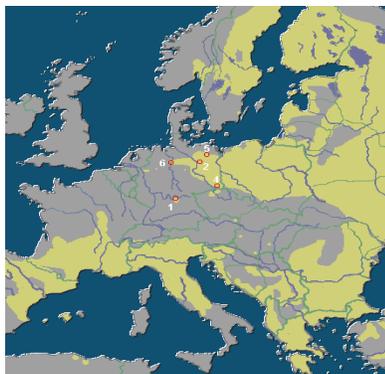


Ortolan bunting *Emberiza hortulana*

Birds Directive – Annex I



Emberiza hortulana breeds in Europe and Central Asia, as far west as NW Mongolia¹

	AT	BE	BU	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HU	IR
Present														
	IT	LV	LT	LU	MA	NL	PL	PT	RO	SL	SV	SE	UK	
Present														

SPECIES INFORMATION

ECOLOGY

- Ortolan buntings are small passerines that breed in Europe and Central Asia and spend the winter in Africa, south of the Sahara;
- Birds arrive at their breeding grounds in April-May and leave Europe again in August-October;
- The choice of a breeding place is based on habitat quality as well as on the presence of other individuals. Territories are not strictly defended and the males often have songposts 20-50 m apart;
- The overall breeding density is difficult to assess because of the tendency of breeding pairs to cluster. In prime breeding habitats densities can be as high as 15 singing males per 15 ha but are more commonly around 2-20 breeding pairs per km²;
- The nest is mostly placed on the ground, sometimes also low in bushes or small trees;
- Egg-laying occurs during May-June. The clutch size is 3 to 5. Pairs raise only one clutch per year;
- Incubation time is 11-12 days. The young leave the nest after 12-13 days and become independent of the parents c. 4 days later;
- Ortolan buntings eat mostly invertebrates, but also seeds, especially outside the breeding season.

HABITAT REQUIREMENTS

- Within the European breeding range, ortolan buntings occur in a wide variety of habitats. They prefer areas with a continental climate, many hours of sunshine and low rainfall;
- Key factors in determining suitable habitat are the presence of trees, which are used as song-posts and sometimes as foraging sites, and open areas suitable for feeding;

¹ Map: *The complete birds of the Western Palearctic CD-ROM (1998)* Photo courtesy of Petra Bernady

- In Central and Eastern Europe, ortolan buntings are associated mainly with cultivated land. They prefer low-intensity, mixed farmland on light soils with sparsely vegetated spots (for feeding) and bushes, trees and artificial perches (as song-posts);
- In Southern Europe, the species breeds in uplands and mountains up to at least 2,000 m, where it typically occurs in rugged, gully-strewn countryside;
- In forested areas of Fennoscandia, the small remaining populations occupy forest margins, clearings and clear fells.

THREATS

Ortolan bunting populations are declining across most, if not all, of its European range. The causes of the decline are not well understood. Identification of the principal threats is complicated by the variability in habitat choice across Europe.

The major threats are thought to include:

- Loss of habitat heterogeneity in farmland: through replacement of small-scale, mixed farming by large-scale, intensive agriculture. Negative features include the loss of tree- or bush-lined ditches, clearance of scrub patches, amalgamation of fields, and reduction of crop diversity;
- Intensification of farming practices: Increased use of fertilizer and high seed densities make crops too dense for the birds to walk through while feeding, and herbicide and insecticide use reduces the density and diversity of food items;
- Abandonment of cultivation: Although an evolution from open to semi-open landscapes benefits the species, further succession towards forest and scrub has a negative impact. Abandonment of extensively cropped or grazed land is therefore detrimental, due to the loss of habitat mosaic;
- Loss of habitat through urbanization (mainly Western and Central Europe) or afforestation (mainly upland areas in Southern Europe);
- Pesticides: The use of pesticides greatly reduces the number of insects available to the birds. Residues also accumulate in the birds and these may reach fatal levels when the birds fat reserves are depleted on migration;
- Exploitation: for more than a century, ortolan buntings have been the subject of traditional autumn hunting with nets in South-Western France. In the mid-1990s, the annual bag was c. 50,000 birds while more recently, an estimated 5,000 to 30,000 birds are killed annually.

