

Oriental Turtle Dove breeding in the Western Palearctic

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169. Nesting habitat of Oriental Turtle Dove *Streptopelia orientalis meena*: mature Scots Pine *Pinus sylvestris* forest, Sysert', Sverdlovsk region, Russia, June 1982. *Vadim Korovin*

ABSTRACT Hitherto regarded as a rare vagrant to the Western Palearctic, the Oriental Turtle Dove *Streptopelia orientalis* is now known to breed at two sites at least, and probably breeds at two others, in the extreme east of the region, just within the Western Palearctic boundary in the Ural Mountains of Russia. Details are presented of the species' distribution in the west of its range and brief notes are included on some aspects of its biology and ecology, as well as on separation of the two West Palearctic races in the field.

The Oriental Turtle Dove *Streptopelia orientalis* breeds in Asia from the Urals to the Pacific coast and islands (including Japan), south through China, Turkestan (i.e. western Central Asia, between the Caspian Sea and Lop-nor) and Afghanistan to India, Myanmar (Burma), northern Indochina, Taiwan and the Ryukyu Islands (Goodwin 1983; Cramp

1985; Gibbs *et al.* 2001; fig. 1). The essentially non-migratory races, *erythrocephala* (Indian peninsula from Bihar and Orissa south to Mysore), *agricola* (northeast India from Bihar and Orissa through Assam, Bangladesh and Myanmar to Tenasserim), *stimpsoni* of the Ryukyu Islands and *orii* of Taiwan (Gibbs *et al.* 2001), are not discussed further here.

Within the borders of the former USSR, the breeding range extends from the Kuril Islands, Sakhalin, and the coasts of the Sea of Okhotsk and Sea of Japan west to the eastern foothills of the southern Urals, to Kazakhstan (Lake Teniz, the upper Sarysu and upper Ili river valleys, and the western edge of the Tien Shan mountains), and also mountainous parts of Central Asia west to the Amudar'ya River. The range reaches 64°N in the Lena valley, 63-64°N in the Yenisey valley and 61-62°N in the Ob' valley (Stepanyan 1990; Priklonskiy 1993; Gibbs *et al.* 2001). Most of the range is occupied by the nominate race *orientalis*, while *meena* is found in the western part, these two races intergrading in a narrow zone lying between the upper Ob' and upper Yenisey river valleys and in the east Russian Altai mountains (Cramp 1985; Stepanyan 1990; Priklonskiy 1993; Gibbs *et al.* 2001).

According to Ivanov (1976), the northern limit of the range in the Ural Mountains is represented by records at the Sinara lake (56°N). Data collected in recent decades make it possible to delineate more accurately the distribution of the Oriental Turtle Dove in the Urals

(fig. 2). At Pervomayskiy, just south of Orenburg on the Ural River, four birds were seen on 8th and 11th June 1999, and a nineteenth-century record near Orenburg (reported as a vagrant) was also in June (Dement'ev & Gladkov 1951; Korshikov & Kornev 1999). Breeding has been confirmed in the southern Transurals: in isolated patches of pine *Pinus* forest near the settlement of Bolotovsk (Kvarkeno district) in the northeast of the Orenburg region (Kornev & Korshikov 1998; V. A. Korovin pers. obs.); also in tree clumps and copses of the Arkaim nature reserve, which is situated in the valley of the Bol'shaya Karaganka, an east-bank tributary of the Ural River, in the Bredy and Kizil'skoye districts of the southern Chelyabinsk region (Korovin 1997). In May 1998, several Oriental Turtle Doves, singing and apparently holding territories, were noted in the Toguzak River valley, near Varna in the southeastern Chelyabinsk region and close to the border with Kazakhstan (Morozov 1999; Zöckler & Stensmyr 1999). The Oriental Turtle Dove is also a common breeder in the Etkul' district, 20-60 km south of Chelyabinsk (Red'ko

