

Lošinj Dolphin Reserve

An inter-disciplinary approach to
conservation

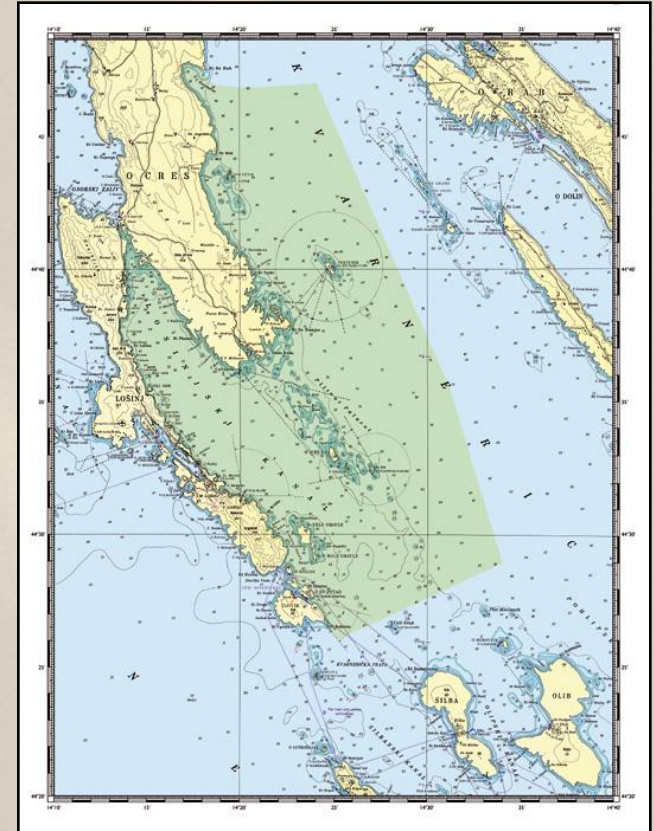
Dražko Holcer & Peter Mackelworth
Blue World Institute of Marine Research and Conservation



An inter-disciplinary approach

Combining ecological, socio-economic, and institutional characteristics of the region

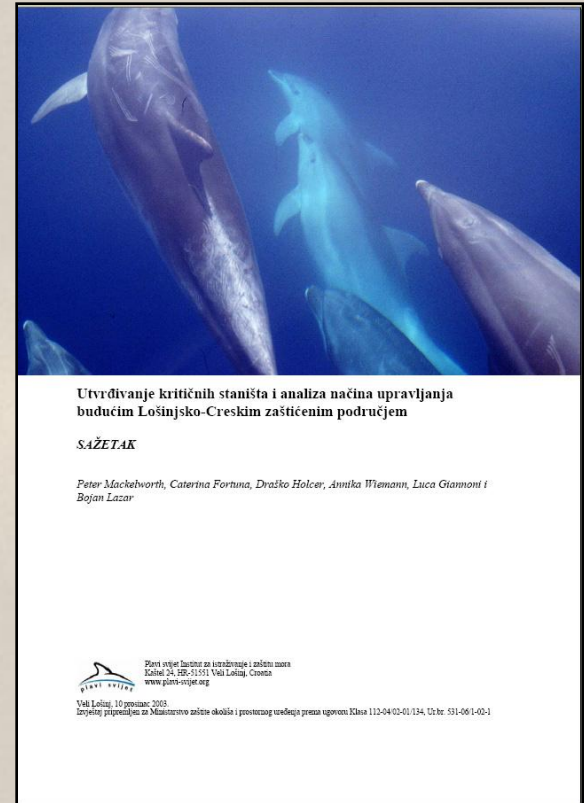
- Ecological characteristics
- User group characteristics
- Institutional arrangements
- National and international influences



Critical Habitats Report (2003)

Funded by ACCOBAMS and undertaken in cooperation with the State Institute for Nature Protection and other Croatian Institutions