FARMING PRACTICES FAVOURABLE TO ORTOLAN BUNTING

Ortolan buntings occur in a variety of habitats, and the causes of the population decline are not well understood. Therefore, pointing out specific farming practices that are particularly favourable to the species is not an easy task. The following list of helpful farming practices are rather generalized as the specific management measures to be implemented within a certain area will depend on the type of habitat occupied by the local ortolan bunting population.

- Maintain or develop a habitat mosaic: No matter whether the general habitat is farmland, upland or forest, a common feature of sites occupied by ortolan buntings seems to be the presence of a structurally diverse mosaic of trees and open areas with patches of bare or sparsely vegetated ground. Generally, all farming and forestry practices that maintain such a habitat mosaic structure are therefore favourable to the species;
- Maintain non-intensive arable and mixed farming systems: Ortolan buntings favour small-scale, non-intensive farming systems with small fields, high crop diversity, low levels of pesticide use, and tree-lined tracks or field borders. Such farming systems seem to provide the right mixture of feeding areas, song-posts and nest cover;

- Maintain or develop unfarmed features in agricultural areas: Unfarmed features such as hedges, small groves, isolated trees and fallow areas should be preserved. The presence of trees near junctions of field borders is of particular importance, because here different crops, providing a variety of feeding opportunities, may meet and optimum breeding places are often found;
- Prevent land abandonment: Abandonment of extensively cropped or grazed land, followed by a succession of scrub, is a major threat to ortolan bunting habitat in Southern Europe. Non-intensive farming practices in such areas should therefore be maintained or re-established.
- Prevent conversion to intensive cropping systems or afforestation: Intensive crops are no longer suitable for ortolan buntings as they become too dense for the birds to walk through while feeding. It also leads to the loss of tree- or bush-lined ditches, clearance of scrub patches, amalgamation of fields and reduction of crop diversity;
- Restrict or prevent use of fertilisers, pesticides etc: as they can reduce the density and diversity of food items and cause toxicity in the birds;
- Prevent scrub invasion: Encroachment of scrub on open upland areas, which are part of a mosaic landscape with trees should be prevented by grazing or cutting of the vegetation;
- Prohibit the capture and killing: of ortolan bunting unless for specific well justified reasons in accordance with Article 9 of the Birds Directive which will not compromise its conservation status.

OTHER SPECIES BENEFITING FROM THESE CONSERVATION MEASURES

Like every species, the ortolan bunting has particular habitat requirements that are unique to its lifecycle and to its long term survival. However, as the bunting is essentially a species of traditional agro-pastoral systems and orchards, several of the measures mentioned above would also benefit other species protected under the Birds Directive that are typical of these habitats.

Red Kite, *Milvus milvus*;

Hoopoe, *Upupa epops*;

Woodlark, *Lullula arborea*;

Red-backed Shrike, *Lanius collurio*.

In addition, these management practices would benefit several huntable species, including declining or depleted species such as:

Red-legged Partridge, *Alectoris rufa*;

Grey Partridge, *Perdix perdix*;

Quail, *Coturnix coturnix*;

Turtle Dove, *Streptopelia turtur*.

OBLIGATIONS ARISING FROM THE BIRDS DIRECTIVE

The ortolan bunting is protected under the EU Birds Directive 79/409/EEC, it is listed in Annex I of the Directive. As a result, Member States must take the following measures to ensure its conservation.

General requirements

Member States are required to take the requisite measures to maintain the population of the ortolan bunting at a level which corresponds in particular to its ecological, scientific and cultural requirements, or to adapt the population of the species to that level (cf Article 2).

To achieve this, Member States are required to preserve, maintain or re-establish a sufficient diversity and area of habitats for the ortolan bunting which should include primarily the following (cf Article 3):

- creation of protected areas;

- upkeep and management in accordance with the ecological needs of habitats both *inside* and *outside* protected area;
- re-establishment of destroyed habitats;
- creation of habitats.