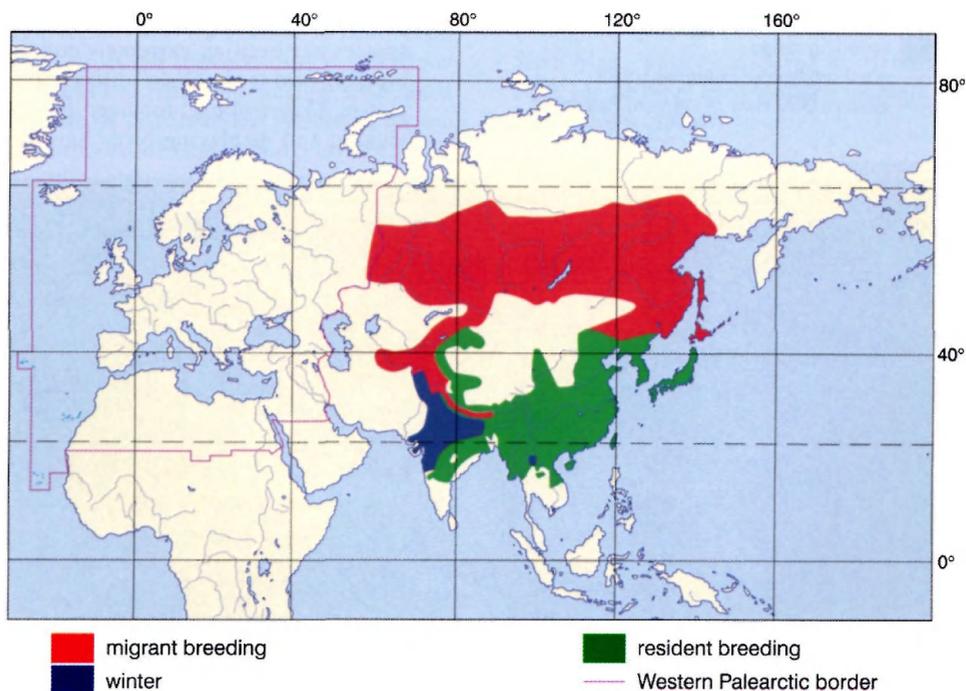


Fig. 1. Map showing world distribution of Oriental Turtle Dove *Streptopelia orientalis*, based on Kozlova (1932), Gizenko (1955), Etchécopar & Hüe (1978), Wild Bird Society of Japan (1982), Stepanyan (1990), Hirschfeld (1992), Priklonskiy (1993), Grimmett *et al.* (1998), Kazmierczak & Perlo (2000), MacKinnon & Phillipps (2000) and Gibbs *et al.* (2001). Map outline by kind permission of Oxford University Press.

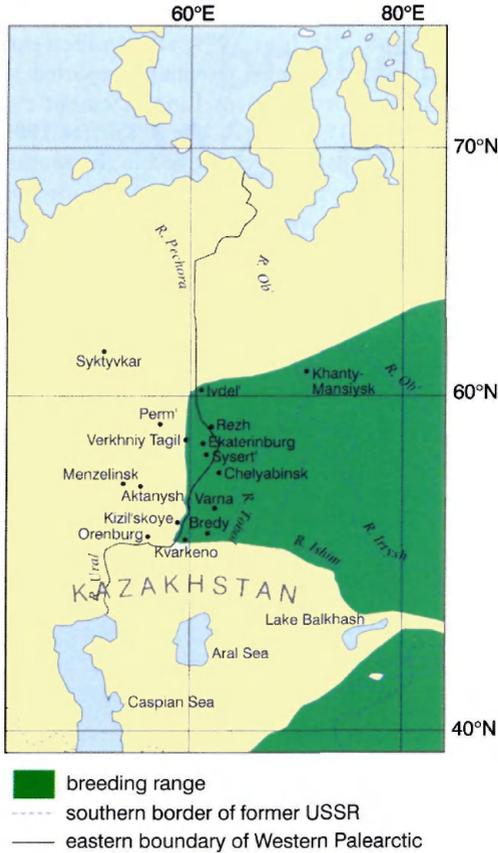


Fig. 2. Map showing western part of breeding range of Oriental Turtle Dove *Streptopelia orientalis*, based on Stepanyan (1990), Priklonskiy (1993), Ryabitsev (2001b) and other sources mentioned in the text.

1998), and in the Rezh district (Sverdlovsk region, Middle Urals), some 100 km north-east of Ekaterinburg (Ryabitsev 1999b; V. K. Ryabitsev *in litt.*). Much farther north in the Sverdlovsk region, there have been records since 1985 in the settlement of Polunochnoye (60°52'N, just north of Ivdel') and a juvenile was shot there in August 1995, but no nests have yet been found in the area to confirm breeding (Shtraukh 1997).