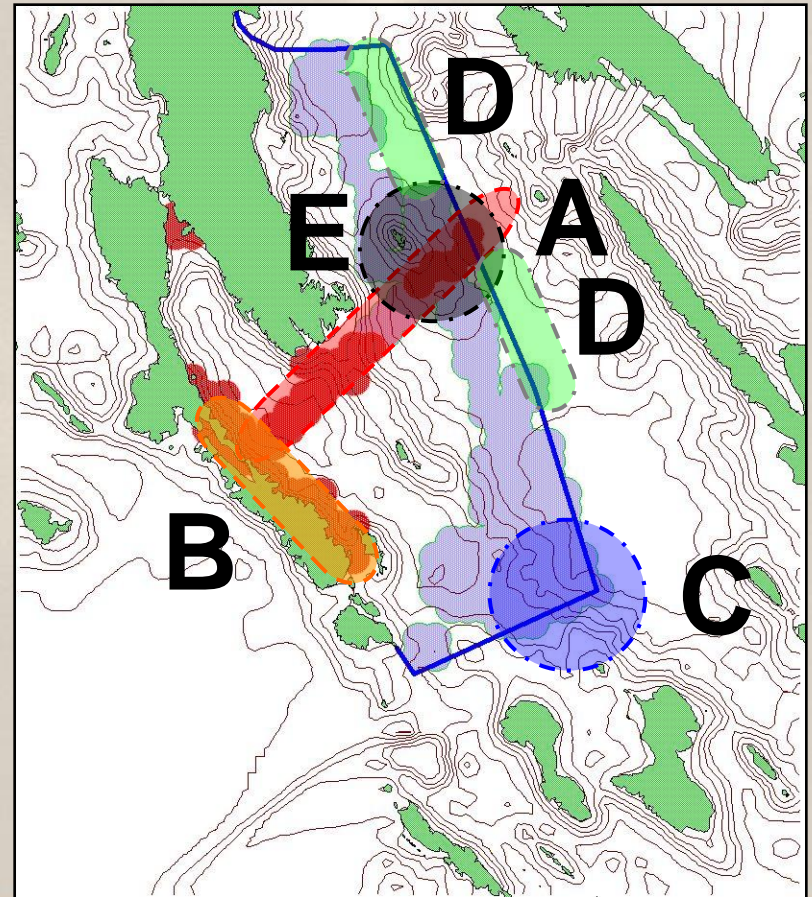
- Ecological and cultural data
- Socio-economic data
- National policy and law
- International policy and law



Ecological data

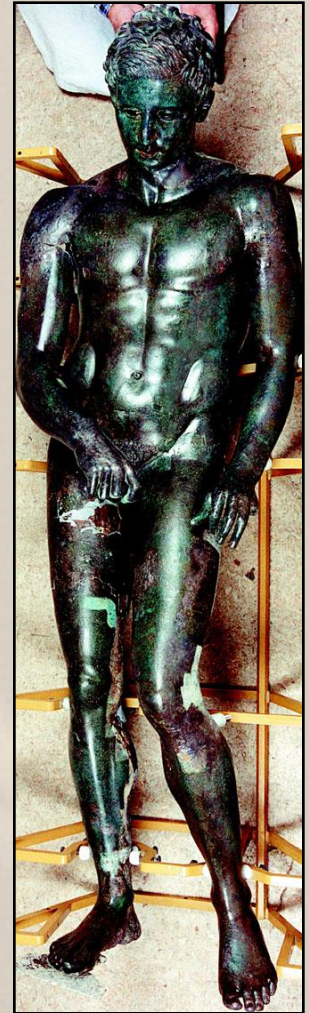
Application of Bottlenose dolphin (*Tursiops truncatus*) data

- Critical habitats
 - St Andrews University, Scotland
- Acoustic disturbance
 - University of Trieste
- Physical disturbance
 - University of Bangor
- Genetic Diversity
 - University of Potsdam



Integration of other data

- Sea turtle distribution
 - Adriatic Marine Turtle Programme
- Benthos
 - Coral community dominated by calcified algae, corals, mosses and sponges
- Nesting & Brooding Bird Species
 - Nesting of Common European Shag
- Cultural Heritage
 - Apoksimenos



Lošinj Society

- Border position of Lošinj has led to significant changes in the make up of the island population
- Migration patterns
 - Change of administration in 1947 – Italian – Yugoslav
 - Development of Mass tourism 1960-1980
 - Change of administration in 1996 – Yugoslav – Croatian
 - Gentrification of the island – emigration of young islanders, immigration of retirees and second home owners



