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Agenda Item 25.1

**PROPOSAL FOR THE INCLUSION OF
THE LESSER GREY SHRIKE (*Lanius minor*)
ON APPENDIX II OF THE CONVENTION**

Summary:

The European Union (EU) has submitted the attached proposal* for the inclusion of the Lesser Grey Shrike (*Lanius minor*) on Appendix II of CMS.

Rev.1 includes amendments submitted by the proponent to make the proposal more precise with regard to the distribution range of the population assessed, in accordance with Rule 21, paragraph 2 of the Rules of Procedure for meetings of the Conference of the Parties (UNEP/CMS/COP12/Doc.4/Rev.1), and taking into account the recommendations of the Second Meeting of the Sessional Committee of the Scientific Council, contained in UNEP/CMS/COP12/Doc.25.1.19/Add.1.

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**PROPOSAL FOR THE INCLUSION OF
THE LESSER GREY SHRIKE (*Lanius minor*)
ON APPENDIX II OF THE CONVENTION**

A. PROPOSAL

Listing the European population of the Lesser Grey Shrike (*Lanius minor*) on Appendix II

B. PROPONENT: The European Union

C. SUPPORTING STATEMENT

1. Taxonomy

- | | |
|--|---|
| 1.1 Class : | Aves |
| 1.2 Order : | Passeriformes |
| 1.3 Family : | Laniidae |
| 1.4 Species : | <i>Lanius minor</i> J. F. Gmelin, 1788 |
| 1.5 Scientific synonyms / | |
| 1.6 Common name(s), in all applicable languages used by the Convention | |
| | Pie-grièche à poitrine rose, Lesser Grey Shrike, Alcaudón chico |



© J.-Ph. SIBLET Lesser Grey Shrike *Lanius minor*, Critically endangered in France, listed in annex I of the Birds Directive

2. Overview

The Lesser Grey Shrike is a member of the family *Laniidae*, a family widely distributed throughout the world with the exception of South America and Australia. Many shrike species are in an unfavourable conservation status, although few are considered globally threatened at this time.

As regards their biology, *Laniidae* are in a way both songbirds and birds of prey and it appears that they share some threats with birds of prey.

François Turrian, in Lefranc (1993) noted that "their contrasting plumage, their proud small bird of prey appearance, their predatory behaviour and their scarcity in Western Europe make them worthy of interest ". One might add that these species have had to suffer human persecution because of their bad reputation, just like birds of prey. However, while all birds of prey are listed in Appendix II, there are currently very few passerine species in this appendix, and in the end no shrike are listed in the CMS Appendices.

Alike other songbirds, the Lesser Grey Shrike carries out very long migrations which lead it every year to Southern Africa. As in the case of other species of passerine birds in rural areas, it has been severely affected by the intensification of agricultural practices. Although not globally threatened, the Lesser Grey Shrike is not in a favourable state of conservation. It is even in a very unfavourable situation in Europe. Its range has been considerably reduced for half a century and the species has already disappeared from several countries. Where it is still present, it is most often threatened, particularly in Western Europe.

The present proposal aims at including the entire European population, considering that the data collected at the European level proved insufficient to assess its conservation status: "The EU population status for *Lanius minor* is Unknown, as the data reported were not sufficient to assess the population status of the species" (*Lanius minor* Report under the Article 12 of the Birds Directive, 2008-2012). Nevertheless, BirdLife conducted an assessment of the status of the species in Europe and in EU27, where it would rank Least Concern, but this assessment requires confirmation.

It should be noted that Yosef et al. (2017) distinguish two sub-species¹ within the species *Lanius minor*. However, some authors consider the species to be monotypic, hence this proposal is based on the species.



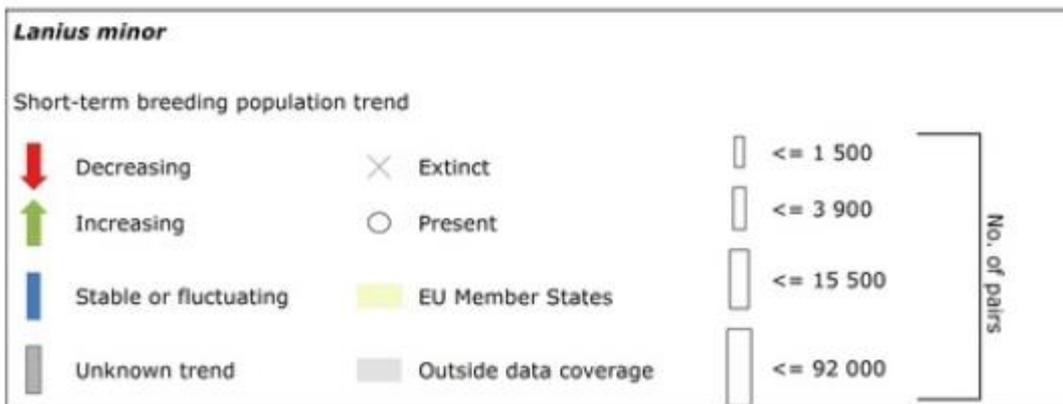
© J. LAIGNEL Lesser Grey Shrike *Lanius minor*

1 • *L. m. minor* J. F. Gmelin, 1788 – breeds NE Spain and S France, Italy (from Piedmont E to Venice, S patchily to Sicily), E Austria, Slovakia, Hungary and Balkans (S to N Greece and E to Black Sea), also S Lithuania, Belarus and SW Russia (E to Urals, S to Crimea and Caucasus), S to Turkey, N Syria, Lebanon and N Iraq; non-breeding S Africa.

• *L. m. turanicus* Fediushin, 1927 – breeds W Siberia (E of Ural Mts) E to Russian Altai and extreme NW China (NW Xinjiang), S to Azerbaijan and NW & N Iran, N Turkmenistan and NE Afghanistan); non-breeding S Africa.

The following maps, highlighting severely fragmented distribution and decreasing trends throughout most of Europe, are excerpts from: *Lanius minor* Report under the Article 12 of the Birds Directive (for the period 2008-2012).





3 Migrations

3.1 Movement patterns, distance, the cyclical and predictable nature of the migration

This shrike is one of the few species (including also the Red-backed Shrike *Lanius collurio*) that experience eastern migration. Post-nuptial migration drives European populations to Greece and its islands. From there the birds cross the Mediterranean and penetrate into Egypt

on a relatively narrow front between the border with Libya and the Suez Canal. Progress is then made through parts of Sudan, eastern Democratic Republic of the Congo and Chad to south-south-western Africa. During spring, the birds move northwards along a route further east, with the Rift Valley appearing to be a corridor. This shrike is then much more frequent than in autumn in the United Republic of Tanzania, Kenya, and Ethiopia. The passage is then very important in the Arabian peninsula, in the Middle East then through Turkey and Greece. The European birds thus perform a real "loop" migration.