Protecting the species

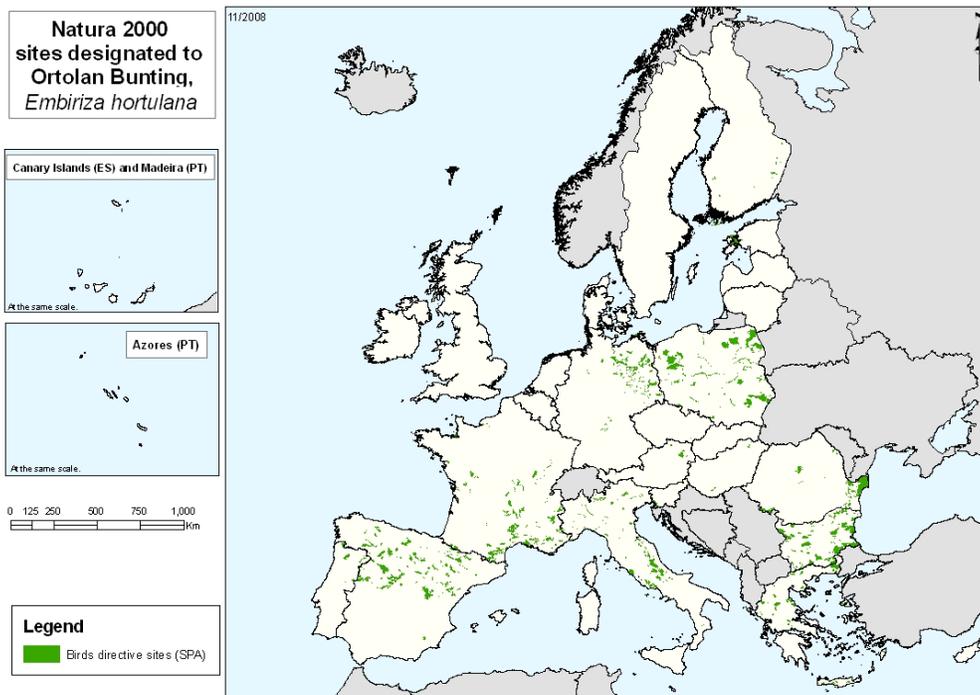
Member States should take the requisite measures to establish a general system of protection for the ortolan bunting throughout its natural range within Europe, and in particular to prohibit the following (cf Art 5):

- deliberate killing or capture by any method;
- deliberate destruction of, or damage to, their nests and eggs or removal of their nests;
- taking their eggs in the wild and keeping these eggs;
- deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as this would have a significant negative effect on the birds;
- keeping birds, the hunting and capture of which is prohibited;
- sale, transport for sale, keeping for sale and the offering for sale of live or dead birds and of any readily recognizable parts or derivatives of these birds (cf Article 6).

Member States may derogate from these provisions under a number of circumstances (eg in the interest of public health, or judicious use) where there is no other satisfactory solution and where the derogations do not affect the overall conservation status of the species (cf Article 9).

Protecting core habitats for the species under Natura 2000

The ortolan bunting is listed in Annex I of the Birds Directive in view of its vulnerable conservation state. This means that, in addition to the general provisions referred to above, Member States must also classify the most suitable territories in number and size as Special Protection Areas under Natura 2000 to ensure the survival and reproduction of the species across its entire area of distribution within the EU (cf Article 4). As of November 2008, 775 SPAs have been designated in the EU-27 where the ortolan bunting is indicated as present.



Managing Natura 2000 sites

Within these SPAs, Member States must take appropriate steps to avoid the deterioration of habitats of the ortolan bunting as well as its disturbance, in so far as such disturbance could be significant.

Measures must also be taken to manage, maintain or, if necessary, restore areas for the ortolan bunting both within SPAs and outside so that the objectives of the Directive are achieved (cf Art 3). The Birds Directive does not elaborate how this should be done as this is up to each Member State to decide but, in practice, management plans are very often developed for each SPA within Natura 2000.

Management plans are useful documents in that they:

- identify the conservation needs of the habitats and species present in that site so that it is clear to all what is being conserved and why;
- analyse the socio-economic and cultural context of the area and the interactions between different land uses and the species and habitats present;
- provide an open forum for debate amongst all interest groups and help build a consensus view on the long term management of the site;
- help find practical management solutions that are integrated into other land use practices.

