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The importance of salt marshes for the protection of rare species of macro Lepidoptera in the Mediterranean basin

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Mediterranean salt marshes, often composed of fine sand and/or muddy coastal sediment substrata, are generally found around sheltered shores of the Mediterranean. The vegetation is dominated by perennial and shrubby halophytes but the plant communities vary according to regional climate and the salinity, particularly in the Mediterranean with summer droughting and sediment type.

Current data shows a recent and dramatic decline in surface area of salt marsh habitats and their fragmentation. These habitats have been considerably reduced due to geomorphological evolution linked to climate change, and above all, due to human activity. Disturbance via tourism and other forms of coastal development, overgrazing and pollution are serious threats to such places which are in need of urgent and strict protection.

Recent studies show the importance that safeguarding these unique habitats will ensure the survival of highly endangered species associated with them. These ecosystems, which are particularly delicate, have now been declared as protected areas in many regions. This, in turn, ensures the protection of the biodiversity present in these habitats which are adapted to these environmentally unique areas. A case in point is the macro Lepidoptera community of salt marshes present in the Mediterranean basin which is strongly influenced by the Mediterranean climate. Research studies pertaining to salt marsh habitats are rather fragmentary and thus information on species diversity is limited. Certainly, even among macro Lepidoptera, future investigations will lead to the discovery of new species.

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