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Alectoris rufa, Red-legged Partridge

Assessment by: BirdLife International



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Galliformes	Phasianidae

Scientific Name: Alectoris rufa (Linnaeus, 1758)

Regional Assessments:

• Europe

Common Name(s):

• English: Red-legged Partridge

Taxonomic Source(s):

del Hoyo, J., Collar, N.J., Christie, D.A., Elliott, A. and Fishpool, L.D.C. 2014. *HBW and BirdLife International Illustrated Checklist of the Birds of the World. Volume 1: Non-passerines*. Lynx Edicions BirdLife International, Barcelona, Spain and Cambridge, UK.

Turbott, E.G. 1990. *Checklist of the Birds of New Zealand*. Ornithological Society of New Zealand, Wellington.

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.

AERC TAC. 2003. AERC TAC Checklist of bird taxa occurring in Western Palearctic region, 15th Draft. Available at: #http://www.aerc.eu/DOCS/Bird_taxa_of_the_WP15.xls#.

Assessment Information

Red List Category & Criteria: Near Threatened A2bcde+3bcde+4bcde <u>ver 3.1</u>

Year Published: 2020

Date Assessed: August 28, 2020

Justification:

Red-legged Partridge populations have been estimated to be declining at a rate of between 40-45% over the past 10 years, based on data reported by EU Member States to the European Commission under Article 12 of the EU Birds Directive. This rate of decline is matched by that reported under the Pan-European Common Bird Monitoring Scheme, which shows a steep decline since 2008. Threats from intensive agriculture, insecticides, hybridisation and ecological consequences for wild populations from contact with released birds are all documented to impact varying proportions of the wild global population. However, it is acknowledged that a significant and potentially more stable proportion of the population occurs on private land inaccessible to surveyors for these schemes in the species's core range in Spain.

As such, it is inferred that the rate of population reduction has approached the thresholds for listing as Vulnerable over the past ten years but is not, as yet, believed to have exceeded this threshold. The species is therefore assessed as Near Threatened, as nearly meeting the thresholds for Vulnerable under

Criterion A2bcde +A3bcde + A4bcde.

It is important that there is greater collaboration between those monitoring the trend of the wild population and those involved in conserving sustainable populations to maintain the viability of hunting, to increase the precision of the trend estimate for future assessments.

Previously Published Red List Assessments

2018 - Least Concern (LC)

https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22678711A131873456.en

2016 - Least Concern (LC)

https://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22678711A85911062.en

2012 – Least Concern (LC)

https://dx.doi.org/10.2305/IUCN.UK.2012-1.RLTS.T22678711A40086544.en

2009 – Least Concern (LC)

2008 - Least Concern (LC)

2004 - Least Concern (LC)

2000 – Unknown (LR/LC)

1994 – Unknown (LR/LC)

1988 – Unknown (LR/LC)

Geographic Range

Range Description:

Red-legged Partridge is a western European endemic, resident in **Spain** (including the Balearic Islands), **Portugal**, **France** and extending into NW **Italy** and Corsica. The majority occur in Spain, where the population is estimated at 4,900,000 pairs (BirdLife International in prep.), Portugal is estimated to hold between 500,000 and 1,000,000 pairs, France between 130,000 and 300,000 pairs and Italy between 1,000-1,500 pairs (BirdLife International in prep.). Declines are considered to be occurring throughout.

Country Occurrence:

Native, Extant (resident): Andorra; France; Germany; Italy; Portugal; Spain

Extant & Introduced (resident): Algeria; Greece; United Kingdom

Extant & Introduced (breeding): Ireland; New Zealand

Extant & Vagrant (non-breeding): Belgium; Luxembourg; Netherlands; Switzerland

Distribution Map





EXTANT (RESIDENT)

EXTANT & INTRODUCED (RESIDENT)

Compiled by:

BirdLife International and Handbook of the Birds of the World (2018) 2017 $\,$





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



Population

The breeding population, which is confined to Europe, is estimated at 4,975,000-6,850,000 pairs, which equates to 9,950,000-13,700,000 mature individuals (BirdLife International in prep.).

