## CONTRIBUTION TO FAUNA CONSERVATION IN THE MEDITERRANEAN ISLANDS. THE RED LIST OF BIRDS

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New criteria have been suggested to include animal species in red lists; for example BIBBY *et al.* (1989) propose the following ones for birds : 1) nesting or wintering species of international importance (if more than 20% of the population of western Europe nest or winter in the country); 2) nesting species which are rare because of the scarcity of their habitat or because they are on the edge of their distribution area (if in the country less than 300 pairs nest); 3) decreasing nesting species (with at least 50% of decrease as from the 60s); 4) nesting or wintering species confined to vulnerable habitats, with more than 50% of the population are fined to show the give TUCKED (1001) ballow that a 20% decrease is the last confined to about ten sites. TUCKER (1991) believe that a 20% decrease in the last twenty years is an objective risk for a species, but also their habitat vulnerability (species confined to few or small habitats or vulnerable sites) or some absolute values (less than 10,000 pairs nesting in Europe) can be useful to reckon the risk. Besides it can also be evaluated only in Europe; e.g.: some species, whose the most important populations live outside Europe, but less than 50% (and more than 5%) of the total known population lives in Europe and is in urgent need of conservation; or some species whose populations are mainly distributed in Europe that has therefore an international resposibility for them. The latter should be extended to those areas are important for their concentration of migrant species. GRIMMET & JONES that (1989) have used the following criteria to inventory the important bird areas in Europe: 1) sites of concentration for breeding, migration or wintering (with the socalled criterion of 1% of biogeographic or European population); 2) sites in which there are species threatened on a large geographic scale; 3) sites in which there are species or subspecies that are threatened only in Europe; 4) sites for species which have a small world distribution and important European populations.

Mediterranean area covers very many countries and consequently criteria for red lists must include parameters of biologic and biogeographic nature as well as distributional trend; we propose an objective method for birds which takes into consideration the

trend; we propose an objective method for birds which takes into consideration the following ones, weighing each of them with a value between 1 and 3: - a) endemism degree : endemic species = 3; subspecies very characterized and geographically restricted = 2; subspecies distributed over than one single island = 1; - b) population insularity : 76-100% of species distribution lies in the islands = 3; 26-75% = 2; 1-25% = 1; - c) rarity :< 100 pairs in the islands = 3; 101-500 = 2; > 500 = 1; - d) insular distribution : anatt from continental distribution the species is present in

- d) insular distribution : apart from continental distribution, the species is present in 1-25% of the islands = 3; in 26-75% = 2; in 76-100% = 1;
- e) population trend : much decreasing = 3; decreasing = 2; stable or fluctuating = 1;

- f) distribution area trend : distribution area much decreasing = 3; decreasing = 2; stable or fluctuating = 1:

- g) extinction : if the species has become extinct in one or more islands = 3;

 $\hat{h}$  vulnerability :sedentariness, habitat specialisation, feeding specialisation, threatened from human presence, impossible to reintroduce when become extinct = 1 for each parameter.

In accordance with the sum of these figures calculated for the 99 bird species living in the Mediterranean islands, we put them in order of increasing threat.

## REFERENCES

BIBBY C., HOUSDEN S., PORTER R. & THOMAS G., 1989. Towards a bird conservation strategy. *RSPB Conservation Review*, 3: 4-8. GRIMMETT R.F.A. & JONES T.A., 1989. Important Bird Areas in Europe. *ICBP Techn.Publ.*, 9, Combridge

Cambridge. TUCKER G., 1991. The ICBP Dispersed Species project, a new initiative for bird conservation in Europe. *Bird Census News*, 4 (1): 13-18.