Breeding and other records in the Western Palearctic

The Oriental Turtle Dove has hitherto been treated exclusively as a vagrant to the Western Palearctic (e.g. Cramp 1985; Hirschfeld 1986; Gibbs *et al.* 2001). It is, however, now clear that in the West Palearctic part of the Sverdlovsk region (fig. 2; see also map and notes on boundary and names in Ryabitsev & Wilson 1999), the species has been an extremely common breeding bird in the Sysert' district, south-east of Ekaterinburg, for over 20 years; singing and displaying birds have been



Richard Chandler

170. Oriental Turtle Dove *Streptopelia orientalis orientalis*, Shikoku, Japan, April 1997.



Hugh Harrop

171. Juvenile Oriental Turtle Dove *Streptopelia orientalis meena*, Stromness, Orkney, December 2002.
Note that this individual is still being considered by BBRC.

noted in the Beloyarskiy district, just southeast of Ekaterinburg (Korovin 2001; V. A. Korovin pers. obs.); there have been repeated breeding-season records near the town of Verkhniy Tagil, northwest of the regional capital (Piskunov 1999); and two birds (one singing) were noted in the Shalya district of the Sverdlovsk region, also northwest of Ekaterinburg, at 58°42'E, in June 2002 (Alekseeva 2002). Farther south and west, nesting has been confirmed close to the sources of the Miass, Uy and Ural rivers in the northeast of Bashkortostan, adjoining the Chelyabinsk region (Il'ichev & Fomin 1988).

Also in the European part of the former USSR, records for Russia include singing males near Syktyvkar (Komi Republic) in June 1990 (Estaf'ev 1999), and on the border between the Menzelinsk and Aktanysh districts in eastern Tatarstan in May 1999 (As'keev & As'keev 1999), while a single bird was observed on Mt Elbash just west of the upper Ural River in southeastern Bashkortostan in May 2000 (Barabashin 2001). Oriental Turtle Doves were seen regularly on autumn passage in the lower Ural River valley (Kazakhstan) in the mid 1970s, and a single bird was collected in the Crimea (Ukraine) in October 1902 (Gubin *et al.* 1977; Kostin 1983; Priklonskiy 1993). Vagrants, of both nominate *orientalis* and *meena*, have also been recorded, mainly in autumn and winter, in a number of European countries west

as far as Britain, northwest to Fennoscandia, and also in the Balkans and Mediterranean, and Middle East (Cramp 1985; Hirschfeld 1986; Lewington *et al.* 1991; Snow & Perrins 1998). Such birds were considered by Hirschfeld (1986) to be more likely genuine vagrants than escapes from captivity.



Hugh Harrop

172. Juvenile Oriental Turtle Dove *Streptopelia orientalis meena*, Stromness, Orkney, December 2002.
Note that this individual is still being considered by BBRC.

Racial variation

Adults of the two races are separable in the field. Nominate *orientalis* differs from *meena* in being slightly larger and more bulky, and having distinctly darker and richer plumage, with browner crown and mantle, and redder fringes to the blacker-centred scapulars and inner wing-coverts (these fringes are also broader than in *meena*). Nominate *orientalis* also has grey-blue tips to the tail feathers, with dark on the outer web of the outermost feathers usually extending to the edge, so that the grey tips appear to form a wide terminal band; in *meena*, the tail feathers are tipped white and the dark area on the outer web is more restricted, so that the edges of the spread tail are thinly framed in white. The western race *meena* is brighter overall, with warmer brown upperparts (nape to mantle), and it lacks the grey fringes on the outer wing-coverts typical of nominate *orientalis*. According to Harris *et al.* (1996), it has a brown rump and blue-grey lower back, while the rump was said by Gibbs *et al.* (2001) to be fringed with earthy-brown, and Hirschfeld (1992) described the rump and back of both races as typically bluish-grey, though adding that some birds show brown tips to the upper-tail-coverts. The throat of *meena* is whiter, and its vinous foreneck and breast (the breast is sometimes pale enough to suggest Turtle Dove *S. turtur*, but *meena* is still typically more exten-

sively darker below than that species) shade into pale pink on the belly and white on the undertail-coverts, whereas nominate *orientalis*, which also has a darker-grey underwing, is vinous to grey-cream on the underparts (with grey undertail-coverts). In general terms, then, the smaller *meena* is more similar to Turtle Dove overall. Juveniles of nominate *orientalis* are darker than *meena*, and also distinguishable by having the grey undertail-coverts and tips of the tail feathers typical of adult birds (Cramp 1985; Hirschfeld 1992; Harris *et al.* 1996; Svensson & Grant 1999; Gibbs *et al.* 2001). Based on morphological and vocal differences, but pending detailed investigation, including DNA analysis, *orientalis* and *meena* probably merit treatment as separate species (L. Svensson *in litt.*).