Lošinj island

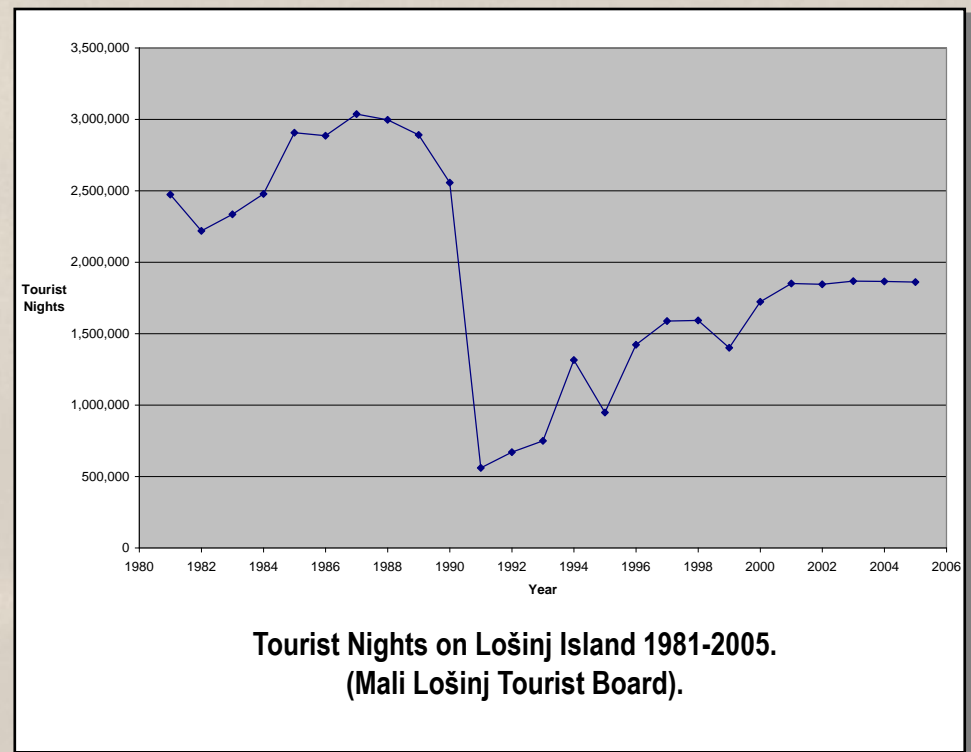
- Limited natural resources
 - Related to size and insularity
- Limited human resources
 - Migration
- Often reliant on the marine environment
 - Tourism
 - Fishery
 - Recreation
 - Waste disposal



