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Agenda Item 7.2

PROPOSAL FOR THE INCLUSION OF THE EUROPEAN ROLLER (*Coracias garrulus*) IN CMS APPENDIX I

Summary

The European Union and its 28 Member States have submitted a proposal for the inclusion of the European Roller (*Coracias garrulus*) in CMS Appendix I at the 11th Meeting of the Conference of the Parties (COP11), 4-9 November 2014, Quito, Ecuador.

An advanced unedited version of the proposal, as received from the proponent Party, is reproduced under this cover for its early consideration by the Scientific Council. It will be replaced by the final version as soon as possible.

**PROPOSAL FOR INCLUSION OF SPECIES ON THE APPENDICES OF THE
CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF
WILD ANIMALS**

A. PROPOSAL: Inclusion of the entire population of *Coracias garrulus* on Appendix I

B. PROPONENT: the European Union (EU) and its 28 Member States

C. SUPPORTING STATEMENT:

1. Taxon

1.1 Classis	Aves
1.2 Ordo	Coraciiformes
1.3 Familia	Coraciidae
1.4 Species	<i>Coracias garrulus</i>
1.5 Common name	European Roller

2. Biological data

2.1 Distribution

The European Roller is restricted to the Palearctic, breeding from north-west Africa and the Iberian Peninsula eastwards through the Mediterranean to the western Himalayas. *Coracias garrulus* occurs as two subspecies: the nominate breeds from Morocco, south-west and south-central Europe and Asia Minor east through north-west Iran to south-west Siberia (Russia); and *semenowi*, which breeds in Iraq and Iran (except north-west), east to Kashmir and north to Turkmenistan, south Kazakhstan and north-west China (west Sinkiang).

The species probably overwinters in two distinct regions of sub-Saharan Africa, from Senegal Eastwards to Cameroon and from Ethiopia Westwards to Congo and Southwards to South-Africa (del Hoyo *et al.* 2001).

2.2 Population

The European Roller has apparently undergone moderately rapid declines across its global range and it is consequently considered Near Threatened by the IUCN and the Birdlife International. Declines have been most pronounced in northern populations, and if similar declines are observed elsewhere in the species' range it may warrant uplisting to Vulnerable. (<http://www.iucnredlist.org/details/22682860/0>).

Over half of the global breeding range lies within Europe, where the most important populations are in Bulgaria, Spain, Ukraine, Romania, Russia and Turkey (in order of importance, Kovács *et al.* 2008), which together hold about 90% of the European breeding population.

The Roller has an estimated number of 55,000 - 117,000 breeding pairs in Europe (50-74% of the global breeding range) (Kovács et al. 2008).

There was a moderate, documented decline in Europe during the 1970-1990 period (Tucker and Heath 1994). During the 1990-2000 period, the species has continued to decline by up to 25% across Europe, including key populations in Turkey and European Russia (BirdLife International 2004). Overall European declines exceeded 30% in three generations (15 years). Populations in Northern Europe have undergone the most dramatic declines, notably:

- Estonia: from 50-100 pairs in 1998 to no known breeding pairs in 2004 [A. Kalamees *in litt.* 2005] (The estimated Estonian population is 0-3 pairs for period 2000-2012, Birds Directive Article 12 report of Estonia)
- Latvia: from several thousands to under 30 pairs in 2004 [E. Račinskis *in litt.* 2005],
- Lithuania: from 1 000-2 000 pairs in 1970s to 20 pairs in 2004 [L. Raudonikis *in litt.* 2005])
- Russia: the European Roller has now disappeared from the northern part of its range (A. Mischenko *in litt.* 2005)
- the European Roller has extinct in Germany, Denmark, Sweden (Snow & Perrins, 1998) and Finland (Avilés *et al* 1999), possibly due to habitat loss as a result of agricultural intensification (Kovács *et al.* 2008)

A few European countries have very small populations, e.g. 5-13 pairs breed in Austria (Burgenland) ,0-1 pair in Slovakia (no breeding pairs since 2010) and 0-3 pairs in Estonia. Such small populations are vulnerable and not increasing despite conservation efforts (Bohus 2002).

At present in EU, the largest populations are in Spain, Romania, Bulgaria, Hungary and France, but here populations have declined as well (Kovács et al. 2008).

Very few concrete data are available for non-European populations, but the species only formerly bred in the United Arab Emirates (Aspinall, S. & Porter, R. , 2011). However, there is no evidence of any declines in Central Asia. Should these populations be shown to be declining, the species may warrant uplisting further to Vulnerable. (<http://www.iucnredlist.org/details/22682860/0>).

