

**PROPOSALS FOR THE CONSERVATION OF OTTERS  
*LUTRA LUTRA* L. ON CORFU ISLAND (IONIAN SEA, GREECE)**

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**ABSTRACT** – Suggested measures for the conservation of otters (*Lutra lutra*) on Corfu include: 1) a nature sanctuary ("Otter Haven") for some little remote lagoons near Aghios Stephanos in the north-east; 2) a lagoon restoration scheme including restoration of traditional fishing with joint nature tourism for the large reedbeds and lagoons: Antinioti (100 ha) in the north, Chalkiopolou (380 ha) in the suburbs of Kerkyra, Korission (500 ha) in the south-west; 3) the stopping of raw sewage discharge, illegal infilling, building and waste dumping in the wetlands; 4) the limitation of intensive fish farming schemes. Such a policy is reconcilable with economic activities (tourism, fishing, trade or administration).

**Key words:** *Lutra lutra*, Conservation, Corfu, Ionian Sea

**RIASSUNTO** – *Proposte per la conservazione della lontra Lutra lutra L. nell'isola di Corfù (Mare Jonio, Grecia)* – Per la conservazione della lontra (*Lutra lutra*) nell'Isola di Corfu sono suggeriti i seguenti interventi: 1) creazione di "santuari naturali" per la specie comprendenti le piccole lagune vicino a Aghios Stephanos nella parte nord-est dell'isola; 2) riqualificazione degli ambienti a canneto e delle lagune, abbinata al ripristino della pesca tradizionale e allo sviluppo del turismo ecologico: Antinioti (100 ha) nella parte settentrionale, Chalkiopolou (380 ha) nell'area suburbana di Kerkyra, Korission (500 ha) nella parte sud-ovest; 3) divieto di scarichi fognari e abusivi, divieto di costruzione di insediamenti abitativi e eliminazione di discariche nelle zone umide; 4) limitazioni allo sviluppo degli allevamenti ittici intensivi. Gli interventi prospettati si inquadrano in una politica di gestione ambientale compatibile con le attività economiche presenti (turismo, pesca, commercio).

**Parole chiave:** *Lutra lutra*, Conservazione, Corfu, Mare Ionio.

## INTRODUCTION

Recent field surveys of otters *Lutra lutra* were carried out on Corfu Island (Kerkyra) in the Ionian Sea (Greece) in 1986 (Gaetlich, 1988) and in 1991-1992 (Grémillet, 1993). They proved that the otter still breeds in fresh, brackish and coastal wetlands in the east and north parts of Corfu. On the other hand the species seems to be extinct on the west and south coast because of habitat destruction and persecution (Tab. 1).

Tab. 1 – Sites on Corfu where the otter seems to be extinct in 1991-1992.

LOCALITY	HABITAT	LAST REPORT	PROBABLE CAUSE OF EXTINCTION
Ropa valley	reclaimed wetland and river	1968-1970 (local hunters)	habitat destruction
Korission	lagoon	1986 (Gaetlich, 1988)	persecution

The present population of otters is threatened by illegal building on the wetlands due to tourism expansion and by organic pollution due to domestic sewage and olive oil pressing units lacking water treatment plants.

This population is worthy of conservation taking in account that the species occurs only in two other islands of the Mediterranean basin (Euboea: Macdonald, 1991; Chios: Grémillet, unpublished data) and is endangered or declining in large part of western Europe (Macdonald & Mason, 1990).

The present paper summarizes the information collected on current distribution and status of the otter in Corfu (Grémillet, 1993 and unpublished data) and suggests proposals for the preservation of its most important habitats.

### CONSERVATION PROPOSALS

Table 2 lists habitats where otters were recorded in 1991-93. In most of these evidence of breeding was found. Otters occurred also in sites with a high tourism pressure. It should be noted that lagoons and wetlands play a fundamental role for the survival of otters in Corfu.