Lošinj Economy

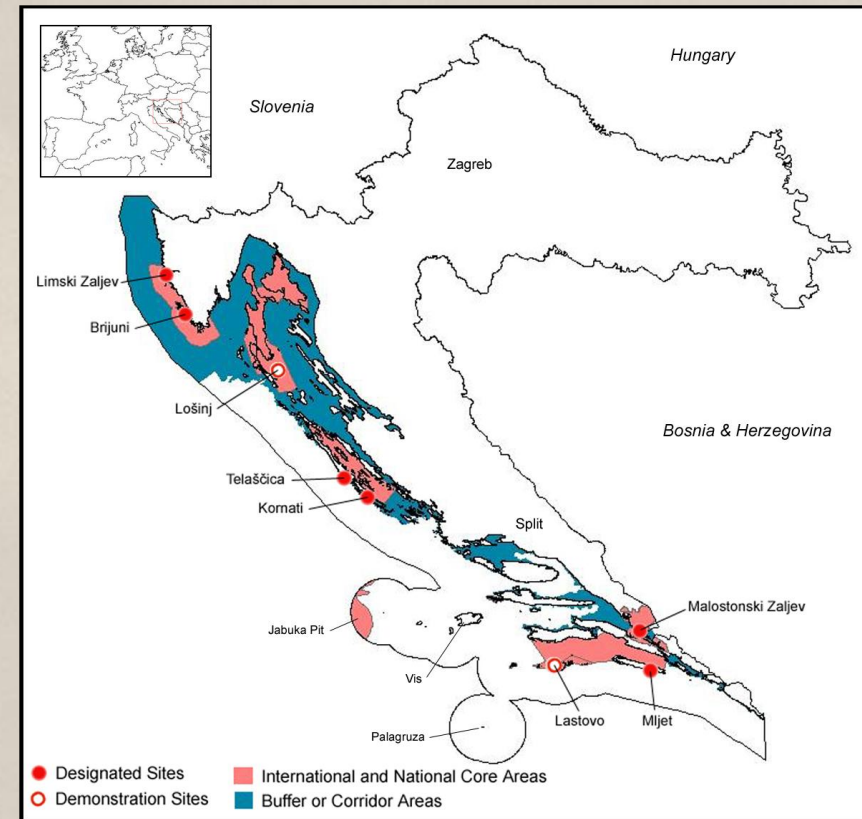
Tourism and related services

- 88% of the total revenue
- 82% of the employment



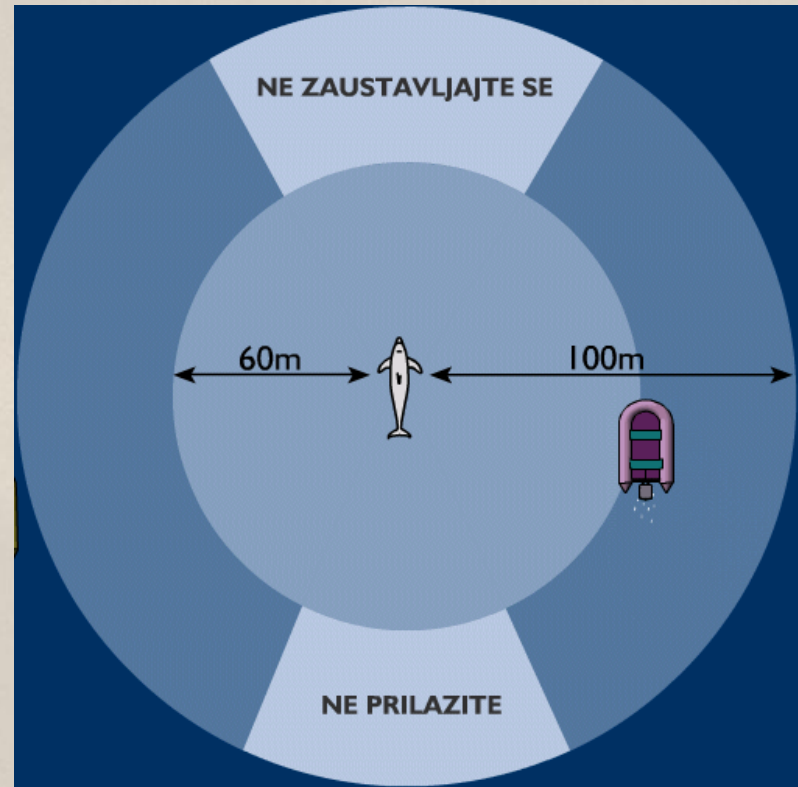
The Lošinj Special Zoological Reserve for Dolphins

- Area
 - Incorporates 525km²
 - The subsidiarity principle
 - Local management institution
- Network
 - CRO-NEN (National Ecological Network)
 - European Natura 2000
 - Mediterranean SPAMI
 - ACCOBAMS



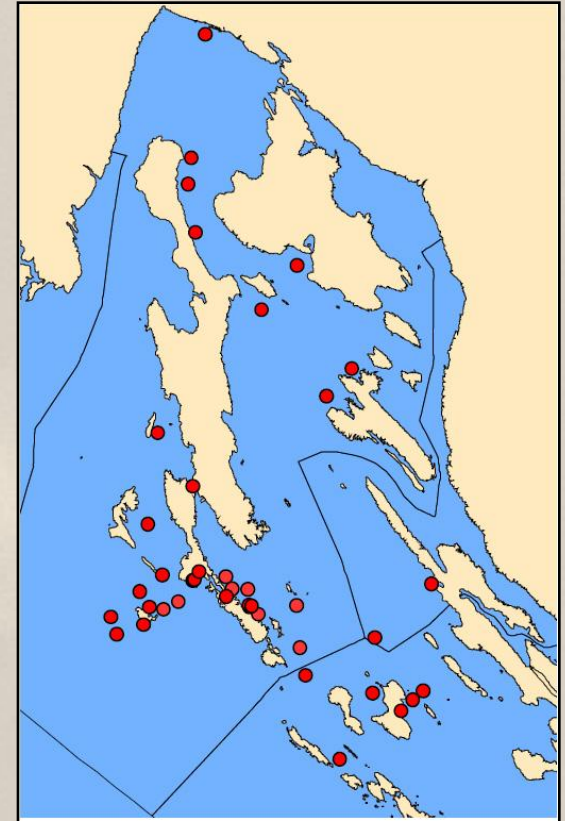
Five Simple Ideas

1. Enforcement of current laws on sport and recreational fishing;
2. Enforcement of current laws on professional fishing vessels;
3. Exclusion of non Lošinj registered professional fishing vessels;
4. A mandatory speed limit throughout the area;
5. A mandatory code of conduct for vessels interacting with dolphins