Trend Justification

The population is believed to have declined at a rate of 20-29% over ten years (the species's generation length is 2.1 years; Bird *et al.* 2020), due to the effects of agricultural intensification, habitat conversion, over-hunting and the effects of high volume release of farm-reared birds, many of which proved to be hybrid *A. chukar* x *A. rufa* (Blanco-Aguiar *et al.* 2008, Barbanera *et al.* 2010).

This is a lower rate of population reduction than the 40-45% in ten years reported by EU Member States to the European Commission under Article 12 of the EU Birds Directive (BirdLife International in prep.), or the 44% in ten years since 2008 reported under the Pan-European Common Bird Monitoring Scheme. There is a high likelihood that population monitoring in the core range of the species was incomplete, as this species is managed for hunting on large privately-owned estates that were inaccessible to the surveyors. Red-legged Partridge is the most economically important small-game species in central Spain, and 87% of hunting estates, holding a large proportion of the population, are privately owned (Díaz-Fernández *et al.* 2012).

However, these populations are not considered immune to the declines occurring throughout the rest of the range, and while there is scope for good management to maintain viable populations with a hunting surplus, it is suspected that these populations are also undergoing a moderate population reduction.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

The species is found in open habitats ranging from Mediterranean to humid temperate zones but not in boreal, oceanic or arid zones (Tucker and Heath 1994, McGowan *et al.* 2013). It prefers lowland areas and avoids forest and wet areas if possible. It uses habitats with a wide variety of soils and land uses including dry hilly land with scattered bushes up to about 1,300 m (occasionally up to 2,000 m) in montane foothills, inhospitable dry terrain on lower mountain slopes and marginal cultivation, cropland, orchards or woodland (McGowan *et al.* 2013). Over most of its range it is associated with arable farming, using low-intensity cropping with a mixture of cultivated, fallow and uncultivated ground (Tucker and Heath 1994). Laying dates vary between countries; April to early May in Portugal, late April to May in England and May to mid-June in France. The nest is a scrape in the ground lined with a few pieces of vegetation. Clutch sizes average 11.2–12.7 eggs. It feeds on seeds, leaves and roots with grasses and legumes particularly important in winter. It will also eat insects. The species is mostly sedentary but may descend to lower ground during the winter (McGowan *et al.* 2013).

Systems: Terrestrial

Threats (see Appendix for additional information)

The disappearance of uncultivated land due to changes in agricultural practice has resulted in the loss of nesting cover and chick food and is directly linked to rapid declines in farmland bird populations in Spain (Traba and Morales 2019). In pastoral areas, pastures have been agriculturally improved and areas of low, herb-rich scrub converted to grassland and further habitat loss has occurred through the loss of arable farming from open hill areas, if livestock are removed (leading to encroachment of tall scrub and

forest) (Tucker and Heath 1994). Urbanization and agricultural expansion have also caused habitat fragmentation.

Over-hunting is likely to have played a role in the decline of the species: over 60% of estimated potential population may be shot each year (McGowan and Kirwan 2013). The species status as a gamebird of high socioeconomic value means that there is a considerable effort to maintain a huntable surplus, which is eminently achievable with good habitat management: there is some evidence that hunting mortality is compensatory to natural mortality (Soucher *et al.* 2018). One approach to achieving this has been to release captive-reared birds shortly prior to the hunting season, a practice that increased rapidly from the end of the 20th century (Casas *et al.* 2016) and upwards of 3-6 million farm-bred partridges are now released annually (Díaz-Fernández *et al.* 2012). Ensuring hunting bag limits are sustainable is dependent on an accurate assessment of abundance prior to the season, but it was found that in intensive estates where large numbers of birds are released, harvest depended only on release intensity (Díaz-Fernández *et al.* 2012). The presence of released birds can also increases estimates from field assessments of abundance, but as their survival rate is very low (<0.05 to the next spring: [Souchay *et al.* 2018]) this adjustment results in larger numbers of 'wild' individuals (birds that have bred) being taken (Casas *et al.* 2016).

