

A Partridge in Danger

Sandro Lovari

The Italian grey partridge *Perdix p. italica* is in danger of extinction. It has been overhunted and stocks have been polluted by the importing and release of other subspecies. The author urges that the few small flocks of the pure native bird known to survive should be located and given strict protection.

The grey partridge probably arrived in Italy during the glaciations and remained there isolated, adapting itself to the mild Mediterranean climate when the cold age ended. Its range covered almost the whole peninsula, especially hills and the lower mountain slopes. It did not reach the islands, although Giglioli (4) mentions a small colony (perhaps imported) in Sicily, near Francavilla. The Italian subspecies *Perdix p. italica* (Hartert) is smaller, slenderer, darker, and more reddish-brown than the northern subspecies. The breast plumage, however, is pale grey, and the male's brown "horse-shoe" is also pale, often reduced to two spots only (13, 14, 6). The clutch size appears to average about 14 eggs per clutch (14, 15, 1, 6), slightly fewer than in northern countries (5, 10).

Hunting pressure has always been very heavy in Italy and partridges are still one of the most persecuted game birds. The use of herbicides and pesticides in agriculture has also greatly endangered the original partridge population. Potts (7) has pointed out their dangers for chick-survival, and Blank *et al.* (2) found that chick mortality was a "key factor" in the regulation of population density. Probably other factors are also involved, such as competition with pheasants and changes in crop cultures (11). In fact, however, the Italian grey partridge (like the other European subspecies) started to decline steadily during the present century. The Italian shooters' associations tried to stop this downward trend, not by protecting the partridge for a few years, but by introducing, from north and east Europe, alien subspecies unadapted to Italian local conditions. These releases proved a complete failure; they polluted the Italian race without stopping the decline. Hybridisation has probably had a harmful effect on the Italian population by introducing genetical factors unadapted to the Mediterranean climate (16). In the last ten years a few rearing farms have been established and captive-reared birds are replacing imports, but birds born and reared in aviaries may not be strong enough to establish viable breeding populations in the wild (11), especially as their parents were far from being pure *Perdix perdix italica*.

However, according to Ghigi (3), small populations of the original subspecies may still live in a few hill areas of Central Italy, and small flocks have in fact been sighted in the private shooting reserve of Pian d'Albola, near Radda in Chianti, in the Siena district of Tuscany, and in the private shooting reserve of Lilliano, near Castellina, in Chianti, in the same district (Olmastroni 1972, pers. comm.).

A thorough inquiry should be made as soon as possible to find out the precise areas where this rare partridge still lives and strict protection given to it. That will not be easy, wildlife conservation being still a rather new concept

for most Italians, and really strong pressures will have to be exerted to secure proper protection for a traditional game bird, no matter how endangered. However, the enforcement of recently enacted regional regulations for hunting (12) might help to protect the few areas where *Perdix perdix italica* is still present.

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Destruction in Madagascar

The hitherto rather inward looking American journal *Defenders of Wildlife* has performed a signal service by enlarging its April 1975 issue and devoting almost the whole of it to a fully illustrated review of the desperate plight of the Madagascar fauna and flora. The lemurs, tenrecs and other endemic fauna and flora of this remarkable island, whose wildlife is predominantly endemic, seem to be doomed by the human pressures on its few remaining forests. Some 70 per cent of the natural vegetation and 90 per cent of the forests have already been destroyed by man, leaving all too often not a fertile land producing crops but a semi-desert feeding half-starved cattle. Madagascar is a test case for the world conservation movement: how can it strengthen the will and the resources of the few Malagasy conservationists and enable them to persuade their Government to take the effective action to save this vital heritage of world science? It will be a lasting shame to the UN agencies concerned, UNEP, UNESCO and FAO, if they do not divert enough of their resources to help in this fight. Copies of the journal can be obtained at 2000 N Street NW, Washington DC 20036, price \$3.00 (\$4.50 airmail).

Some Initials

IUCN	International Union for Conservation of Nature and Natural Resources
FAO	Food and Agriculture Organisation
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
NERC	Natural Environment Research Council
ICBP	International Council for Bird Preservation
ISPA	International Society for the Protection of Animals
RSPB	Royal Society for the Protection of Birds