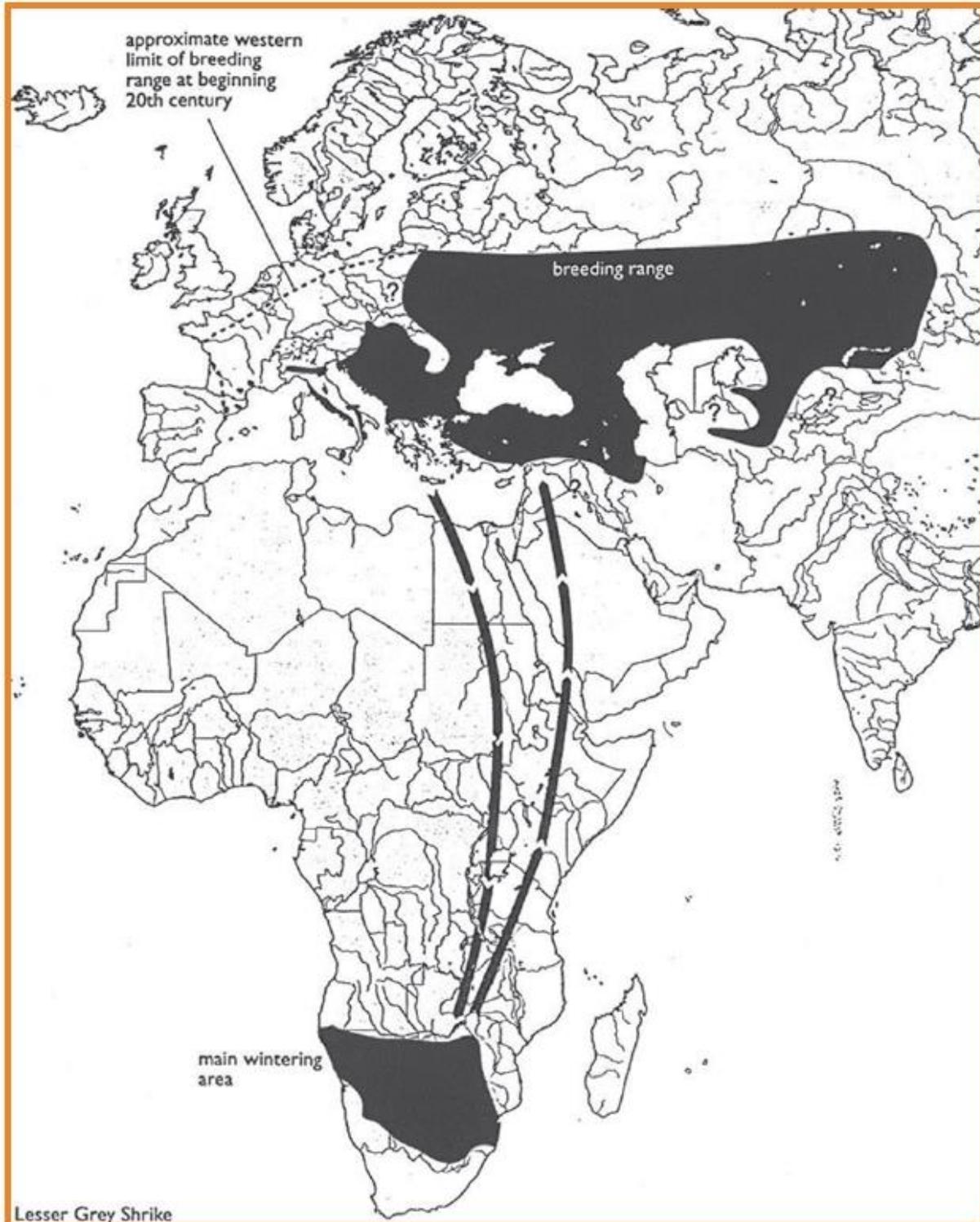


Fig 2 : Breeding range, wintering area and migration routes of the European populations of *Lanius minor*. Dotted lines indicate limits of the breeding range at the beginning of the 20th century (Lefranc & Worfolk 1997).

The Lesser Grey Shrike is therefore a long-distance migrant, with all populations wintering in

the southern part of Africa. The winter quarters are mainly located in semi-arid areas within the 600 mm isohyet and cover the southern part of Angola, Namibia, Botswana and parts of southern Mozambique and Republic of South Africa (to Damara land, Transvaal and Natal). It is remarkable that the main wintering area covers a much smaller area than the breeding range: about 1.5-1.45 million km² compared with about 8 million km² (Dowsett 1971). Herremans (1998) even estimates that the wintering area is 10 times smaller than the area occupied in spring in Eurasia. This author attempted to estimate the world population in winter. For this purpose, he carried out transects (car journeys less than 40 km / hour) on 2,875 km in Namibia, Botswana and South Africa (area covered by the observation estimated at just over 43,000 ha). On the basis of the results obtained, he extrapolated the total population by major types of vegetation. The result was about 6 million birds in the wintering area in the mid-1990s.

3.2 Proportion of the population migrating, and why that is a significant proportion

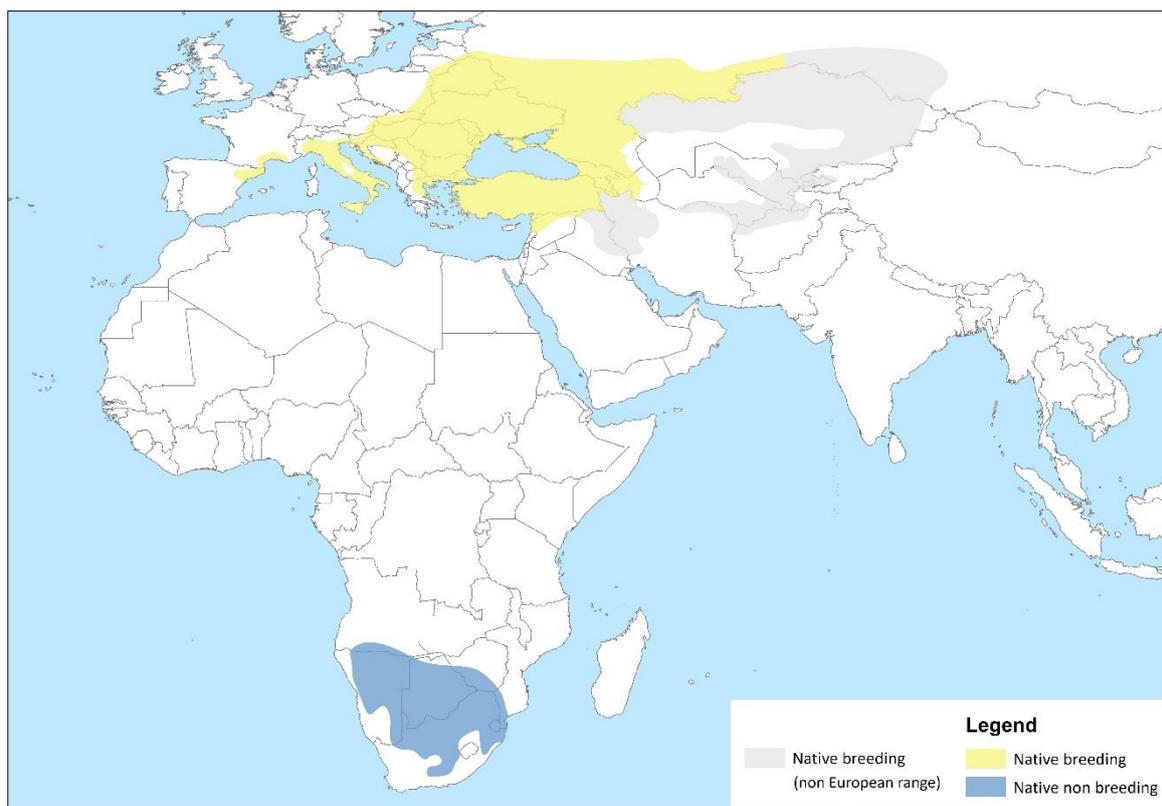
The whole population is long-distance migratory. It would be interesting to repeat the experience of counting birds in winter for an alternative estimate of global population trends. Main countries sheltering wintering populations of *Lanius minor* are Namibia, Botswana, Zimbabwe (southern part) and South Africa (northern part).