The role of Blue World

- Provision of background data
 - Dolphin
 - Other protected species
 - Cultural information
 - Social information
- Facilitation role
 - Hosting of meetings
 - Local Authority
 - Fishery Guild
 - Relevant Authorities



Turtle sighting and stranding data



Designation of the Lošinj MPA

- The Lošinj MPA was designated with 'preventative protection' in August 2006.
- The initial local reaction was positive



Veli Lošinj, 6. August 2006.



Future Steps for the LDR

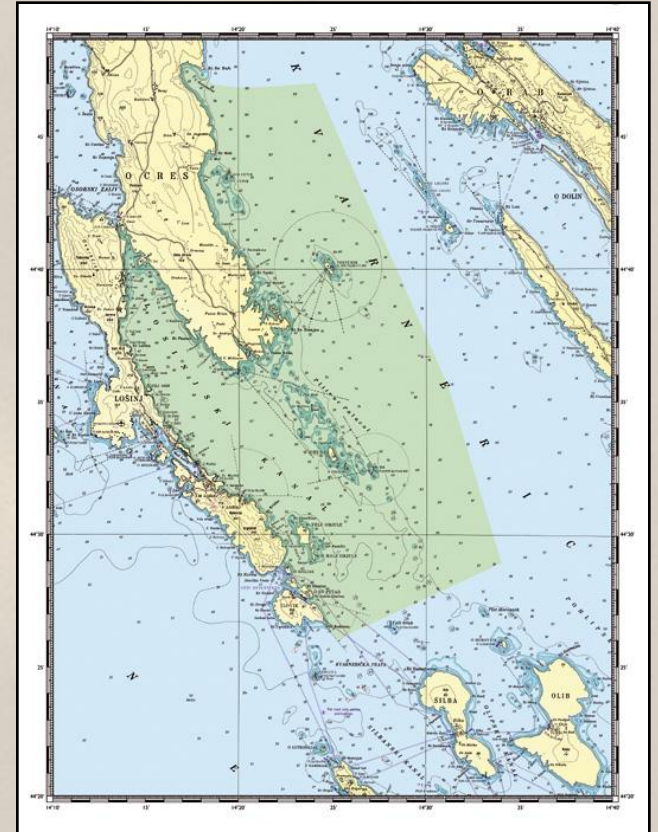
- Identification of funding mechanism for the development of the Management Plan
- Public Hearing – Ministry of Culture (MINK)
 - Originally scheduled for Autumn 2005
- Development of Institution for Management
 - Currently falls under the County Office for Protected Areas



Future Steps

- Protected species use patterns
- Human use patterns
- Provisional zoning plans

Management Plan



Lessons Learnt

Importance of combining different knowledge

- Biological knowledge
 - Dolphins
 - Blue World data
 - Turtles
 - Croatian Natural History Museum
 - Benthos
 - Natural History Museum, Rijeka
 - Birds
 - University of Trieste



Lessons Learnt

Importance of combining different knowledge

- Local knowledge
 - Biological
 - Spawning areas
 - Socio-economic
 - Fishery and tourism data
 - Cultural
 - Identity of resource user



Lessons Learnt

- Social science
 - Involve the stakeholders at the earliest opportunity
 - Information is available about all aspects of the island
 - Understand your opponents and supporters
 - Make you results understandable
 - Critical Habitats report – executive summary



Lessons Learnt

- Law
 - International
 - ACCOBAMS
 - Bern convention and Habitats directive
 - National
 - National Strategy and Action Plan
 - Stability and Association Agreement
 - Local
 - County seas
 - Local by-laws



'Lošinj the island of dolphins'

- Primary motivation for the creation of protected areas is normally biological
- Protected areas are inherently social
 - Human constructions
 - Control human actions
- Tying Economic Capital to Social Capital



Ultimately the deeper agenda is
to make nature and natural
resources meaningful to a whole
new community of 'Lošinjani'

