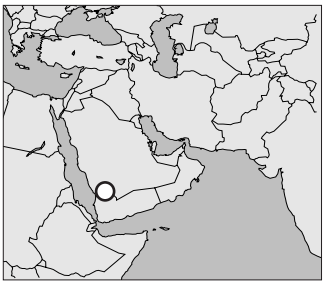
The winter distribution and habitat use of the near-threatened Cinereous Bunting *Emberiza cineracea*



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INTRODUCTION

The conservation of migratory bird species poses special problems because their annual movements, often spanning continents, require their breeding grounds, stop-over sites and wintering grounds to remain capable of meeting their needs (Salathé 1991, Crick & Jones 1992, Bibby 2003). For example, we know quite well the Palearctic breeding grounds and the principal migration routes of over 300 migratory bird species through Europe and the Mediterranean, but we have but a fragmentary knowledge of the distribution of these migrants in Africa (Walther & Rahbek 2002). Recently, Walther *et al* (2004) specified the African winter distribution and habitat use of the near-threatened Cinereous Bunting *Emberiza cineracea*. Its categorisation as near-threatened arises because livestock grazing and tourism developments are destroying its breeding habitats on several Greek islands and around the Turkish cities of Develi and Kilis (ssp *cineracea*). Little is known of the conservation status of the ssp *semenowi* which occurs from southeastern Turkey through northern Iraq up to an apparently isolated population in the Zagros Mountains in SW Iran (Byers *et al* 1995, Snow & Perrins 1998, BirdLife International [BLI] 2004). The species migrates through the Middle East and the Gulf Region to its wintering range, which lies not only in northeastern Africa but also in the southwestern Arabian peninsula (Chappius *et al* 1973, de Knijff 1991, Byers *et al* 1995).

Because the focus of Walther *et al* (2004) was exclusively the African winter distribution of the Cinereous Bunting, I provide here the supplementary Arabian winter records of the Cinereous Bunting to better describe the entire winter distribution of this species. While the species is regularly recorded on migration in Cyprus, Syria, Lebanon, Jordan, Israel, Palestinian Authority

Map 1. Recorded localities for Cinereous Bunting *Emberiza cineracea* in the southwestern Arabian peninsula and in Africa taken from those listed in both Walther *et al* (2004, Table 3) and in **Table 1** of this study. Key: ● or ○ = occurred in November to February inclusive, and ▲ or △ = records in other months, solid symbols representing records since 1980 and open symbols prior to 1980.

Territories, Egypt, Kuwait, Qatar, Bahrain and the United Arab Emirates (BLI 2004), true winter records from November to February are surprisingly few, the most recent African winter record being from the 1950s (Walther *et al* 2004). Therefore, the more recent winter records from Yemen reported in this note will hopefully aid further field investigations of the whereabouts of this species during the Palearctic winter.

METHODS

To acquire information about the winter distribution of the Cinereous Bunting, I contacted all Ornithological Society of the Middle East (OSME) country contacts, and various field ornithologists that had worked in the region. Furthermore, with the help of Effie Warr and Robert Prŷs-Jones, I was able to consult all the older literature citations and to examine all available specimens at the British Museum (Natural History), Tring, UK, while P Sweet sent information on the available specimens in the American Museum of Natural History, New York, USA. Each record of the species was entered into a database containing information on number, subspecies, age, and sex of individuals observed, as well as data on habitat, date, and locality. I established the geographical coordinates of each locality identified. Where the source did not provide coordinates, I consulted the Times Atlas (1956 & 2001 editions), various printed gazetteers, or the internet-based gazetteer of the National Geospatial-Intelligence Agency (2005). Whenever these references provided more accurate coordinates than did the original sources, I used the revised coordinates.

RESULTS

The migration and winter distribution of the Cinereous Bunting were previously described by Chappius *et al* (1973), de Knijff (1991) and Walther *et al* (2004). **Table 1** presents all recorded localities for the Cinereous Bunting in Africa not previously listed in Walther *et al* (2004) plus all records in the southwestern Arabian peninsula. There are only April and September records for Sudan (Walther *et al* 2004). Those from southwestern Saudi Arabia are from March, April, September and December; the locality of the last-named (Record 1) lies close to the present Saudi-Yemen border. Except for Record 1, all winter records from November to February inclusive come from Eritrea and Yemen whereas all recent (post-1980) winter records are exclusively from Yemen (**Map 1**). The only recent Eritrean records are from March and April (Records 18 &19)[1].