Breeding and ecology

The following summary is based on data collected by VAK at the western limit of the species' range (race *meena*), primarily at the Biological Field Station of the Urals State University in the Sysert' district of the Sverdlovsk region (56°36'N, 61°03'E). Oriental Turtle Doves arrive on the breeding grounds there a few days later than Turtle Doves, the average first date during the years 1976-85 being 9th May (range 4th-14th May). The majority will have departed by the end of September, with stragglers noted in early October.

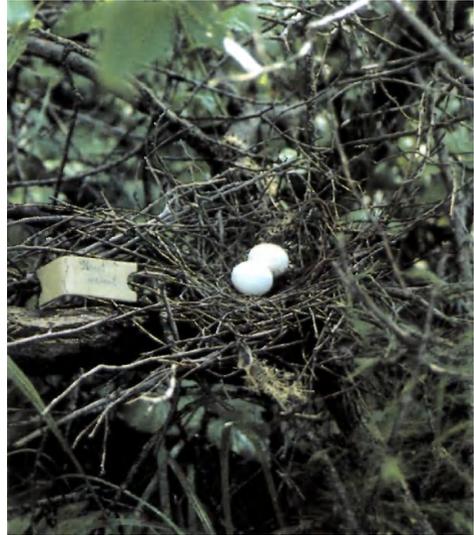


Vacim Korovin

173. Nesting habitat of Oriental Turtle Dove *Streptopelia orientalis meena*: mature Scots Pine *Pinus sylvestris* forest, Sysert', Sverdlovsk region, Russia, July 2002.

In the area around the Field Station, the Oriental Turtle Dove is a common breeding bird of pine forest and mixed birch *Betula* and pine forest. In a regular study plot in mature pine forest, with small plantations 40-50 years old, a survey of singing territorial males and nests showed that the density had fluctuated between 9.1 and 18.2 birds per km² in the period 1976-1985, with an average over ten years of 13.1 birds per km². Numbers in this area remained relatively stable up to the end of the 1990s. Apart from mature forest, Oriental Turtle Doves readily occupy clearings and fire-affected areas where rejuvenation produces young growth.

Favoured nesting habitat includes small patches or strips of more enclosed young pine plantations within mature forest, but also young and maturing stands of pine. Oriental Turtle Doves are less commonly recorded in the forest-steppe zone, but song and display have been noted particularly in isolated patches of birch forest in the Belayarskiy district just southeast of Ekaterinburg, whereas the species has yet to be recorded in small woods of aspen *Populus* and birch (known as 'kolki') in the northern Chelyabinsk region. In the steppe zone (Bredy district, southern Chelyabinsk), singing and displaying birds have been observed occasionally in scattered small pinewoods and, very rarely, in forest strips planted as shelter-belts (e.g. in 1990, two birds along 10 km of such strips in May-June, small numbers perhaps breeding). In the Arkaim nature reserve, a nest with eggs was found in a small aspen and birch wood on 11th August 1993 (Korovin 1997).



Vadim Ryabitsev

174. Nest and eggs of Oriental Turtle Dove *Streptopelia orientalis meena*, Kurgan region, Russia, June 2001.

Diet

The crop of an Oriental Turtle Dove collected at a south-taiga study site in the Sysert' district in September contained 622 Umbelliferae seeds. Two birds from harvested fields in the steppe zone (Bredy district), also in September, showed a much more varied diet: mainly seeds of Hemp *Cannabis sativa* (793 items) and Sunflower *Helianthus annuus* (63) in one crop, while the other contained Common Millet *Panicum miliaceum* (276 seeds) and wheat *Triticum* (67). Both birds contained small numbers of seeds of



Yuri Shibnev

175. Oriental Turtle Dove *Streptopelia orientalis orientalis* at nest with young, South Ussuriland, Russian Far East, date unknown.



Yuri Shibnev

176. Oriental Turtle Dove *Streptopelia orientalis orientalis* feeding young, South Ussuriland, Russian Far East, date unknown.

Yellow Bristle-grass *Setaria pumila* and amaranth *Amaranthus*, while only one yielded seeds of cocksbur *Echinochloa* and 20 small gastropod molluscs.

A major study of *orientalis* in the Novokuznetsk district of the Kemerovo region (c. 87°E, Western Siberia) showed close similarities to the western race *meena* in respect of habitat (mature birch and aspen forest in the forest-steppe zone, always with a shrub layer of Bird Cherry *Prunus padus*, *Viburnum*, elder *Sambucus* and hawthorn *Crataegus*); and also in the timing of its migration – arrival on 8th–18th May and departure from the last third of August, peaking mid-September and with stragglers to early October (Kotov 1976).

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