4. Biological data (other than migration)

4.1 Distribution (current and historical)

The Lesser Grey Shrike is undoubtedly one of the European passerines that has declined the most in a century, both in terms of numbers and distribution. Today the breeding range of the European population (EU27) covers 448,000 km² (source: ETC/BD and also BirdLife).

The map below indicates schematically (yellow) the boundaries of the population assessed for listing.



Breeding range of the European population of *Lanius minor* (yellow) and winter range of the species in Africa (blue). Modified from BirdLife International

It is a highly thermophilic oriental species that Voous (1968) placed in the European-Turkestanian faunal type. The breeding range is limited to a part of Eurasia. It extends for a maximum of about 2,300 km from north to south and over a little over 6,000 km from west to east. In its eastern part, it reaches the upper reaches of the Irtysh in the Altai region. In the north, thanks to a continental climate, it reaches 55 ° N. of latitude in European Russia, while the southern limit follows the shores of the Mediterranean from the extreme south-east of Spain to Turkey, then extends eastward to Afghanistan.

In Western Europe, this species was still common at the beginning of the 20th century. It has regressed enormously and is now confined to the most southern areas where its populations have become very rare (France, Spain) or are decreasing significantly (Italy). It remains well represented in Central Europe, notably in Romania, Bulgaria and Greece. Romania is the main stronghold in Europe.

4.2 Population (estimates and trends)

In 2004, BirdLife International estimated the European population at 620,000-1,500,000 pairs, with an unfavourable status (status: declining, criteria: moderate continuing decline). Today, as the world population considered as "declining"² may still exceed 1.2 million pairs, the European population has been updated. According to the European Red List of Birds (BirdLife, 2015) the pan-European population would be 331,000-896,000 pairs, of which 87,700-165,000/166,000 in Europe 27. Figures for EU27 reflect data reported by Member States under Art 12 of the Birds Directive for the period 2008-2012. Based on Birdlife' assessment, the European Topic Centre on Biological Diversity (ETC/BD) states "*Lanius minor* has a breeding population of 87,700-165,000 pairs and a breeding range of 448,000 square kilometres in the EU27. The breeding population trend in the EU27 is unknown in the short term and unknown in the long term. The EU population status for *Lanius minor* is unknown, as the data reported were not sufficient to assess the population status of the species".

Here is the country detail of the European population. Today, only a handful of countries are still home to large numbers: Russian Federation (46 per cent), Turkey (19 per cent), Romania (17 per cent), Ukraine (5 per cent) Armenia, Azerbaijan and Bulgaria (3 per cent each), etc.

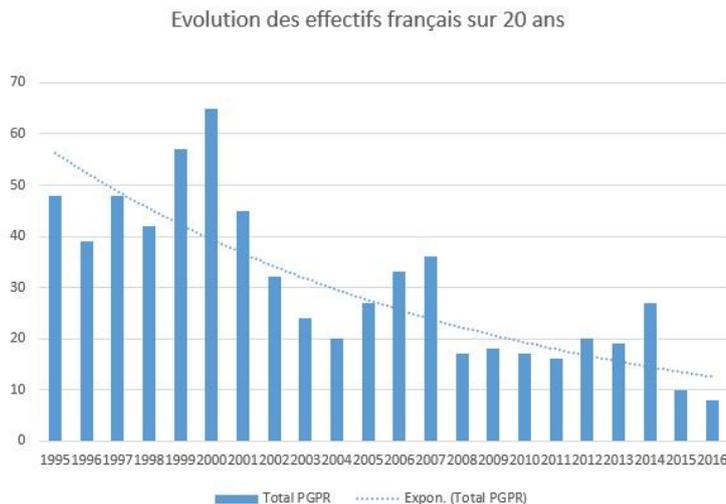
² According to BirdLife, "the population is suspected to be in decline owing to a multitude of possible ongoing threats (Harris and Franklin 2000). In Europe, trends between 1999 and 2013 have shown a steep decline (EBCC 2015)".

Lanius minor (Lesser Grey Shrike)

Table 1. Reported national breeding population size and trends in Europe¹.

Country (or territory) ²	Population estimate			Short-term population trend ⁴				Long-term population trend ⁴				Subspecific population (where relevant)
	Size (pairs) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	
Albania	200-500	<1	2002-2012	poor	F	0	2002-2012	poor	F	0	1980-2012	poor
Armenia	10,000-30,000	3	2002-2012	medium	?				?			
Austria	0-1	<1	2008-2012	good	0	0	2001-2012	good	-	90-100	1981-2012	good
Azerbaijan	5,000-50,000	3	1998-2000	poor	?				?			
Belarus	50-200	<1	2001-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium
Bosnia & HG	200-500	<1	2010-2014	medium	?				?			
Bulgaria	12,000-20,000	3	2005-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium
Croatia	2,300-3,500	1	2010	poor	?				?			
Czech Rep.	0	<1	2001-2003	good	?				?			
France	17-18	<1	2008-2012	good	-	62-65	2000-2012	good	-	50-75	1980-2012	medium
Georgia	Present	<1			?				?			
Greece	6,000-8,000	1	2008-2012	poor	?				?			
Hungary	3,300-4,500	1	2000-2012	medium	-	48	1999-2012	medium	?			
Italy	1,000-2,000	<1	2011	poor	-		2001-2011	poor	-		1980-2011	poor
Kosovo	20-35	<1	2009-2014	good	?				?			
Lithuania	0-5	<1	2008-2012	medium	-	50-100	2001-2012	medium	-	50-100	1980-2012	medium
FYRO Macedonia	2,000-5,000	1	2001-2012	poor	?				?			
Moldova	3,000-5,000	1	2000-2010	medium	F	0	2000-2010	medium	-	5-10	1980-2010	medium
Montenegro	20-50	<1	2002-2012	poor	?				?			
Poland	1-3	<1	2008-2012	medium	-	70-80	2000-2012	medium	-	90-100	1980-2012	medium
Romania	65,000-130,000	17	2010-2013	medium	?				?			
Russia	150,000-400,000	46	2008-2012	medium	0	0	2000-2012	medium	F	0	1980-2012	medium
Serbia	680-1,040	<1	2008-2012	medium	0	0	2000-2012	medium	-	10-29	1980-2012	medium
Slovakia	400-600	<1	2000-2012	medium	-	10-30	2000-2012	medium	-	20-50	1980-2012	medium
Slovenia	2-13	<1	2008-2012	medium	-	80	2001-2012	medium	-	90-95	1980-2012	medium
Spain	1	<1	2010	good	-	95	2001-2010	good	-	97-98	1980-2010	good
Turkey	50,000-200,000	19	2013	poor	-	0-19	2000-2012	medium	-	0-19	1990-2013	poor
Ukraine	20,000-35,000	5	2000	medium	F	5-10	1998-2010	medium	F	10-15	1980-2010	medium
EU27	87,700-165,000	22			Unknown							
Europe	331,000-896,000	100			Stable							