Assessment and approval of plans and projects that may significantly affect Natura 2000 sites:

The EU Nature Directives support the principle of sustainable development. Their aim is to set the parameters by which the economic activities can take place whilst safeguarding Europe's biodiversity. Thus, any plans or projects that may affect the species and habitats for which the sites are designated must be first assessed to determine whether the project is likely to have a significant effect on the species and habitat types for which the site has been designated.

If the impact is not considered significant the project can go ahead. If the effect is expected to be significant then alternative less damaging options must be fully explored and selected. In exceptional cases, if no viable alternatives exist, projects with significant negative impact on Natura 2000 sites can still go ahead if they are considered to be of overriding public interest. In such cases, compensation measures will need to be taken in order to ensure that the ecological coherence of the Natura 2000 Network is not compromised (cf Articles 6 (3) & (4) of the Habitats Directive which apply to SPAs classified under the Birds Directive).

ORTOLAN BUNTING CONSERVATION THROUGH MEASURES UNDER CAP/RDPs

The obligations arising under the Birds and Habitats Directives can be integrated into the CAP measures in the following manner:

Cross compliance

Cross compliance is a horizontal CAP tool and applies to all direct payments (Pillar I), Pillar II payments (Less Favoured Area payments, Agri-Environment, Natura 2000 compensatory payments, and certain wine payments). The cross compliance requirements consist of 19 Statutory Management Requirements (SMR), and the requirements set to keep land in good agricultural and environmental conditions (GAEC).

In the case of the **Birds Directive** one of the 19 SMRs concerns the requirements resulting from the following articles that must be respected by farmers:

- Article 3 (1) & (2)(b): preserve and maintain a sufficient diversity of habitats for wild birds; in particular introduce measures for their upkeep and management in accordance with the ecological needs of habitats inside and outside of protected zones;
- Article 4 (1), (2), (4): special conservation measures in Natura 2000 sites and taking appropriate steps to avoid pollution or deterioration of these areas;

- Article 5 (a), (b) & (d): obligations under the general system or protection for all wild birds, and in particular prohibitions of the deliberate killing or capture by any method, the deliberate destruction of, or damage to, their nests and eggs or removal of their nests and/or the deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant.

In the case of SPAs another SMR based on the **Habitats Directive**, must be respected:

- Article 6: within Natura 2000 sites take the necessary conservation measures to restore and maintain the species and habitat types for which the site is designated and prevent their deterioration, destruction or significant disturbance.

The exact requirements of the above mentioned SMRs vary between Member States and depend on the way the requirements of the Birds and Habitats Directives are translated into their laws and administrative measures (e.g. management plans for Natura 2000 sites) applicable to farmers, and consequently cross compliance.

In addition to meeting the SMRs, farmers must also keep land in good agricultural and environmental conditions (GAEC) which sets a minimum level of maintenance through, for instance, compulsory standards for:

- Retention of landscape features including where appropriate, hedges, ponds, ditches, trees (in line, in group or isolated) and field margins;
- Avoidance of encroachment of unwanted vegetation on agricultural land;
- Protection of permanent pasture.

Member States can also voluntarily set standards, for example, for²:

- Minimum livestock stocking rates or/and appropriate regimes;
- Establishment and/or retention of habitats;
- Prohibition of the grubbing up of olive trees;
- Maintenance of olive groves and vines in good vegetative condition.

Measures under Rural Development Programmes funded from EAFRD:

The following measures could be used to benefit ortolan bunting:

- **Less Favoured Area payments:** (Article 37) linked to existing farming practices where they support upkeep of traditional low-input farming systems;
- **Natura 2000 payments:** (Article 38) in order to compensate for costs incurred and income foregone resulting from legal or administrative restrictions on farming within Natura 2000 areas such as not intensifying farmland management;
- **Agri-environmental schemes:** (Article 39) linked to voluntary measures such as practicing mixed farming that retains a structurally diverse mosaic of trees and open areas with patches of bare or sparsely vegetated ground, reducing or prohibiting the use of pesticides, removing scrub;
- **Reimbursement of non-productive investments:** (Article 41) can cover a range of investments from on-farm investments linked AE schemes or to measures identified in management plans such as converting to organic production methods, or which enhance the public amenity value of a Natura 2000 site;
- **Conservation of rural heritage** (Article 57): for instance to cover the cost of drawing up management plans for sites hosting ortolan bunting, undertaking habitat restoration measures in areas currently or potentially suitable for ortolan bunting, launching awareness campaigns on ortolan bunting conservation requirements amongst farmers.

