

**OCENE IN POROČILA
RECENSIONI E RELAZIONI
REVIEWS AND REPORTS**

Lovrenc Lipej, Robert Turk & Tihomir Makovec:
ENDANGERED SPECIES AND ENDANGERED HABITAT
TYPES IN THE SLOVENIAN SEA
Zavod RS za varstvo narave, Ljubljana, 2006

On the occasion of the international "Conservation of Biodiversity in the Northern Adriatic" workshop held the 25th of May 2006 in Strunjan (Slovenia), the book entitled "*Endangered Species and Endangered Habitat Types in the Slovenian Sea*", written by Lovrenc Lipej, Robert Turk and Tihomir Makovec, was presented.

The Gulf of Trieste is known from time immemorial for its marine flora and fauna richness. Because of this wealth, many European researchers have travelled to our coast since the second half of 19th century to study and collect biological material for private collections or museums.

Many species, common in the Adriatic and Mediterranean Seas, bring today in their scientific name the testimony of a past dedicated to the first observations, morphological descriptions of organisms and the long stays of many eminent scientists (e.g. *Muggiaea kochi*) in the Gulf of Trieste, at that time considered a true paradise for naturalists. The main consequence of this proliferation of science and scientists in the northern Adriatic area was the establishment of many institutions devoted to marine research. Within many scientists, Aristocle Vatova must be mentioned. Born in Koper in 1897, he is no doubt the father and pioneer of the benthos ecology research in the Adriatic Sea. His subdivision of benthic dominion in zoocoenoses has remained valid till this very day. The citation of his work (1949) in this new publication must be considered a rightful legitimization.

The Gulf of Trieste and the entire northern Adriatic area in general holds an important and traditional fishery activity. The purse seine net, locally known as "sac-caleva", used to catch small pelagic fish, was designed and built in Izola (1927). The consequence was the development of numerous fish industries, mainly in Izola, for many decades representing one of the most important economic activities in the Istrian Peninsula.

The marine environment was subjected to many kinds of stresses due to human activities. Large coastal portions were modified, industrial and urban plants have caused a production and dispersion of polluting compounds into the sea, trawling fishery has played an important part in the modification of the seabed. Consequently, the Slovenian sea could no longer be re-

cognized as naturalists' paradise anymore. However, it should be pointed out that these human activities have raised the living standard of the local population.

Only in the 1960s, the concept of ecology began its gradual development, and today more attention is devoted to the protection of the environment. Many studies have been made till now and a more detailed knowledge about marine environment is available.

The present book, almost 240 pages long, presents the synthesis of all available data and cognitions about the species and habitat types that could die or disappear in the natural environment of the Slovenian coastal sea. The book is written in Slovenian and in English, which will enlarge the circle of readers, both scientists who will be able to use the passed on knowledge and the admirers of the marine environment.

In the introductory part, the authors emphasize that the book is a marine Red List, which comprises not only endangered animal and vegetal species, like other Red Lists do, but endangered habitat types as well. In the next chapter, the reader can find the main characteristics of the Mediterranean, Adriatic and of the small although in no way poor Slovenian sea. The research methods follow, with an explanation of the criteria used in the selection of endangered species and habitat types. The ensuing longer chapters comprise exhaustive descriptions of endangered species in the Slovenian sea, data about their expansion, habitats and threats to their survival. Here, three species of seagrasses and 41 animal species, from sponges, anthozoans, gastropods, bivalves and crabs to cartilaginous and bony fishes, turtles, birds and mammals are presented. The accompanying photos, maps and excellent drawings enrich descriptions of species and their distribution in the marine environment.

In the chapter dealing with endangered habitat types in the Slovenian sea, the authors describe endangered biocenoses in the coastal belt. The list includes two supralittoral, four mediolittoral, six infralittoral and four circalittoral biocenoses. The very clear description of various biocenoses will give an opportunity to identify such habitat types in the natural environment also to a layman. In the next thematic block, the authors point out the factors affecting the biodiversity of the Slovenian sea and could greatly contribute to habitat degradation. These are not only factors originating from human activities, like urbanization and consequently pollution, fishing and mariculture activities, but also factors of natural origin, like the constant slow spreading of southern species toward the north.

The book also lists research institutions engaged in research of marine biodiversity and the legal tools designed for the conservation of biotic and landscape diversity as well as for sustainable use of natural sources. Some data are also given on Marine Protected Areas and their importance in the conservation of marine biodiversity in Slovenian waters like in other seas, with the

list of action plans adopted by contracting parties of the Barcelona Convention for the protection of the Mediterranean monk seal, marine turtles, cetaceans, marine vegetation, birds, chondrichthyan fishes and for the prevention of non-indigenous species being introduced in these waters.

