activities;
3. Bringing together experts and management staff for providing a quick insight.

détente
consultants



For good management measures, it is possible to go through a rapid assessment with experts

but...

It is crucial to implement the measures.

Limitations of the good practice

1. Time scale of the project and of the assignment.
2. Lack of experience in carrying capacity studies, but very popular as a concept.
3. Lack of mechanisms to implement the proposed monitoring framework.

For whom is this good practice useful



- DDBR
- Other large protected areas



Thank you for attention
and.... SLOW DOWN with us in
Danube Delta!

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