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Coracias garrulus, European Roller

Assessment by: BirdLife International



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Coraciiformes	Coraciidae

Taxon Name: Coracias garrulus Linnaeus, 1758

Regional Assessments:

• Europe

Common Name(s):

English: European Roller, RollerFrench: Rollier d'Europe

Taxonomic Source(s):

Cramp, S. and Simmons, K.E.L. (eds). 1977-1994. *Handbook of the birds of Europe, the Middle East and Africa. The birds of the western Palearctic.* Oxford University Press, Oxford.

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2018

Date Assessed: August 9, 2018

Justification:

This species has been downlisted to Least Concern. Although the population is still thought to be declining, the declines are not thought to be sufficiently rapid to warrant listing as Near Threatened. The European population is still thought to be declining but at a less severe rate and the Central Asian population is not thought to be declining significantly. Conservation actions in several countries have contributed to national recoveries.

Previously Published Red List Assessments

2017 - Least Concern (LC)

http://dx.doi.org/10.2305/IUCN.UK.2017-1.RLTS.T22682860A111884908.en

2016 - Least Concern (LC)

http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22682860A92965129.en

2015 - Least Concern (LC)

http://dx.doi.org/10.2305/IUCN.UK.2015.RLTS.T22682860A84399225.en

2012 - Near Threatened (NT)

http://dx.doi.org/10.2305/IUCN.UK.2012-1.RLTS.T22682860A37868316.en

2008 – Near Threatened (NT)

2005 - Near Threatened (NT)

2004 – Least Concern (LC)

2000 - Lower Risk/least concern (LR/Ic)

1994 – Lower Risk/least concern (LR/Ic)

1988 - Lower Risk/least concern (LR/Ic)

Geographic Range

Range Description:

This species 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 overwinters in two distinct regions of Africa, from **Senegal** east to **Cameroon** and from **Ethiopia** west to **Congo** and south to **South Africa** (del Hoyo *et al.* 2001). It has a large global population, including an estimated 100,000-220,000 individuals in Europe (50-74% of the global breeding range) (BirdLife International 2004). However, following a moderate decline during 1970-1990 (Tucker and Heath 1994), the species continued to decline by up to 25% across Europe during 1990-2000 (including in key populations in Turkey and European Russia) (BirdLife International 2004). Overall European declines exceeded 30% in three generations (15 years).

The most recent assessment of the European population suggests the decline has slowed to c. 5-20% in three generations (BirdLife International 2015). Populations in northern Europe have undergone severe declines (Estonia: 50-100 pairs in 1998 to no known breeding pairs in 2004 and 0-3 reported for 2008-2012 [A. Kalamees *in litt*. 2005, BirdLife International 2015], Latvia: several thousand to under 30 pairs in 2004 and 2012 [E. Raèinskis *in litt*. 2005, BirdLife International 2015], Lithuania: 1,000-2,000 pairs in 1970s to less than 20 pairs in 2004 and 2008-2012 [L. Raudonikis *in litt*. 2005, BirdLife International 2015]), and in Russia it has now disappeared from the northern part of its range (A. Mischenko *in litt*. 2005) with 7,000-10,000 pairs reported in its European range (BirdLife International 2015). However, the population in Central Asian is apparently not experiencing significant declines (R. Ayé *in litt*. 2015).

Country Occurrence:

Native: Afghanistan; Albania; Algeria; Angola; Armenia; Austria; Azerbaijan; Bahrain; Belarus; Benin; Bosnia and Herzegovina; Botswana; Bulgaria; Burkina Faso; Burundi; Cameroon; Central African Republic; Chad; China; Congo; Congo, The Democratic Republic of the; Côte d'Ivoire; Croatia; Cyprus; Czechia; Djibouti; Egypt; Eritrea; Estonia; Eswatini; Ethiopia; France; Gabon; Gambia; Georgia; Germany; Ghana; Gibraltar; Greece; Guinea-Bissau; Hungary; India; Iran, Islamic Republic of; Iraq; Israel; Italy; Jordan; Kazakhstan; Kenya; Kuwait; Kyrgyzstan; Latvia; Lebanon; Lesotho; Libya; Lithuania; Macedonia, the former Yugoslav Republic of; Malawi; Mali; Malta; Mauritania; Moldova; Montenegro; Morocco; Mozambique; Namibia; Niger; Nigeria; Oman; Pakistan; Palestine, State of; Poland; Portugal; Qatar; Romania; Russian Federation (Central Asian Russia, European Russia); Rwanda; Saudi Arabia; Senegal; Serbia; Slovakia; Slovenia; Somalia; South Africa; South Sudan; Spain; Sudan; Syrian Arab Republic; Tajikistan; Tanzania, United Republic of; Tunisia; Turkey; Turkmenistan; Uganda; Ukraine; United Arab Emirates; Uzbekistan; Western Sahara; Yemen; Zambia; Zimbabwe

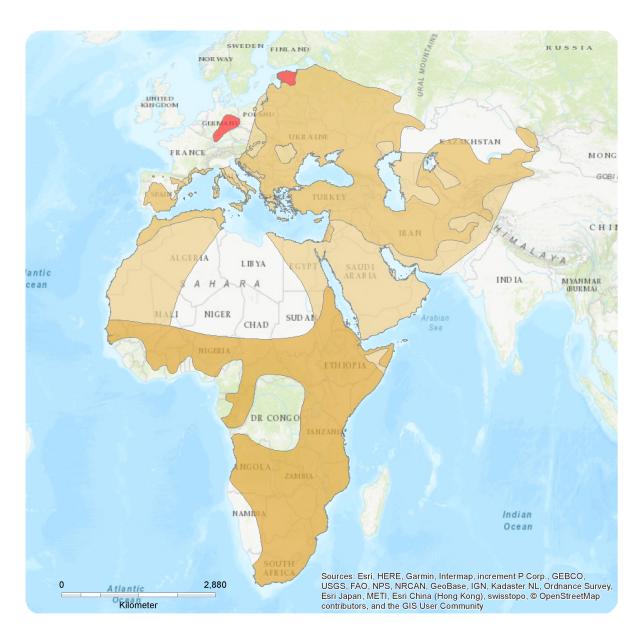
Regionally extinct: Sweden

Vagrant: Belgium; Cabo Verde; Comoros; Denmark; Faroe Islands; Finland; Iceland; Ireland; Liechtenstein; Luxembourg; Netherlands; Norway; Sao Tome and Principe; Seychelles; Switzerland; Togo; United Kingdom

Present - origin uncertain: San Marino

Distribution Map

Coracias garrulus





Compiled by:

BirdLife International and Handbook of the Birds of the World (2018) $\,$



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



Population

In Europe, the breeding population is estimated to number 75,000-158,000 mature individuals (BirdLife International 2015). The European population is thought to hold around 40% of the global breeding range therefore a very approximate estimate of the global population is 188,000-395,000 mature individuals or 282,000-593,000 individuals. Here placed in the band 100,000-499,999 mature individuals and 200,000-600,000 individuals.

Trend Justification

The species was previously thought to be undergoing sharp declines in Europe, however new data compiled for the 2015 European Red List of Birds suggests that the population is declining at a less severe rate, with the breeding population decreasing by c. 5-20% over three generations (16.8 years) (however many national populations in central and eastern Europe are still declining) (BirdLife International 2015). Negative trends are still reported for northern European populations such as Lithuania as well as Latvia, Poland, Belarus and Estonia (L. Raudonikis *in litt*. 2015). Some southern European populations have also declined: in the past century, the species has gone 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 (Snow & Perrins 1998). In Central Europe, extinctions occurred in some areas around 25 years ago with no evidence of recolonization (M. Vogrin *in litt*. 2015).