The recent decline of the French Lesser Grey Shrike population is illustrated by the following graph:



Source : <http://herault.lpo.fr/avenir-pie-grieche-a-poitrine-rose/>

In Europe, according to the European Bird Census Council, a steep decline corresponding to a decline of more than 5% / year is highlighted in the period 1999-2013: -33 per cent. This figure was obtained by summarizing the monitoring programs in Bulgaria, Greece, Hungary and Italy.

4.3 Habitat (short description and trends)

It is a steppe species that has adapted to open rural landscapes. The presence of a few trees is necessary because of tree nesting, although the species can theoretically do without perches when searching for prey thanks to its possibilities of hovering. Due in particular to agricultural intensification, favourable habitats rich in insects have considerably decreased. A study on the habitat of this Shrike in Central Romania carried out by MOGA et al. (2010) highlighted the

need to retain some trees in the open habitats³.

The original habitat of the Lesser Grey Shrike is probably the steppe more or less weakly strewn with scattered trees, as it still exists in some parts of Eastern Europe and Central Asia. The species has (for some time!) adapted well to a secondary, highly anthropized steppe characterized by the existence of small plots of varied crops and traversed by alignments of trees along the roads.

4.4 Biological characteristics

Breeding

Lesser Grey Shrike has a distinct tendency to sociability, although isolated pairs are not uncommon. In "aggregates", nests occupied simultaneously may be only 25-50 m apart, but are generally separated by 100-150 m. In the original habitat, trees were rare, which probably contributed to the development of semi-colonial behaviour. For example: a pine grove of 30 nests in the steppes of southern Russia (Sirikov in Grote 1939) and a collective farm near Odessa (Ukraine) housed 8 pairs on an area of 20 ha (Dementiev & Gladkov in Lefranc 1993). A study area in the center of Slovakia still has a stable population: up to 84 pairs per 20 km² (Kristin 2000). Even if adults sometimes move more than 600 m from their nest, the search for food takes place mainly within a radius of 150 to 200 m around it. The home range of a pair is between seven and ten ha. The territories of neighbouring pairs may partially overlap.

It is between the end of April and the middle of May that the European birds are back in their nesting territories. Males and females appear almost simultaneously. Pairs form very quickly, upon arrival. It is also possible that pairs are already matched, pair formation may have taken place during migratory stops or in winter quarters.

Egg laying does not begin until mid-May. In Europe, it culminates between the end of May and mid-June. Only one normal clutch is the rule (an exceptional case of a second normal clutch was found in France in the lower Aude valley by R. Dallard). Replacement clutches can be started until the end of June. The female ensures the essential, if not all, of the incubation.

The Lesser Grey Shrike nests exclusively on trees generally quite high (2.5-20 m): fruit trees, poplars, acacias, plane trees, etc. The nest is located against the trunk, or on a lateral branch, often in the canopy. It is a loose structure about 15 cm outside diameter and 9 cm high, which can be composed of materials of human origin (bits of string left in the fields, etc.) and odoriferous flowers of the genus *Artemisia*, *Anthemis*, *Gnaphalium*, *Mentha*. The nest hosts five or six eggs, sometimes four or five for the replacement laying (extremes found in Europe three-nine). The incubation lasts 15 or 16 days and the young remain at the nest between 15 and 17 days. There is little accurate data on the rate of feeding. Kristin (1991) reports visits from adults to the nest, 6 to 14 times per hour. After leaving the nest, young birds are still fed by parents for at least two weeks. The species is only exceptionally parasitized by the Cuckoo *Cuculus canorus*. There is a mention for Alsace in the 1950s (A. Hild pers. com.). In Europe, post-nuptial movements begin in late July or early August. The peak of departures is towards the end of this month and very few birds are still seen in the breeding area after mid-September.

Population dynamics

The Lesser Grey Shrike breeds from the age of one year. As with other shrikes of the genus *Lanius*, its potential longevity must be seven to eight years (The Ring 1973 & 1974). In the study by Kristin et al. (2006), a few birds aged five and six could be identified by banding. Adult survival from one year to the next is not known. Some rare populations of *Lanius minor* have been the subject of banding operations. In Germany, near Heidelberg, 8 adults out of 29 (29 per cent) returned the year following banding. Six of these birds (three males and three

³ "The birds preferred open habitats, with extended arable field cover. Moreover, the tree and shrub cover were small in areas used for nesting. As poplars are the preferred nesting habitats of this bird, and are scarcely represented in this area, the protection of these trees is critical for conservation of the Lesser Grey Shrike".

females) were nesting between 600 and 3,000 m of the territory occupied the previous year, while two others (1 male and 1 female) were in the same canton (Hantge 1957). Also in Germany, Matthes (1965) also found two adults the year after banding: one male was 300 m from its former territory and another occupied exactly the same places. In addition, Matthes was able to show that the young bird could be "loyal" to the colony by controlling a female who was nesting 200 m from the tree where she was born the previous year. Kristinet al. (2006) provide more recent and more detailed data on a stable population followed in a 20 km² area in Slovakia where 176 adults and 790 chicks were banded between 1989 and 1999. In years following banding, 32.8 per cent of adults were controlled; the latter statistically significantly involved more males (40.25 per cent) than females (24.6 per cent). Despite the large number of banded chicks, only 6.5 per cent were found the following year, or later in the study area, but not in the immediate vicinity of their place of birth. The results also showed that 30 per cent of the nests were constructed in the same tree from one year to the next, and more than half of them (183 out of 319 or 57.4 per cent) were either in the same tree, or in a tree less than 20 m from the previous year. What is a little surprising is that they were very rarely the same individuals (6 per cent of cases, always males). The adult females found (n = 17) generally nested more than 450 m from their nest of the previous year. No fidelity between partners could be found: of 64 pairs caught, ten birds (i.e. five ex pairs) were found the following year, but with "divorces" in all cases. In summary, adult males were fairly faithful to their breeding area (but very rarely to their previous territory), females much less (and never to their previous territory). Banding results show a low rate of return of young birds to their area of birth.