2.3 Habitat

The European Roller breeds throughout temperate, steppe and Mediterranean zones characterized by reliable warm summer weather. It prefers lowland open countryside with patches of oak *Quercus* forest, mature pine *Pinus* woodland with heathery clearings, orchards, mixed farmland, river valleys, and plains with scattered thorny or leafy trees. It winters primarily in dry wooded savannah and bushy plains (del Hoyo *et al.* 2001).

The European Roller is a lowland species and it avoids the closed forests. Its foraging and nesting sites are quite different:

- for foraging, European Rollers need open grasslands (meadows, pastures) and/or extensive agricultural areas. The species mostly forage in agricultural habitats, especially meadows in May and August and in cereals in June-July. Fallow land is always favoured. Vineyards can be attractive if the soil keeps some vegetation cover (Tron *et al.* 2006,). Hedgerows (as well as fences and power lines) are essential perches while looking for prey (Tidmarsh & Di Corrado 2003).

- the European Roller is a secondary cavity nesting species and needs abandoned woodpecker cavities. Usually, Rollers nest in the old cavities of Black Woodpecker (*Dryocopus martius*) and Green Woodpecker (*Picus viridis*). Occasionally, they nest in natural tree hollows or in exposed banks or in loess and sand cliffs. Rollers also occasionally nest in cavities in buildings. Rollers have been observed to nest in cavities of medium voltage pylons as well (e.g. in Romania).¹

2.4 Migrations

All populations of European Roller are long-distance migrants. The pattern of the movement and the exact wintering grounds are yet unknown. The species probably overwinters in two distinct regions of Africa, from Senegal Eastwards to Cameroon and from Ethiopia Westwards to Congo and Southwards to South-Africa (del Hoyo *et al.* 2001).

Different populations seem to follow different routes. E.g., according to the ringing recoveries, the Roller population of the Carpathian Basin probably migrates through the Middle-East to reach Africa². Satellites telemetry studies showed that Rollers of the Iberian-peninsula crossed the Equator and winter in Southern-Africa (Angola, Botswana, Namibia, Zambia, Zimbabwe) (SEO/Birdlife).

European Rollers migrate during day, alone or in small groups. Adult birds set off earlier than young ones (Cramp *et al.* 1993).

3. **Threat data**

Changes to the European Roller's habitats had drastic effects in the past century. Its feeding and breeding places are changing and disappearing equally fast and it is not clear which is the most important problem for the species. It was proved that different [types of?] agricultural fields have different effects on Rollers' breeding success (Avilés *et al.* 2004).

3.1 Direct threats

Electrocution

Hunting from perches is a well-known part of the behaviour of the European Roller. This species used to use trees, bushes and fences as perching sites, but nowadays it shows strong preference for electric wires. This behaviour increases the risk of electrocution on breeding places and presumably means a very high mortality factor for migrating and wintering birds as well. During the data collection for the European Species Action Plan (Kovács *et al.* 2008) the threat of electrocution was reported 'high' in Hungary and Portugal.

¹ In Europe, the species mainly breeds in abandoned Green Woodpecker (*Picus viridis*) cavities in white poplar (*Populus alba*), especially in riparian forests, less often in willows (*Salix* spp), or infrequently in natural cavities of planes *Platanus orientalis*, walls or sand-banks (Cramp *et al.* 1993).

² Wintering places of the Carpathian Basin's population are not known yet, but according to recovery data of the Hungarian ringed birds which were recaptured abroad (Romania, Bulgaria, Greece and Libya) probably Hungarian Rollers migrate across the Balkan Peninsula to the South-East. Emmenegger *et al.* 2013 found Angola as a wintering place for the Western population.

Illegal hunting

The European Roller severely suffers from hunting throughout their migration routes. Illegal shooting is reported from Serbia, Croatia, Cyprus, Saudi-Arabia and Libya. Hundreds, perhaps thousands, are shot for food in Oman every Spring (del Hoyo *et al.* 2001) and in Gujarat, India. Hunting in wintering places occurs regularly as well.

(<http://husrb.mme.hu/en/content/tragical-roller-recapture-or-threats-middle-east-our-migrating-birds>)

One of the proposed conservation actions by IUCN and Birdlife International is to “tackle specific threats such as hunting.” (<http://www.iucnredlist.org/details/22682860/0>).



Illegal trapping and catching for pet

The European Roller is an attractive and exotic-like bird. It is therefore a desired species as pet for private collectors. Illegal collecting of young birds from natural and artificial breeding places could be a real danger for Rollers. In 2008, e.g., a case of smuggling at the Serbian-Hungarian border was reported. (Kiskunság National Park's webpage: http://knp.nemzetipark.gov.hu/index.php?pg=news_35_1282). See attached photo.