It is thought to be relatively common in Tajikistan (D. Ewbank *in litt*. 2015) and in Central Asia (Afghanistan, Kazakhstan, Krygystan, Tajikistan, Turkmenistan and Uzbekistan) an analysis of observations of this species suggests that a strong or moderate decline is unlikely whilst a weaker decline cannot be excluded due to limitations in the data (R. Ayé *in litt*. 2015). The species is considered common in Uzbekistan by ornithologists however significant habitat loss has occurred suggesting the species may be declining (R. Kashkarov *in litt*. 2015). Populations in the Middle East have not apparently exhibited declines. Europe holds approximately 40% of the global breeding range, considering new information from Central Asia which suggests the species has not declined significantly and assuming that populations in the Middle East and north-west Africa have also not declined significantly since they were last assessed, the population is not thought to be undergoing significant declines.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

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 savanna and bushy plains (del Hoyo *et al.* 2001). 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 *Salix* spp., or infrequently in natural cavities of planes *Platanus orientalis*, walls or sand-banks (Tron *et al.* 2006, Poole *et al.* in prep). They mostly forage in agricultural habitats, especially meadows (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, Poole *et al.* in prep). Hedgerows (as well as fences and powerlines) are essential perches while looking for prey (Tron *et al.* 2006, Poole *et al.* in prep).

Systems: Terrestrial

Threats (see Appendix for additional information)

Threats include persecution on migration in some Mediterranean countries and hundreds, perhaps thousands, are shot for food in **Oman** every spring (del Hoyo *et al.* 2001), and Gujarat, **India**. The loss of suitable breeding habitat due to changing agricultural practices, conversion to monoculture, loss of nest sites, and use of pesticides (reducing food availability) are considered to be the main threats to the species in Europe (E. Raèinskis *in litt*. 2005, Kovacs *et al.* 2008). It is sensitive to loss of hedgerows and riparian forest in Europe which provide essential habitats for perching and nesting.

Conservation Actions (see Appendix for additional information)

Conservation and Research Actions Underway

EU Birds Directive Annex I. Bern Convention Appendix II. Bonn Convention Appendix I. An International Species Action Plan is in place (Kovacs *et al.* 2008). Conservation actions in certain countries have contributed to several national population recoveries (Bulgaria, Spain [Rodríguez *et al.* 2011], France and Hungary [Kiss *et al.* 2014]). A number of national monitoring schemes are in place within its range and it has been the focus of targeted study. Species action plans have been developed in Hungary, Latvia, and Andalusia (Spain); similar documents are being drafted in Slovakia and Catalonia (Spain). Working groups present in Austria, Belarus, France, Latvia, Lithuania, Serbia and Slovakia.

strong style="">Conservation and Research Actions Proposed

Continue monitoring population trends. Determine Turkish, Middle Eastern and Central Asian trends and review its conservation status based on the findings. Tackle specific threats such as hunting. Address threats in Europe relating to the Common Agricultural Policy and integrate appropriate measures into agri-environment schemes.

Credits

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Bibliography

Avilés J.M., Sanchez J.M., Sanchez A., Parejo D. 1999. Breeding biology of the Roller Coracias garrulus in farming areas of the southwest Iberian Peninsula. *Bird Study* 46: 217-223.

BirdLife International. 2004. *Birds in Europe: population estimates, trends and conservation status*. BirdLife International, Cambridge, U.K.

BirdLife International. 2015. European Red List of Birds. Office for Official Publications of the European Communities, Luxembourg.

del Hoyo, J.; Elliott, A.; Sargatal, J. 2001. *Handbook of the Birds of the World, vol. 6: Mousebirds to Hornbills*. Lynx Edicions, Barcelona, Spain.

Fry, C. H.; Fry, K. 1999. Kingfishers, bee-eaters, and rollers. Princeton University Press, Princeton.

IUCN. 2018. The IUCN Red List of Threatened Species. Version 2018-2. Available at: www.iucnredlist.org. (Accessed: 15 November 2018).