The actual stock that is released is also a threat: 63% of farmed birds had mtDNA lineages from Chukar (*A. chukar*), but more alarmingly so did 45% of wild Red-legged Partridges (Blanco-Aguiar *et al.* 2008), potentially undermining the genetic distinctiveness of the species.

Also illegal importations of *A. graeca* and *A. chukar* may also be causing problems through hybridization and competition (Tucker and Heath 1994, McGowan and Kirwan 2013).

Conservation Actions (see Appendix for additional information)

Conservation Actions Underway

EU Birds Directive Annex II and III. In 1993, the release of any *Alectoris* species other than *A. rufa* was discontinued in the U.K. (Tucker and Heath 1994). Most conservation actions implemented to increase densities are carried out by those engaged with hunting, most obviously through the retention of a large extent of land on which suitable habitat for the species is retained or enhanced, but also through generalist predator control and the provision of water sources and supplemental feeders (Arroyo 2012, Caro *et al.* 2014, Sánchez-García *et al.* 2017). These techniques can increase densities (Sánchez-García *et al.* 2017), although there appears to be a level of compensatory mortality or dispersal in the absence of hunting (Soucher *et al.* 2018).

Conservation Actions Proposed

The promotion of low-level agriculture in the lowlands and the maintenance of traditional farming practices in marginal hill areas should be put in place. Releases of other *Alectoris* species should be stopped in the rest of Europe. Sustainable hunting practices should be developed and adopted and promoted by hunting organisations and their members (Tucker and Heath 1994). Alternatives to large-scale releases of captive-bred Red-legged Partridge should be implemented where wild populations are present at expected densities, e.g. 2 pairs/km². Stock that is released must be genetically certified as appropriate to the region of release. Release of any *Alectoris* should be subject to greater restriction, especially where large numbers are involved and the frequency of releases is high. Reared birds for release should be marked with closed rings to improve the monitoring of hunting mortality of the wild population.

Collaborations between those managing hunting interests and those seeking improved conservation status should focus on shared ground in maintaining secure populations with sufficient surplus for

hunting through developing regional management best practice and a centralised resource for monitoring wild populations.

Credits

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Bibliography

Arroyo, B., Delibes-Mateos, M., Díaz-Fernández, S., & Viñuela, J. 2012. Hunting management in relation to profitability aims: red-legged partridge hunting in central Spain. *European Journal of Wildlife Research*. 58(5): 847-855.

Barbanera, F.; Pergams, O. R. W.; Guerrini, M.; Forcina, G.; Panayide, P.; Dinis, F. 2010. Genetic consequences of intensive management in game birds. *Biological Conservation* 143(5): 1259-1268.

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

BirdLife International. In prep. *European Red List of Birds*. Deliverable to the European Commission (DG Environment) in 2021 under Service Contract ENV.D.3/SER/2018/0018.

Blanco-Aguiar, J. A., P. González-Jara, M. E. Ferrero, I. Sánchez-Barbudo, E. Virgós, R. Villafuerte, and J. A. Dávila. 2008. Assessment of game restocking contributions to anthropogenic hybridization: the case of the Iberian red-legged partridge. *Animal Conservation* 11: 535-545.

Casas, F., Arroyo, B., Viñuela, J., Guzmán, J. L., & Mougeot, F. 2016. Are farm-reared red-legged partridge releases increasing hunting pressure on wild breeding partridges in central Spain? *European journal of wildlife research* 62(1): 79-84.

González-Redondo, P., M. Delgado-Pertinez, S. Toribio, F. A. Ruiz, Y. Mena, F. P. Caravaca, and J. M. Castel. 2010. Characterisation and typification of the red-legged partridge (Alectoris rufa) game farms in Spain. *Spanish Journal of Agricultural Research* 8: 624–633.