In the studies cited, productivity in young birds depended on two main factors: predation and weather conditions in May and June. The German authors quoted insist on these two elements collegially, while Kristin (1995 & 2000) attributes the success of nesting in his area to favourable conditions: warm and dry weather. He attributes most of the failures, relatively uncommon, to predation by Magpies.

Breeding success statistics are available in Lefranc & Issa (2013) page 57. It seems to be highly variable among studies, for instance between 15 per cent and 79 per cent of nesting attempts were successful.

Precise data also exist for Languedoc:

2007: at least 14 pairs produce 42 fledglings or 3 young / pair having successfully nested (Clément 2008).

2008: in the lower Aude valley, out of 8 pairs, 5 produce 11 young, i.e. 1, 3 young per pair and 2.2 young per pair having successfully nested. (Clément 2008).

2009: West of Montpellier, 11 pairs nested and 9 produced 30 young fledged, a productivity of 2.7 young per pair and 3.3 young per pair having successfully bred. In the plains of the lower Aude valley, 7 pairs nested and 6 produced 27 young fledged, i.e. 3.8 young per pair and 4.5 young per pair having successfully bred (F. Vallès pers. com., Meridionalis 2010).

Food

The Lesser Grey Shrike searches for food in a radius generally less than 15 m. It waits for its prey a few meters from the ground on various perches, natural or artificial. The species also hovers for 15 to 30 seconds at a height of 2 to 6 m above the ground. This technique of hunting is not frequently observed in Languedoc. It was, however, very regular in the former Alsatian territories where perches were much rarer. Most preys are caught on the ground, where vegetation is usually low with often bare areas. Under good weather insects are also seized in flight or captured in foliage.

In France, the diet of the species was studied between 1993 and 2000 by Lepley et al. (2004) within the last two known colonies in France. Analysis of pellets and nest bottoms identified 2115 prey, almost exclusively invertebrates including beetles (mainly Scarabeides and Carabeides) and orthoptera (especially Tettigonides). In this study, it was shown that the diet differed significantly between semi-colonial families and isolated families. This difference was due to three prey species only: *Amphimallon pygialis* (Melolonthide), *Anisoplia tempestiva*

(Rutelide) and *Decticus albifrons* (Ensifere). These species accounted for more than 60 per cent of the total biomass of prey ingested by gregarious families, compared with less than 10 per cent for isolated families. The reason is probably due to differences in habitat. The nests of semi-colonial pairs were found in the immediate vicinity of grasslands (on average 25 per cent of the total area within a hunting radius of 150 m), while those of the isolated pairs were in areas devoid of grasslands (habitats mainly composed of vines, cereal crops and vegetable crops, with the presence of small wastelands and grassy edges).

The results obtained elsewhere in Europe for food (synthesis in Lefranc & Worfolk 1997) also indicate the preponderance of beetles and, to a lesser extent, of orthoptera. The Lesser Grey Shrike enjoys the temporary abundance of some insects. In Slovakia, Kristin & Zilinec (1998) found that *Melolontha melolontha* was a very important prey in years with common cockchafer, up to 31 per cent of the catch (n = 346) of chicks. The same study shows the importance of another species: the common cricket *Gryllus campestris* which accounted for up to 38 per cent of the catches.

The Lesser Grey Shrike is almost strictly insectivorous. It rarely captures small vertebrates and, rarely, impales its victims. A few cases were reported in 2009 in the lower Aude valley (Dziarska-Palac 2009, F. Valles pers. com.).

Predation and competition

Potential breeding predators include raptors, although their presence is often tolerated (sometimes apparently even sought after). The main predators of nests are corvids. In Slovakia, Kristin (2000) estimates that the local population is stable, thanks, among other things, to the low density of *Pica pica* (1 pair / 2 km²), whose nests are systematically destroyed by farmers, especially in the vicinity of houses where the shrike also nests (between 0 and 120 m from the dwellings). In Languedoc, for the lower Aude valley, there is a case of live observation of a nest pillaged by a pair of magpies (Bara 1995). Also in Languedoc, the Jackdaw *Corvus monedula* often nests near the shrike, sometimes even in the tree that carries the nest of the latter. Its predation is probably rare, but the first case has just been proved in 2010 (F. Billard & N. Saulnier pers. com.).

4.5 Role of the taxon in its ecosystem

Shrikes are excellent biological indicators. They play an important role in the food chains of certain ecosystems, as predators and sometimes, more rarely, as prey. The text below details the sometimes astonishing relationships between the Lesser Grey Shrike and other bird species.

Interspecific relationships

In steppe environments in the eastern part of the *Lanius minor* range, trees are often scarce and ornithological literature reports cases of curious and astonishing neighborhoods. In southern Russia, a single large ash tree was home to several Lesser Grey Shrike pairs and a pair of Red-backed Shrike, Long-eared Owl *Asio otus*, Common Kestrel *Falco tinnunculus* and Hooded Crow *Corvus corone cornix* (Grote 1939). Horvath (1959) insists in his study area in Hungary that the nests of the shrike were often (15 out of 26) in the immediate vicinity of raptor nests: Kestrel and Red-footed Falcon *Falco vespertinus*. Similar cases have recently been reported in Bulgaria with a Lesser Grey Shrike nest 6 m from a falcon nest, in this case a Hobby *Falco subbuteo* (Ornithos 2000, vol.11 page 48). These astonishing associations could constitute a behavioral adaptation of common defense against predators (magpies and crows). In Languedoc, cases of immediate neighbours between nests of Lesser Grey Shrike and raptors were also observed. To the west of Montpellier, the species nested at least two years in a row (2009 & 2010) on the same large ash tree as a pair of Black Kite *Milvus migrans* and for the Kestrel there are at least three cases known. BARA (1995) mentions two nesting cases on the same tree as the Little Owl *Athene noctua*. There are, however, many observations of hostile behavior towards both hawk and owl, which remain potential predators of broods and even adults.

Close to its nest, the shrike may attack other species of birds, including the Magpie and sometimes the Jackdaw. This aggressiveness may also be revealed in the case of non-dangerous passerines such as the Melodious Warbler *Hypolais polyglotta* and the Golden Oriole *Oriolus oriolus*. In the lower Aude valley, DzirskaPalac (2009) noted a particular intolerance of all *minor* pairs against the Great Spotted Cuckoo - *Clamator glandarius* whose silhouette evokes that of the magpies

5. Conservation status and threats

5.1 IUCN Red List Assessment (if available)

The species is critically endangered in France (CR) according to IUCN France et al. (2016): 17 to 18 pairs were reported in the 2008-2012 reporting of Article 12 of the Birds Directive but only 7 pairs remained in 2016.