3.2 Habitat destruction

Loss of nesting locations

Loss of old trees or groves with hollows for Roller's nests is a serious problem. The European Roller is a secondary-cavity nesting species; it is not able to create its nest hole, except in case of loess and sand cliffs. The lack of suitable nesting sites seems to be the most limiting factor based on the experiences of former conservation actions. According to the international action plan, the following main processes have played the most important role in the loss of suitable cavities (Kovács et al 2008):

- The intensification of forest management in the European Union. Intensive forest management is characterized by clear-cuts leading to loss of old trees.
- Replacement of native soft woods (poplar, willow) with introduced tree species (*Robinia pseudoacacia*) reduces the number of natural hollows. The stakeholders usually do not leave the dead old trees with cavities and do not plant softwood groves for the grazing livestock.
- The clearing of riverbank trees and riparian forests and also the spreading of invasive tree species minimize the suitable cavities for the Roller.
- Mosaic agricultural areas are suitable habitat for this species, but the removal of hedges with old trees for expansion of arable land prevents the Rollers from breeding there.
- The European Roller is highly dependent on the presence of cavity-making woodpecker species such as Green Woodpecker and Black Woodpecker. The Green Woodpecker is considered the main cavity provider because this species uses also grasslands for foraging (but does not use the same prey). The decrease of the Green Woodpecker population, which uses the same habitats as Roller, has been observed, but the reasons are not clarified.

Reduction of feeding places

Birds of farmland and grassland habitats have the worst condition status in Europe. The European Roller is one of the species whose populations showed negative trend across its entire breeding range due to agricultural intensification (Donald *et al.*2006). The land abandonment and reduced management of meadows and pastures results in lower quality of Roller foraging habitats. The conservation of grassland to other land use and increasing natural habitat homogeneity because of the elimination of natural or semi natural habitats such as field margins, hedgerows and fallows reduce the size of suitable feeding places of Rollers. Most of the habitats which used to be favourable for Roller are nowadays in very bad condition, mostly because of the lack of grazing livestock.

3.3 Indirect threat - poisoning

European Rollers are predominantly insectivorous species, and as such are possibly exposed to secondary poisoning of by a wide selection of pesticides used in the agricultural sector. Poisoning may happen when the chemicals are accumulated through the food chain. As Rollers winter in sub-Saharan Africa – where chemical usage regulations are more permissive compared to the European Union - they are presumably exposed to dangerous pesticides banned from the EU breeding range.

3.4 Threats connected especially with migrations

The European Roller suffers from hunting and illegal taking on its migration routes (see section 3.1 above).

3.5 National and international utilization

See section 3.1 above as regards hunting for food and for pet-keeping.

4. **Protection status and needs**

4.1 National protection status

The European Roller is a protected species in many range states, particularly in the Western parts of its range.

4.2 International protection status

- **IUCN Red List Category 1: Near threatened**
- **Bonn Convention on the Conservation of Migratory Species of Wild Animals** Category: Appendix II. The species is also listed in Category A of proposed Action Plan for Conservation of African-Eurasian Migratory Landbirds
- **Bern Convention on the Conservation of European Wildlife and Natural Habitats** Category: Appendix II
- **European Conservation Status²: SPEC2**
- **EU Birds Directive: Council Directive on the conservation of wild birds (2009/147/EC)** Category: Annex I
- Finally, in 2012, the European Roller was listed as a priority for funding under the EU LIFE programme
- International Species Action Plan for the European Roller was accepted by the European Commission in 2008

4.3 Additional protection needs

The European Roller is presently listed on Appendix II, which means it requires international cooperation for its conservation. Such cooperation could take place in the frame of the proposed Action Plan for the Conservation of African-Eurasian Migratory Landbirds, which is not legally binding. In the case of European Roller, urgent and legally binding measures are required to eliminate illegal taking, especially in the migration and wintering areas. Appendix I listing would furthermore urge conservation measures in CMS Parties, such as the protection of important habitats and measures to prevent electrocution (bird-friendly design for new power lines, conversion of existing power lines).

5. **Range States³**

Afghanistan, ALBANIA, ALGERIA, ARMENIA, AUSTRIA, Azerbaijan, BELARUS, Bosnia, BULGARIA, China, CROATIA, CYPRUS, FRANCE, GEORGIA, GREECE, HUNGARY, IRAN, Iraq, ISRAEL, ITALY, JORDAN, KAZAKHSTAN, Kyrgyzstan, LATVIA, Lebanon, LIBYA, LITHUANIA, MOLDOVA, MOROCCO, POLAND, PORTUGAL, ROMANIA, Russia, SAUDI ARABIA, SERBIA, SPAIN, SYRIA, TAJIKISTAN, TUNISIA, Turkey, Turkmenistan, UKRAINE, UZBEKISTAN.

¹ CMS Parties in capital.

6. Comments from Range States

7. Additional remarks

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