The reported habitats used by the birds recorded in **Table 1** are similar to those given in Walther *et al* (2004): elevations range from 1220–2200m asl, and habitats generally are semi-open to open rocky areas, grasslands, meadows or low-intensity cultivated areas, interspersed mostly with low vegetation of mosses, ferns, grasses, herbs, shrubs, and some larger trees and woodlands where presumably seeds are the principal food (*cf* Records 7 & 18). The Cinereous Bunting frequently appears to associate with other species in winter flocks (*eg* with *Serinus* spp, *Petronia* spp and other bunting species).

The eastern subspecies *semenowi* definitely migrates from its breeding range to both parts of the wintering range, but so far, the western breeding subspecies *cineracea* has been observed only in northeastern Africa (Walther *et al* 2004) (**Table 1**). From the sparse data available, it seems that *cineracea* migrates only to the western part of the wintering range but not to the southwestern Arabian peninsula.

[1]Tilahun *et al* (1996) report the supposedly first sighting of a single Cinereous Bunting in or around the Dessa'a Forest (13°20' - 14°10'N, 39°32' - 39°55'E), an Important Bird Area of Ethiopia north-east of Mekele [Mek'ele], 13°32'N, 39°33'E), citing Dijksen (1996) which probably provides further details on this record. The locality extends the range of the Cinereous Bunting very slightly south of the southernmost Eritrean record shown in Map 1, but overall extends the range only slightly south of the Eritrean-Ethiopian border.

Table 1. Recorded localities of Cinereous Bunting *Emberiza cineracea* in Africa not previously listed in Walther *et al* (2004) plus all records in the southwestern Arabian peninsula. Sources and details of each record are specified by record number below the table. Subspecies, age and sex (F=female, M=male), and numbers (No) observed are given if known. Dates are as accurate as possible, given the source. Geographical coordinates are given as degrees, minutes and seconds, and were double-checked (see Methods). Details of each Record follow **Table 1**.

Record/Subsp.	Age	Sex	No.	Date	Locality	Coordinates
Saudi Arabia						
1 *semenowi*	adult	F	1	23 Dec 1936	Faifa [= Fayfa], Tihama 'behind Jizan' [= Jaizan], Asir region	17°15'30"N, 43°06'00"E
2 -	-	-	4	16 Mar 1984	near Taif	21°16'13"N, 40°24'57"E
3 -	adult	F	1	10 Apr 1992	Wadi Turabah, Asir Mountains, between Taif and Baha	20°27'58"N, 41°14'29"E
4 -	adult	-	1	10 Apr 1992	Wadi Turabah, Asir Mountains, between Taif and Baha	20°27'58"N, 41°14'29"E
5 -	-	-	≥ 1	16 Sep 1995	Wadi Three Gazal-Ash Shafa [= Wadi ash Shafa], *c*20km SW of Taif city	21°06'20"N, 40°20'01"E
Yemen						
6 *semenowi*	adult	M	1	26 Dec 1912	Menakha [= Manakhah], Yaman Mountains	15°04'19"N, 43°44'27"E
7 *semenowi*	adult	M	1	11 Jan 1913	Menakha [= Manakhah], Yaman Mountains	15°04'19"N, 43°44'27"E
8 *semenowi*	adult	M	1	31 Jan 1913	Menakha [= Manakhah], Yaman Mountains	15°04'19"N, 43°44'27"E
9 *semenowi*	adult	M	1	6 Mar 1913	Wasil [= Jabal al Wasil], Yaman Mountains	14°41'00"N, 45°45'00"E
10 *semenowi*	-	-	1	Dec 1948	high up on the Jebel Sabar (= Sabor) near Taiz	13°32'26"N, 44°00'46"E
11 -	-	-	3	8 Oct 1979	Qa [= Qa'] al Haql, S of Yarim [= Yerim]	14°17'50"N, 44°22'49"E
12 -	-	-	7	10–11 Nov 1985	Al Mahwit (between Sanaa and Al Hodeidah)	15°27'00"N, 43°33'00"E
13 -	-	-	≥ 1	10 Dec 1992	near Al Bishari (= Bayt al Bishari)	15°28'49"N, 43°35'31"E
14 -	-	-	25	18 Nov 1993	Al Mahwit (between Sanaa and Al Hodeidah)	15°27'00"N, 43°33'00"E
15 -	-	-	3	Oct	Jabal Sumarah-Wadi Rafood-Wadi Bana	14°08'00"N, 44°18'00"E
16 -	-	-	Scarce	Winter	Jabal Shibam	15°02'00"N, 43°45'00"E
Egypt						
17 -	adult	F	1	30 Mar 1996	10 km east of El Arish (= El 'Arîsh)	31°08'30"N, 33°53'24 "E
Eritrea						
18 -	-	-	3	21 Mar 1998	Acria Dam near Asmara (central plateau)	15°21'36"N, 38°57'00"E
19 -	adult	M	1	22 Apr 2002	Dengolo Tahtay in the Lower Dongollo, 20–30km from Massawa on the road to Asmara	15°28'21"N, 39°08'03"E
Tunisia						
20 -	adult	M	1	21 Apr 1971	Gabes [= Gabès]	33°53'00"N, 10°07'00"E