The same is true in Spain: CR in the red list of breeding birds in Catalonia (ANTON et al., 2013), only 1 pair in Spain according to the 2008-2012 report of article 12 of the Birds Directive. The species is classified as VU in Italy. It is also critically endangered (CR) in Austria and Poland. The only Member States that did not report the decline in the 2008-2012 reporting period were Austria (stable but only 0-1 pair), Bulgaria (stability with 12,000-20,000 estimated pairs) and Romania (the trend is unknown, but the estimate of 65,000-130,000 pairs is much lower than the previous estimate). By other sources, a population of 6,000-8,000 pairs is indicated for Greece, again with an unknown trend.

The data collected in the framework of the 2008-2012 report of the Birds Directive do not make it possible to assess the conservation status of this species at the EU-level. Indeed, it was not possible to calculate the trend both in the short term and in the long term. As a result the species is classified as "unknown" in Europe according to the European Commission, which corresponds to Data Deficient (DD). However, the species was assessed as Least Concern by BirdLife both in Europe (based on the same data and some complementary data) and globally.

5.2 Equivalent information relevant to conservation status assessment

The LC classification in Europe according to BirdLife is, in our opinion, insufficiently substantiated, especially in the case of the EU27. The data collected by EBCC in Bulgaria, Greece, Hungary and Italy indicate a steep decline over 14 years (1999-2013: -33%). Generation time is 4 years according to BirdLife (seen in 2014 on their website, valid for *L. minor*, *L. excubitor*, *L. senator* and *L. collurio*): the species must therefore be evaluated over 12 years (3 X generation time). The hypothesis that *Lanius minor* is actually at least NT in Europe cannot be ruled out, and the EBCC data, provided they are representative, even indicate that we are at the threshold of VU with a decline close to 30% in 3 generations. It would therefore be urgent in our opinion to carry out a re-evaluation on the basis of data as comprehensive as possible in terms of both estimated numbers and trends. It will also be necessary to assess the influence of improved knowledge on the trends reported.

The situation in Romania needs to be clarified: the trend is described as unknown and no Romanian data are included in the calculation of the European trend of the species, but we draw attention to the fact that the estimate 65,000-130,000 pairs is much lower than the previous estimate of 364,000-857,000 pairs in 2000-2002 (BirdLife synthesis of 2004).

The situation in Bulgaria needs to be clarified too: first of all the population of *Lanius minor* in Bulgaria was probably underestimated in the BirdLife synthesis in 2004 (5,000-15,000 pairs over the period 1996-2002) whereas the current population would be 12,000-20,000 pairs. Obviously the species suffers from the rare species better sought syndrome⁴. We are surprised that the trend could be described as stable in the reporting, whereas national monitoring

⁴ It seems relevant to quote these lines from the Birds Directive Article 12 Guidelines : "It is a common phenomenon for a rare species to attract increased attention. As a result, more people search for it and find it, causing the population size estimate to be revised, and often substantially increased. Nevertheless, it may still be clear that the species is actually declining, based on analyses of data from sites with reliable historical trends"

programs give -82.7 per cent (steep decline, > 5 per cent/year) over an 8-year period (2005-2013). "Significant decline is shown by the Lesser-grey Shrike population trend. The species uses relatively diverse habitat types with mosaic distribution, including farmland, grassland with trees and scrub. In some regions of the country there are significant changes in this habitat type such as scrub removal from grassland up to 100 per cent ". Source: <http://bspb.org/monitoring/en/Trends.html>

Obviously this species deserves a re-assessment of its conservation status in Europe

5.3 Threats to the population (factors, intensity)

Spring Weather and Climatic Fluctuations

The Lesser Grey Shrike is associated with a climate of continental or Mediterranean type (hot and dry summers). It is the most thermophilic shrike in France. Its extreme sensitivity to cold and humidity was noted by several authors when the bird was still well represented in Western Europe (Haensel 1963, Matthes 1965, Niehuis 1968, Lefranc 1970). Przygodda (in Haensel 1963) proved experimentally that young *Lanius minor*, who had barely hatched, perished rapidly under the cooling effect of water when the temperature dropped to 17 ° C. In Thuringia (Germany), Lierath (1954) was the witness of a case of cannibalism: a hungry female devouring one of her own young barely hatched. The male was unable to supply it, to catch the smallest prey because of the bad weather. In the Alsatian Kochersberg, clearly subject to continental climatic influences (Godart in Atlas de l'Est 1963), the species normally found ideal conditions in the period 1960-1970. The persisting rainfall and exceptionally low temperatures of June 1969 probably explain in part the sharp fall in population: from 18 pairs in 1969 to 8 pairs in 1970. In 1969 only three pairs were seen with chicks out of the nest. The species last bred in this sector in 1975 (Lefranc 1970 & 1978).

Unfavourable weather conditions in a single spring are unlikely to have a significant impact on the population size of a given population. On the other hand, a true "Atlantization" of the climate, that is to say a succession of fresh and wet spring, is likely to significantly compromise the process of renewal of the populations. The spectacular changes in numbers observed since 1850 are described fairly accurately in the German, Swiss, Belgian and French ornithological literature. Niehuis (1968) found a significant correlation between climate fluctuations and population fluctuations by cross-checking ornithological data and meteorological data (average temperatures and precipitation) available since the early 19th century for In Central Europe.

It seems highly improbable that the species could regain its lost grounds in Western Europe on account of the global warming, although this seems to be implied by Huntley et al. (2007) in their climatic atlas of European Breeding Birds. Similar models have been applied to the winter range of migrating passerine species (Barbet-Massin et al. 2009): the Lesser Grey Shrike is among the species facing larger winter range contractions and shifts by 2100, with other bird species wintering in southern or eastern Africa such as the Collared Flycatcher *Ficedula albicollis*.

Habitat transformation in the breeding range

In Western Europe, including France, the Lesser Grey Shrike had adapted well to certain cultivated steppe landscapes (polycultures, roadside trees) extending in the plains and hillsides. Changes in agricultural practices, simplification of landscapes and the high use of plant protection products may represent the main local reasons opposing its possible return in the case, unchecked at the moment, where the general dynamics of the species would allow it to regain lost ground. As for the residual population of Languedoc, some territories could be threatened by a program to uproot vines and replace them with cereals. Another threat concerns the cutting of trees (plane trees) along the roads, especially in the South West Montpellier sector. For this small population, the unintentional destruction of nests by human activities is another danger. Meridionalis (2010) reports two cases only for the year 2009. Urbanization is also a problem. In particular, this sector is subject to multiple pressures because of its proximity to the Montpellier agglomeration: road improvements, future

Montpellier-Perpignan high-speed line, industrial zones and probably also, in the short term: photovoltaic plant projects.

The lower Aude valley is also not immune to any risk of urban impact: traces of the future Montpellier-Perpignan high-speed line, photovoltaic projects on the ground, wind farms, etc. There are also projects that are more specific to the area: anti-flood development on the Aude, the Via Domitia project, which aims to bring water from the Rhône by pipes buried to Perpignan, etc.