IUCN. 2020. The IUCN Red List of Threatened Species. Version 2020-3. Available at: www.iucnredlist.org. (Accessed: 10 December 2020).

MAPA. 2020. Estadística anual de caza. Tablas resumen 2005-2018. Ministerio de Agricultura Pesca y Alimentación. Available at: https://www.mapa.gob.es/es/desarrollo-rural/estadisticas/Est Anual Caza.aspx.

McGowan, P.J.K., Kirwan, G.M. and Boesman, P. 2013. Red-legged Partridge (*Alectoris rufa*). In: J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie and E. de Juana (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.

Sánchez-García, C., Pérez, J. A., Díez, C., Alonso, M. E., Bartolomé, D. J., Prieto, R., Tizado, E.J. & Gaudioso, V. R. 2017. Does targeted management work for red-legged partridges Alectoris rufa? Twelve years of the 'Finca de Matallana'demonstration project. *European Journal of Wildlife Research* 63(1): 24.

Traba, J., & Morales, M. B. 2019. The decline of farmland birds in Spain is strongly associated to the loss of fallowland. *Scientific reports* 9(1): 1-6.

Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. BirdLife International, Cambridge, U.K.

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External Resources

For <u>Supplementary Material</u>, and for <u>Images and External Links to Additional Information</u>, please see the Red List website.

Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
3. Shrubland -> 3.4. Shrubland - Temperate	Resident	Suitable	No
3. Shrubland -> 3.8. Shrubland - Mediterranean-type Shrubby Vegetation	Resident	Suitable	No
4. Grassland -> 4.4. Grassland - Temperate	Resident	Suitable	No
14. Artificial/Terrestrial -> 14.1. Artificial/Terrestrial - Arable Land	Resident	Suitable	No

Use and Trade

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

End Use	Local	National	International
Sport hunting/specimen collecting	Yes	Yes	No
Food - human	Yes	Yes	No
Pets/display animals, horticulture	No	No	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming	Ongoing	Majority (50- 90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		n degradation
		2. Species Stresses -> 2.3. Indirect species effects		cies effects
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.3. Agro-industry grazing, ranching or farming	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		n degradation
		2. Species Stress	es -> 2.3. Indirect spec	cies effects
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Majority (50- 90%)	Causing/could cause fluctuations	Medium impact: 6
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
8. Invasive and other problematic species, genes & diseases -> 8.3. Introduced genetic material	Ongoing	Minority (50%)	Unknown	Unknown
	Stresses:	2. Species Stress	es -> 2.3. Indirect spec	cies effects

9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.3. Herbicides and pesticides	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6
	Stresses:	2. Species Stresses -> 2.3. Indirect species effects		

Conservation Actions in Place

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

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: No
Systematic monitoring scheme: Yes
In-place land/water protection
Conservation sites identified: Yes, over entire range
Occurs in at least one protected area: Yes
Invasive species control or prevention: No
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: 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 Action Needed
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.2. Invasive/problematic species control
2. Land/water management -> 2.3. Habitat & natural process restoration
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management

Research Needed

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

Research Needed

- 1. Research -> 1.2. Population size, distribution & trends
- 1. Research -> 1.4. Harvest, use & livelihoods

Additional Data Fields

Distribution

Continuing decline in area of occupancy (AOO): Unknown

Extreme fluctuations in area of occupancy (AOO): No

Estimated extent of occurrence (EOO) (km²): 1710000

Continuing decline in extent of occurrence (EOO): Unknown

Extreme fluctuations in extent of occurrence (EOO): No

Continuing decline in number of locations: Unknown

Extreme fluctuations in the number of locations: No

Upper elevation limit (m): 2,000

Population

Number of mature individuals: 9,950,000-13,700,000

Continuing decline of mature individuals: Yes

Extreme fluctuations: No

Population severely fragmented: No

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: Unknown

Generation Length (years): 2.1

Movement patterns: Not a 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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