

ANIMAL SPECIES THREATENED IN THE MEDITERRANEAN ISLANDS : A PROJECT TO PRESERVE VULNERABLE HABITATS

Bruno MASSA

Istituto di Entomologia Agraria, Viale delle Scienze 13, 90128 Palermo, Italy

Mediterranean islands in the last years are facing a serious threat for coastland conservation: the widespreading of tourism industry. Following the World Travel and Tourism Council (1992), tourism today has become the most important civil industry in the world : in 1993 it was expected to generate about 3.5 trillions of dollars of world output, that is 6% of the world gross national product, and to double by the year 2005. Tourism is a bigger industry than the auto, steel, electronics or agricultural industries; it grew by more than 57% in the past decade and is expected to grow by 50% before 2000. Some mediterranean islands (e.g. Crete, Rhodes, Cyprus, etc.) in the spring-summer period (May-September) hold almost 10 millions of international travellers, with understandable consequences for the coastline and beach conservation; true, the new economy has given impetus to the agriculture and has generally changed the life style of many people who live in the coast villages, but at the same time has worsened the status of animal and vegetal coenoses through the excessive removal of natural biotopes along coastlines, the building of tourist harbours, the progressive settling of breakwaters, the beach replenishment and the pollution of coasts, which interfere with coastal currents, natural sand sedimentation, as well as terrestrial zoocoenoses and phytocoenoses.

It is necessary to plan a general project to identify the most important naturalistic areas along island coasts and to prepare an agreement (at least shared by the EC countries) in order to control and improve this threat, without loss for the economy. Mediterranean islands are characterized by harsh landscapes painted with strong colours, superb mountain scenery, woodland, fascinating coastlines and beaches, as well as places of great historical and archeological interest; they are very much suitable to different kinds of nature tourism. Ecotourism is defined as responsible travel to natural areas that conserves the environment and sustains the well-being of local people (BLANGY and EPLER WOOD, 1993). Nature tourism in 1989 generated approximately 7% of all international travel expenditures (CEBALLOS-LASCURAIN, 1993); potential benefits of ecotourism are generation of funds for protected areas, creation of jobs for people who live near protected areas, and promotion of environmental education and conservation awareness (BOO, 1993).

An exemplary case of ecotourism in Mediterranean islands is that reported by PITTET (1994) for Formentera (Balears Is.); tourists conscious of the requirements of the environment and who adapt their behaviour to them contribute to the welfare of local people.

We need to inventory all the preserved coast areas of Mediterranean islands, to analyse speedily their biological-conservationist value using as ecological indicators well-known taxonomic groups (BRICHETTI and MASSA, this volume), and to propose to local governments alternative projects, which consent at the same time ecotouristic exploitation, economic growth and conservation of natural resources. Because much of the threatened biodiversity can be found in comparatively small areas, protection of these areas would ensure the survival of a high number of species, both animals and plants. Analysis of breeding bird distribution, of sites of concentrating migrators and of wintering habitats have revealed that they are good indicators of these key areas.

I conclude by proposing to the scientific community to contribute to this international inventory, and I recall that natural resources are a very important and unique tourist attraction; to do nothing in order to improve their degradation or to contribute to their destruction is a cultural crime like destroying a sculpture made by Michelangelo, as NORTON (1986) wrote: "*the damage done when a species becomes extinct is analogous to the damage done when a great work of art is destroyed*".

REFERENCES

- BLANGY S. and EPLER WOOD M., 1993. Developing and implementing ecotourism guidelines for wildlands and neighboring communities. Pp. 32-54 in LINDBERG K. and HAWKINS D.E. (eds.), *Ecotourism, a guide for planners and managers*. Ecotourism Soc., Vermont, USA.
- BOO E., 1993. Ecotourism planning for protected areas. Pp. 15-31 in LINDBERG K. and HAWKINS D.E. (eds.), *Ecotourism, a guide for planners and managers*. Ecotourism Soc., Vermont, USA.
- CEBALLOS-LASCURAIN H., 1993. Ecotourism as a worldwide phenomenon. Pp. 12-14 in LINDBERG K. and HAWKINS D.E. (eds.), *Ecotourism, a guide for planners and managers*. Ecotourism Soc., Vermont, USA.
- NORTON B.G., 1986. *The preservation of species. The value of biological diversity*. Princeton Univ. Press.
- PITTET E., 1994. Ecotourism in Formentera, Archipelago of the Balears. *Insula*, 3(1): 48-50.
- World Travel and Tourism Council, 1992. *The WTTC Report : travel and tourism in the world economy*. Bruxelles