Pesticides

The use of pesticides alone cannot account for the dramatic fluctuations of the species and its sharp decline in the late 19th century, as synthetic insecticides were only developed during the 1940s.

However, since that time, the use of these products on a large scale has helped to reduce or even eliminate certain populations of this species, almost strictly insectivorous, in the cultivated pseudo-steppes to which it had adapted very well. Potential preys could be contaminated in Languedoc by the different chemicals used in viticulture, but for the moment no precise study makes it possible to affirm it. Treatments include one against golden flavescence, a serious grapevine disease caused by a phytoplasma, a bacterium without a cell wall. This microorganism is transported by a leafhopper *Scaphoides titanus*, originating in North America. It was in 1950 that the first home of "flavescence dorée" was noted in France. Since 1987, the control of the disease is compulsory: grubbing and burning of contaminated vines and strains, insecticide treatments against leafhopper. This last point obviously poses a serious problem for winegrowers who have engaged in the production of organic wine.

Predation

Kristin et al. (2000) based on bibliographic data, including Birkhead (1991), and their own studies argue that the dramatic decline in Western Europe of the Lesser Grey Shrike is explained by the deterioration of its habitat following changes in agricultural practices, but also and probably as much by a progressively excessive predation. It is a corvid in full population expansion for many decades: the Magpie. It should be noted that these authors do not mention a certain "atlantisation" of the climate which, a few decades ago, very probably played a role far from being negligible.

5.4 Threats connected especially with migrations

It is only from mid-May to mid-August that the Lesser Grey Shrike is present in its breeding territory. Its wintering area is located about 8,000 km away, somewhere in south-western Africa. More generally, we recall with Dowsett (1971) that, over a year, this bird spends about 25 per cent of its time in its Palaearctic breeding area and most of the remaining 75% of the time in Africa, of which 40 per cent in its winter territory.

It is evident that the species may also encounter problems along its migratory routes or in its wintering zone and it is not excluded that they contribute strongly (see RUFRAY & Rousseau, 2004) to weaken its breeding populations, in particular those located at the limit of the breeding range. Among the classical threats during migration (see LEFRANC 1993): unfavourable weather conditions (sandstorms, etc.), natural predation (e.g. by Eleonora Falcon *Falco eleonora*, locally and in autumn), direct destruction by hunting and trapping, especially in the Middle East and Africa.

The most serious threats in Africa are undoubtedly the evolution of habitat in a wintering area ten times smaller than the Eurasian breeding range. Possibly changing conditions affecting the thornbelt of the Kalahari basin, the main wintering area, could have significant consequences for shrike populations. In this arid savannah, open, but punctuated with several species of acacias, the Lesser Grey Shrike finds many hunting posts. Herremans (1998) cites as a potential threat a regression of thorny shrubs and vegetation in general following overgrazing, which could indirectly affect food chains. More recent and worrisome information (Pfiato2005)

relates to the southern part of Kalahari where the near-disappearance of *Lanius minor* is cited in the Kimberley area following a complete change in habitat physiognomy. According to the authors, this decline is due to the mortality and disappearance of trees (*Acacia mellifera*, *Acacia erioloba*, etc.) treated chemically by an arboricide (tebuthiuron) in order to favor grazing. Herremans also mentions the periods of intense drought that cause movements of the Lesser Grey Shrike to areas of less favourable physiognomy. These repeated droughts evoke obviously the great current issue of climate change. What's going on in Africa should also be taken into account in modeling the future distribution of migratory birds breeding in Europe (see 5.3).

5.5 National and international utilization

There is no international use as such, but use as a food / human and recreational (sport) is indicated by BirdLife. Furthermore, Brochet et al. (2016) indicate that six species of shrikes, of which the latter are the subject of illegal harvesting in the Mediterranean region.

6. Protection status and species management

6.1 National protection status

Protected species in EU Member States.

6.2 International protection status

Listed in Annex II of the Bern Convention and in Annex I of Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (Birds Directive) . CMS: in category B of the African-Eurasian Migratory Landbirds Action Plan (AEMLAP).

6.3 Management measures

The Lesser Grey Shrike is listed in Annex I of the Birds Directive, a species for which Special Protection Areas of the Natura 2000 network have to be designated. The management of these sites thus designated (Special Protection Areas, Natura 2000 network) aimed to contribute to its protection. In France, the species has mainly attracted the attention of ornithologists and structures involved in the protection of nature from the 1990s with the discovery of the last two loose colonies in Languedoc.

Actions in the lower Aude valley (France) in the 1990s

Regular monitoring of the population has been carried out since 1994 by various ornithologists, including members of the LPO Aude and the GRIVE (Research and Information Group on Vertebrates and their Environment). The first proposals for official conservation measures date back to 1994 with the elaboration of an agri-environmental operation associating wine-growers (Vignerons du Pays d'Enserune), elected representatives, nature conservation associations and the regional State services. The specifications "Protection de la Faune & Flore des plaines de l'Aude" concerned an eligible area of 1,500 ha scattered over four municipalities. The proposed territorial operating contracts (CTE) concerned:

- the maintenance of low grass between 15 June and 15 August: mowing, grinding or grazing
- a ban on the use of non-selective insecticides in vines
- tree maintenance with a special bonus to compensate for crop losses due to their presence in vines or other crops
- feeding of the avifauna (...) sowing a mixture of legumes / grasses.

56 farmers signed a contract for at least one measure and the total area covered more than 300 ha.

In June 1996, the first "Piegrèche" cuvée was launched, based on two grape varieties: Merlot and Cabernet-Sauvignon. Each bottle was decorated with a label representing the bird on a vineyard background (drawing by artist Serge Nicolle). Another label described the bird, "l'Amargassal" in Occitan, insisted on its rarity as well as on the cultural practices respectful of the biotope and adopted by the Vignerons of Pays d'Enserune. Two francs taken from each bottle were destined for various actions. At the beginning of the 2000s, the dynamics initiated unfortunately experienced difficulties due to various factors including economic problems.

Actions in progress in the two geographical areas occupied by the species: lower Aude valley & SW of Montpellier

Since 2008, a regional action plan is operational in Languedoc-Roussillon, the only administrative region that still regularly hosts breeding pairs. A follow-up protocol is thus established and revised every year. Monitoring of the population and its habitat focused on searching for individuals, monitoring of the reproductive process, diet, habitat parameters and their evolution, identification of limiting factors.

Awareness-raising actions are directed both to the owners and / or managers of the land, to the elected representatives and other actors in the territory as well as to the general public. All these actions involve employees and volunteers from LPO Hérault as well as other individuals or members of other associations such as LPO Aude and Aude Nature. In 2010, six trainees recruited by LPO Hérault provided much of the technical follow-up. They also widely disseminated an information brochure "The Lesser Grey Shrike in Hérault".