Tab. 2. — Otter sites recorded on Corfu in 1991-1992 (Grémillet, 1993) and in October 1993 (Grémillet, unpublished data). Survey methods defined in Grémillet (1993).

LOCALITY	HABITAT	HUMAN ACTIVITY AND THREAT	SIGNS OF PRESENCE	BREEDING EVIDENCE
Melissoudi	river with dense vegetation on bank <sup>5</sup>	urban development, tourism, pumping for irrigation,	spraints	
Antinioti	reedbed, lagoon seashore	fishing, hunting, tourism	holt, spraints	cubs
Aghios Stephanos	reedbed, lagoon seashore	hunting, bathing	holt, spraints	
Daphnila	river with dense vegetation on banks, seashore	pumping for orange groves, tourism	resting place, spraints	
Potamos	river with dense vegetation on banks, estuary, beach	urban development, dumps, sewage, tourism, road traffic	holt, spraints	litter + 1 cub
Chalkiopoulou	reedbed, lagoon, wet meadows, old tishing ditches	urban development, dumps, sewage, airport, hunting, fishing	spraints	litter + 1 cub, 1 young
Mesongi	river with dense vegetation on banks, estuary, beach	olive groves, olive oil pressing station, tourism, sawage, dumps	holt, spraints	1 young, cubs
Alikes Lefkirmni	salt-pan, sandy beach	hunting, tourism	footprints	

During many centuries, traditional fish farming in the lagoons fed the population of Corfu without damage to the ecosystem. Now it is declining and people are giving up the management of these wetlands. Some of them get blocked

up because of the spreading of the reedbeds. So, in spite of their international importance wetlands are just an useless habitats in the mind of the local population. Therefore people spoil them by litter dumping, sports grounds, tourist building and an international airport. At the moment schemes for intensive fish farming also threaten some lagoons (Antinioti: 100 ha; Chalkiopoulou: 380 ha) that still shelter a varied wildlife and otter populations. Their preservation requires the planning of some attractive economic activities in agreement with the appropriate use of natural resources. Traditional fishing and ecological tourism seem a possible alternative. In western Europe many nature guides are already vaunting the wildlife appeal of Corfu.

The local "Association for the safeguard of the Chalkiopoulou lagoon" claims the restoration of traditional fishing ditches (Grémillet & Walmsley, 1992). This site is surrounded by the urban area of Corfu but it is really worthy of protection and a restoration scheme.

Antinioti lagoon seems suitable for reed bed management as in the "La Gabrière" lake in Brenne/France (Trotignon & Williams, 1990). This restoration should include the digging of a large network of canals, ponds and pools in the reedbeds together with the grazing of surrounding wet meadows by cattle. That would improve all the biocenosis and therefore the fishing (without the damaging effects of intensive fish farming). The scenery and the rich wildlife (orchids, terrapins, birds, otters) are perfect for tourism linked to nature watching.

Even if the otter seems recently extinct on Korission lagoon, an alternative fishing management is required in order to stop the damaging schemes of intensive fish farming and the expansion of close tourist resorts. By this way it will be possible to strengthen this weak hunting reserve and "Corine site" and to ensure the conservation of this rich biotope for the possible recolonization by otters.

Facing the wild and quiet Albanian coast (separated by 2 km) the north easternmost peninsula near Aghios Stephanos seems undoubtedly the best place to establish a special otter reserve (Otter Haven). Here the coast comprises a wild quiet site of rocky cliffs, caves and coves. Otters use this coast as well as three lagoons (2 ha each). These marshes are remote and surrounded by large reedbeds protected by a huge thick thorny maquis. People can reach only one lagoon by road. In summer tourists reach the two others by boat but only for day trips, they are strictly confined to the stony beaches for sun bathing. In this area disturbance and economic activities are very limited (one little olive grove, a few goats and a small military watching tower) and would be compatible with a natural reserve.

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