The present publication is a precious, qualitative review of endangered species and habitat types in the Slovenian sea, which should not be the only book dealing with this topic, but should represent just the beginning of a constant, professional monitoring of endangered animal and vegetal species and their living environment in the Slovenian sea, earmarked for the prevention of irreparable damages. The book is enriched by valuable biological data as well as by long-standing experience in this field, presented through the eyes of three authors with different profiles: an enthusiastic scientist, a fanatic nature-conservator and a talented photographer and designer.

Nicola Bettoso & Martina Orlando Bonaca

DIVERSIDAD Y CONSERVACIÓN DE LOS AMBIENTOS
KÁRSTICOS: EJEMPLOS VALENCIANOS Y
ESLOVENOS/
PESTROST IN OHRANJANJE KRAŠKE POKRAJINE:
PRIMERI IZ VALENCIJE IN SLOVENIJE/
DIVERSITY AND CONSERVATION OF KARST
LANDSCAPES: VALENCIAN AND SLOVENIAN
EXAMPLES

Znanstveno-raziskovalno središče Koper Univerze na Primorskem je do lanske jeseni na Kraškem robu opravljalo triletni projekt "Ohranitev in varstvo ogroženih habitatov/ vrst na območju Kraškega roba". V treh letih, kolikor je trajal projekt, ki ga je sofinancirala Evropska

unija prek program LIFE-Narava, so primorski strokovnjaki skupaj s številnimi domačimi in tujimi partnerji poskušali ustvariti razmere, ki naj bi omogočile ohranitev narave in kulturne krajine ter izjemne biotske pestrosti, predvsem z aktivno sodelležbo lokalnega prebivalstva.

Za doseg tega cilja pa so bile koristne španske izkušnje. Med partnerji je bila namreč tudi vlada avtonomne španske province Valencije, kjer so že pred leti uspešno začeli uresničevati naravovarstveni model mreže rastlinskih mikroz rezervatov, ki tudi v evropskem merilu dobiva vse večji pomen in podporo. Več kot dvesto takih rezervatov v Valenciji daje izvrstne rezultate pri varovanju ogroženih vrst, predvsem ker je takšen način veliko preprostejši in hitreje izvedljiv od prizadevanj za zaščito kompleksnejših območij. Zaradi velikih podobnosti med kraškimi pokrajinami v Valenciji in na našem Kraškem robu ter velike pestrosti življenja na obeh območjih ne čudi, da je prišlo do sodelovanja v skupnem projektu. Eden izmed rezultatov je tudi skupni, trijezični (špansko-slovensko-angleški) zbornik, ki nam skozi prispevke strokovnjakov primerjalno predstavlja poznavanje pestrosti življenja in prizadevanja po ohranjanju kraških pokrajin v Valenciji in Sloveniji.

Za podrobnejšo predstavitev Valencije in njenih predvsem rastlinskih bogastev v zborniku ni dovolj prostora, spoznamo le osnovne pokrajinske poteze in pomen rastlinstva, med katerim so številni endemiti in relikti. Izpostavljen je kraški svet s podzemnimi jamami in kraškimi kali. Takšna okolja dajejo možnost za preživetje številnim vrstam, ki ga v sušni pokrajini sicer ne bi imele. Verjetno za nas, slovenske bralce najpomembnejši del zbornika pa je predstavitev izkušnje, ki so si jo v Valenciji pridobili z razvojem rastlinskih mikroz rezervatov. Emilio Laguna, ki velja za očeta tega valencijskega pristopa k ohranjanju narave, nas skupaj s sodelavci popelje na začetek devetdesetih let, ko je nastala pobuda po nastanku omrežja majhnih območij, ki so pomembna za ohranitev redkih in ogroženih vrst. Tako je mogoče brez dolgotrajnih zakonskih priprav, ki jih za sabo potegne ustanavljanje parkov, doseči hitro in učinkovito varovanje populacij tudi na zasebnih zemljiščih. Pokrajinski svet valencijske avtonomne vlade namreč daje finančno podporo, od enkratnih odškodnin za vključitev v omrežje do dotacij (tudi do 18 tisoč evrov letno na posameznega lastnika) za nakup zemljišč in izdelavo načrtov upravljanja. Od dobrih 230 mikroz rezervatov, kolikor jih je bilo v Valenciji ob nastajanju zbornika, je 30 zasebnih. Ker omrežje mikroz rezervatov velja za eno najbolj izjemnih pobud na področju varstva in ohranjanja rastlinstva v evropskem merilu, valencijski strokovnjaki sodelujejo pri prenosu tega modela v druge dežele, med katerimi je tudi Slovenija, za začetek zgolj s Kraškim robom.

V prispevku slovenskih avtorjev kratki predstavitvi projekta na Kraškem robu (avtorjev Andreja Sovinca in