Kiss, O., Elek, Z. and Moskát, C. 2014. High breeding performance of European Rollers *Coracias garrulus* in heterogeneous farmland habitat in southern Hungary. *Bird Study* 61(4): 496-505.

Kovacs A., Barov B., Orhun C., Gallo-Orsi U. 2008. *International Species Action Plan for the European Roller* Coracias garrulus garrulus. BirdLife International For the European Commission.

Lemphers, N.C., Tron, F.T. and Evans, D.M. 2007. Comparison of census methodologies for the European roller (Coracias garrulus) in the Vallée des Baux de Provence, France. A Rocha France, Aries-Espénon, France.

Rodríguez, J., Aviles, J.M. and Parejo, D. 2011. The value of nestboxes in the conservation of Eurasian Rollers *Coracias garrulus* in southern Spain. *Ibis* 153(4): 735-745.

Snow, D. W.; Perrins, C. M. 1998. *The birds of the Western Palearctic: concise editions*. Oxford University Press, Oxford, U.K.

Tron, F. 2006. The European Roller as a flagship species for a local stakeholders-based approach of Mediterranean farmland conservation. . Abstract for the 1st European Congress of Conservation Biology 'Diversity for Europe'.

Tucker, G.M.; Heath, M.F. 1994. *Birds in Europe: Their Conservation Status*. BirdLife International, Cambridge, U.K.

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External Resources

For Images and External Links to Additional Information, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate		Suitable	No
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland		Suitable	No
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane		Suitable	No
2. Savanna -> 2.1. Savanna - Dry		Suitable	Yes
3. Shrubland -> 3.5. Shrubland - Subtropical/Tropical Dry		Suitable	Yes
3. Shrubland -> 3.8. Shrubland - Mediterranean-type Shrubby Vegetation		Suitable	No
4. Grassland -> 4.4. Grassland - Temperate		Suitable	No
14. Artificial/Terrestrial -> 14.1. Artificial/Terrestrial - Arable Land		Suitable	No
14. Artificial/Terrestrial -> 14.1. Artificial/Terrestrial - Arable Land		Suitable	No
14. Artificial/Terrestrial -> 14.2. Artificial/Terrestrial - Pastureland		Suitable	No

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.4. Type Unknown/Unrecorded	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place	
In-Place Research, Monitoring and Planning	
Action Recovery plan: Yes	

Conservation Actions in Place

Systematic monitoring scheme: Yes

In-Place Land/Water Protection and Management

Conservation sites identified: Yes, over entire range

Occur in at least one PA: Yes

Invasive species control or prevention: No

In-Place Species Management

Successfully reintroduced or introduced beningly: No

Subject to ex-situ conservation: No

In-Place Education

Subject to recent education and awareness programmes: No

Included in international legislation: Yes

Subject to any international management/trade controls: No

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions Needed

- 3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
- 5. Law & policy -> 5.1. Legislation -> 5.1.1. International level

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed

- 1. Research -> 1.2. Population size, distribution & trends
- 3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution

Continuing decline in area of occupancy (AOO): Yes

Extreme fluctuations in area of occupancy (AOO): No

Estimated extent of occurrence (EOO) (km2): 21100000

Continuing decline in extent of occurrence (EOO): Yes

Distribution

Extreme fluctuations in extent of occurrence (EOO): No

Continuing decline in number of locations: Yes

Extreme fluctuations in the number of locations: No

Upper elevation limit (m): 2400

Population

Number of mature individuals: 100000-499999

Continuing decline of mature individuals: Yes

Extreme fluctuations: No

Population severely fragmented: No

No. of subpopulations: 2-100

Continuing decline in subpopulations: Unknown

Extreme fluctuations in subpopulations: No

All individuals in one subpopulation: No

Habitats and Ecology

Continuing decline in area, extent and/or quality of habitat: Yes

Generation Length (years): 5.6

Movement patterns: Full Migrant

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<u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

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