During prolonged periods of bad weather, insects, which are less active, are much more difficult to detect. In 2008, unfavourable weather conditions resulted in the failure of many nests (LPO Hérault 2009). In order to prevent this kind of hazards, a food supplement was set up in 2009, drawing inspiration from the Catalan model. Eight pairs benefited from the theoretical contribution of 8,000 domestic crickets. The insects were placed in bins placed under the usual perches of the shrikes between 50 and 150 m from the nests. However, few of them have been exploited: two pairs only out of eight (+ two "possible"). The conclusions on the actual effectiveness of the operation remained uncertain (Meridionalis 2010).

Spain is concerned by conservation measures. The western limits of the breeding range of the Lesser Grey Shrike go through the northeast of this country where the species has never been frequent. For the 1980s, estimates were 35-40 pairs in Catalonia and at least 20 in Aragon. Since then, the regression has been continuous. In 2002, there were only 23 pairs (19 in the province of Lleida and 4 in the province of Huesca). In 2007, there were only 10 (9 in Lleida and 1 in Huesca). In 2010, there were a pair and 3 isolated birds. In 2011, there was also a single pair with production of three chicks as well as an isolated bird resulting from the program of reinforcement of the population.

The management measures listed below are intended to improve the species' productivity in the short term and to improve habitat quality in the medium and long term (GIRALT et al., 2010 and D. GIRALT pers com.);

- control of the population of Magpie

Between 5 and 15 traps destined to capture magpies are operational from April to July in the territories occupied by the shrike. These traps, visited every day, have reduced the population of magpies in a very limited geographical area (less than 5 km²), but very temporarily given the high density of magpies in the regions concerned. Predation on nests, however, declined and was even nil in 2008 and 2009, but the results remain difficult to assess at this time because eggs or young have been removed from most of the last nests for the last three years to initiate a captive population.

- food

The idea is to reduce possible chick mortality due to lack of adequate food and to allow adults to spend less energy in search of insects so that they can devote more time to nest defense. From the incubation period until the flight of the young, each shrike pair receives an artificial feed (consisting mainly of domestic crickets *Acheta domestica*) placed in a 50 x 50 cm bin. The latter is installed a hundred meters from the nest. The results appear interesting, but the precise interpretation remains delicate.

- maintaining and improving habitat

The territories still currently used, or in the recent past, are affected by SPAs, but there is not

yet a management plan adapted to the species. Habitat conservation efforts have, however, already been undertaken on a small scale: with the agreement of the owners, the maintenance of fallows and pastures which constitute hunting grounds and tree planting to guarantee the possibility of long-term nesting. As cutting trees along roadsides is considered one of the main reasons for habitat degradation in Spain, several plantations have been carried out in historic nesting areas. For example, in 2004 and 2005, 20 walnut trees and 400 Italian poplars were planted respectively in two areas in Huesca and in 2006, 65 trees belonging to 3 species (Spanish plane tree, narrow-leafed ash and evergreen oak) were planted in a former territory Of Lleida. Given the current size of the trees and also the extreme rarity of the species, this initiative has not yet achieved a positive result.

- strengthening the population

This step was taken by the Autonomous Regional Government of Catalonia (Generalitat de Catalunya) from 2007. For more details, see Lefranc & Issa (2013).

6.4 Habitat conservation

For actions carried out in France, see Lefranc & Issa (2013), action sheets identification of habitat parameters, and maintenance of necessary trees, etc.

6.5 Population monitoring

Highly threatened populations of Western Europe are under close surveillance but gaps in knowledge and / or lack of data centralization remain in the more oriental populations. This results in uncertainty as to the conservation status of the European population.

7. Effects of the proposed amendment

7.1 Anticipated benefits of the amendment

The knowledge about the conservation status of the species throughout its range, as well as the threats it faces would be improved. This would help the implementation of the international actions foreseen e.g. in the National Action Plan 2014-2018 of France (Lefranc & Issa, 2013⁵) (Also see <http://herault.lpo.fr/avenir-pie-grieche-a-poitrine-rose/>]

7.2 Potential risks of the amendment

None

7.3 Intention of the proponent concerning development of an Agreement or Concerted Action

We wish to strengthen international cooperation to better understand the status of the Lesser Grey Shrike European populations and to provide better protection for this species both at its breeding sites and on its wintering grounds and during its migratory journeys.

8. Range States

Albania (B), Angola (W), Armenia (B), Austria (B), Belarus (B), Bosnia and Herzegovina (B), Botswana (W), Bulgaria (B), Burundi, Chad, the Congo, Croatia (B), Cyprus, Czech Republic (B?), Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, France (B), Gabon, Georgia (B), Greece (B), Hungary (B), Italy (B), Israel, Jordan, Kenya, Kosovo (UN Resolution 1244) (B), Kuwait, Lebanon, Libya, Lithuania (B), Malta, Malawi, Moldova (B), Montenegro (B), Mozambique (W), Namibia (W), Oman, Poland (B), Qatar, Romania (B), Russia (B), Rwanda, Saudi Arabia, Serbia (B), Slovakia (B), Slovenia (B), Somalia, South Africa (W), South Sudan, Sudan, Swaziland, Spain (B), Syrian Arab Republic, the Former Yugoslav Republic of Macedonia (B), Turkey (B), Uganda, Ukraine (B), United Arab Emirates, United Republic of Tanzania, Yemen, Zambia, Zimbabwe.

B= breeding ; W= wintering ; No code means passage but there may be, additionally, breeding of a non-European population.

Occasional presence (V = vagrant) or presence of a non-European population:

Afghanistan, Azerbaijan, Bahrain (V), Belgium (V), Cameroon (V), China, Comoros (V), Denmark (V), Estonia (V), Finland (V), Germany (V), Iran (Islamic Republic of), Iraq, Ireland (V), Kazakhstan, Kyrgyzstan, Latvia (V), Lesotho (V), Luxembourg (V), Mali (V), Mauritania (V), Netherlands (V), Niger (V), Nigeria (V), Norway (V), Pakistan (V), Portugal (V), Russian Federation (Central Asia), Sao Tome & Principe (V), Seychelles (V), Sweden (V), Switzerland (V), Tajikistan, Turkmenistan, United Kingdom (V), Uzbekistan.

9. Consultations

Experts and authorities of the EU Member States were consulted on this proposal but not the authorities other range states.

10. Additional remarks

Numerous studies are under way to identify the causes of decline of shrikes around the world and to ensure that the trend can be reversed. For example, Eastern Loggerhead Shrike is the subject of an action plan in Canada, including a breeding programme in captivity (similar to that of the Lesser Grey Shrike in Spain) with the aim of authorizing operations to strengthen populations. The feasibility of this technique applied to the Loggerhead Shrike has been demonstrated by Cade (1992). There is an International Shrike Working Group and a term has even been created (Kristin & al., 2004) to designate this discipline and scientists studying these species (Shrikeology, Shrikeologists).

⁵ http://www.consultations-publiques.developpement-durable.gouv.fr/IMG/pdf/PNA_Lanius_2014-2018.pdf

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 - EBCC
<http://ebcc.info/>
 - EEA ETC/BD
<http://bd.eionet.europa.eu/article12/static/factsheet/lanius-minor.pdf>
 - Gathering more information on trends
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