

237 European roller

The European roller, *Coracias garrulus*, also called Blue roller, Common roller, Eurasian roller, belongs to *Coraciidae* family. It is one of 12 species of rollers across the world the only member of the roller family of birds to breed in Europe [1]. The European roller species are highly migratory birds. They fly over 10,000 km from their breeding grounds in Europe, Asia and North Africa, moving to regions when they winter (Afro-tropical region, mainly in eastern and south-east Africa). There are two recognized subspecies of the European roller:

1. *Coracias garrulus garrulus*, distributed in NW Africa, SW, SC & E Europe and Asia Minor E through NW Iran to SW Siberia
2. *Coracias garrulus semenovi*, distributed in Iraq, Iran (except NW), Pakistan, south Kazakhstan, Turkmenistan, and possibly NW China (W Xinjiang).

Subspecies *semenovi* is slightly paler, with neck, underparts, great and median upper wing coverts more greenish. [2]

European rollers are medium-sized birds known their display of acrobatic courtship rituals with brilliant blue contrasting with black flight feathers, twist and turns that give this species its English name, a roller bird.

Identification

The European Roller is a primarily insectivorous species. It is a stocky bird, the size of a crow measuring 31–32 cm, in length, wingspan 52–58 cm. Its body mass is 120-160 g, varying according to sex and condition. It is mainly blue with an orange brown back. The brilliant blue of its plumage contrasts with black flight feathers. Males and females look alike, although blue colours in males are more vibrant, and the violet of the rump is wider juveniles have paler plumage. with browner cheeks, distinctly brown throat and breast, shorter outermost tail feathers with no dark spots at their tips. The bill is steel gray and the irises are black, the toes and scaly legs are pale brown. Their call is a harsh crow-like sound [3].

Ecosystem and habitat

The European roller inhabits various ecosystems. They prefer warm, sunny lowlands with scattered hollow trees with patches of oak forest or pine woodlands or groups of poplars and avoids closed forests, deserts, semi-deserts, and treeless grasslands. They are also found in Moroccan High Atlas to 2,000 m in Caucasus highlands, in wooded areas near farmlands, orchards, old parks, tree-lined river banks and plains and also in dry open land with trees, but usually avoids intensive cultivation. It is a secondary cavity nesting species, i.e. it needs natural hollows for breeding, using the old holes of Black Woodpeckers (*Dryocopus martius*) and Green Woodpeckers (*Picus viridis*) and bee-eater burrows. They often perch prominently on trees, posts or overhead wires while watching for a wide variety of invertebrates and large insects that they eat. They also feed on vertebrates (small lizards, crickets, frogs, reptiles, grasshoppers, beetles, mantises, moths) or even fruits [4].

Breeding biology

The breeding season of the species of the European roller is from May to July, when they arrive at the breeding grounds after winter. These birds are monogamous, their generation length is 5.6 years. They nest in clay embankments and loess walls but may also nest in sand banks, cliff faces, buildings and, increasingly, artificial nest-boxes. They lay up to six eggs in the unlined nest. Individual populations have shown severe declines in many countries over the last decades with extinctions in some European countries: Germany, Denmark, Sweden, Finland and the Czech Republic. [5]

Conservation status and concerns

The species recently became extinct in Slovakia, Estonia and possibly in Slovenia while France and Italy registered increasing trends due to their successful conservation measures. The main causes of their decline are attributed to loss and degradation of suitable habitat due to change in agricultural practices, loss of nesting sites, use of pesticides and ongoing persecution along the migration routes, climate change with the increasing desertification and drought. Moreover, the migrating European rollers are hunted and killed in thousands in around the Mediterranean for food, especially in Oman where severe mortality is registered due to illegal shooting. It is an attractive bird and a desired species as pet for private collectors that led to illegal trapping to catch these species and keep them as pet. The European Roller is a protected species in many countries, particularly in the Western parts of its range and more information on the species' legal protection is needed from countries along the migration route and on wintering places.

References

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