² These standards are however compulsory for those Member States who had already set a minimum requirements for these standards before 1 January 2009 or where national rules addressing the standard are applied in the Member State.

In addition the following could also be used:

- **Training and information** (Article 21): e.g. could help make AE schemes more effective and train farmers and experts in the Farm Advisory Services on conservation and management requirements linked to wildlife such as ortolan bunting;
- **Farm Advisory Services (FAS)** (Articles 24 and 25): to advise farmers on how to apply cross compliance rules e.g. those based on the Habitats and Birds Directives that are beneficial, inter alia, for ortolan bunting;
- **LEADER** (Article 61): integration of ortolan bunting conservation into area-based local development strategies and enhancement of dialogue and collaboration between farmers, conservationists and other rural stakeholders in the area concerned.

EXAMPLES OF ORTOLAN BUNTING FRIENDLY MEASURES UNDER RDP

No schemes were found in the Rural Development Regulations for 2000-2006 or 2007-2013 that directly targeted the conservation of ortolan bunting but a review of a selection of RDPs for 2007-13 reveals several agri-environment measures that could be of potential indirect benefit for the species.

These can be summarised as:

- Measures to support low intensity mixed farming systems;
- Measures to maintain and create landscape features, such as hedges, tree lines and field or forest margins (over and beyond GAEC levels);
- Organic farming.

However, it should be emphasised that these measures are only *potentially* beneficial. There are several critical questions which influence the extent to which this potential is realised on the ground. Further details are provided in Wildlife & Sustainable Farming Initiative: http://circa.europa.eu/Public/irc/env/swfi/library?l=/species_reports&vm=detailed&sb=Title

GERMANY

In Lower Saxony, a pilot study was launched in 2003 to develop conservation measures for threatened farmland species, including the ortolan bunting, and to find ways of incorporating these measures into the new agri-environment schemes for 2007 on. 18 farmers involving collectively 100ha took part in the pilot project. They committed themselves to reducing the sowing density of their crops and abstaining from using sprinklers, herbicides or fertilisers on their fields. The compensations paid ranged from 510€/ha for cereals, 1600€/ha for potatoes and 1200€/ha for sugar beet.

Monitoring results showed that even on this small scale the breeding success of ortolan buntings in most of the trial areas increased significantly compared to the control fields. Spring barley and pea crops were by far the most preferred habitats with frequent use of summer wheat and potato crops for foraging.

Based on this pilot study a new agri-environment measure was introduced into Lower Saxony's RDP for bird conservation on arable land. This requires that farmers:

- Maintain field verges of 6-24 m in width;
- Avoid use of pesticides and fertilisers throughout the year
- Avoid sprinkler water systems in trial areas;
- Promote mixed cropping systems with cereal-grain-pulse mixes;

The present subsidy for this is between 320-615€/ha.

GREECE

In Greece, wildlife conservation in agricultural landscapes is expected from Axis 2 of the National Rural Development Plan (2007-2013) of Greece (Greek Ministry of Rural Development 2007). Following actions of Axis 2 could contribute to the conservation of the ortolan bunting, if implemented in the right areas.

- Actions for biodiversity protection: Protection of wildlife and implementation of regulatory prototypes on wildlife (especially avifauna) and habitats aiming at biodiversity conservation and environmental balance;
- Action for the protection and conservation of rural landscape:
 - Protection of traditional rural landscape that was shaped from past agricultural practices (i.e. olive groves in Amfissa, Corfu, Mytilene, orchards of Santorini, etc.);
 - Landscape conservation shaped by old agricultural practices (i.e. terraces, hedges) contributing to protection from soil erosion and biodiversity conservation;

These measures could be used to the benefit of the ortolan bunting, but up to now there is no information on whether this has been applied in areas (Natura 2000 sites) used by the species.