The numbers below correspond to the numbers in the **Record** column in **Table 1**:

1. Specimen collected by H. St. J. B. Philby deposited in the British Museum (Natural History), Tring, UK (BMNH 1937.4.17.574) and cited in Bates (1937 p794) and later mentioned in Meinertzhagen (1954 p112) and Chappius *et al* (1973). Habitat: 6000ft [= 1829m] asl, no further details.
2. Observed by Chris Hobden and accompanied by other buntings, either House Buntings *Emberiza striolata* or Cinnamon-breasted Bunting *E. tahapisi* (FE Warr *in litt* 2003). Habitat: no information.
3. Observed by S Newton (*in litt* 2004) and cited as 'spring passage migrant' in Evans (1994). Habitat: among low shrubs and boulders on a rocky wadi slope (*c*1600m asl, S Newton (*in litt* 2004); more details found in Evans (1994)).
4. Observed by S Newton (*in litt* 2004) and accompanied by two Ortolan Buntings *E. hortulana* and possibly two more Cinereous Buntings *E. cineracea*; cited as 'spring passage migrant' in Evans (1994). Habitat: assumed to be similar to that of Record 3.
5. Observed by P Maton and reported in Davidson & Kirwan (1995). Habitat: no information.
6. Specimen collected by GW Bury and deposited in the British Museum (Natural History), Tring, UK (BMNH 1913.7.18.82) and cited in Sclater (1917 pp146–147) and later mentioned by Bates (1937 p794), Meinertzhagen (1954 p112), Chappius *et al* (1973) and Brooks *et al* (1987). Habitat: 7000ft [= 2134m] asl, no further details.
7. Specimen collected by GW Bury and deposited in the American Museum of Natural History, New York, USA (AMNH 716391, FE Warr *in litt* 2003, P Sweet *in litt* 2005) and cited in Hartert (1917), Hartert (1903–1923 p2074) and Brooks *et al* (1987). Habitat: 7000ft [= 2133m] asl, 'stomach contained young barley grains' (quoted from the specimen label).
8. Specimen collected by GW Bury and deposited in the American Museum of Natural History, New York, USA (AMNH 716392, FE Warr *in litt* 2003, P Sweet *in litt* 2005) and cited in Hartert (1917), Hartert (1903–1923 p2074) and Brooks *et al* (1987). Habitat: assumed to be similar to that of Record 7.
9. Specimen collected by GW Bury and deposited in the British Museum (Natural History), Tring, UK (BMNH 1913.7.18.83) and cited in Sclater (1917 pp146–147) and later mentioned by Bates (1937 p794), Meinertzhagen (1954 p112), Chappius *et al* (1973) and Brooks *et al* (1987). Habitat: 4000ft [= 1219m] asl, no further details.
10. Specimen collected by PA Clancey (*in litt* 1981 to M Jennings *quis in litt.* 2004). Habitat: no information.
11. Observed by Phillips (1982) and later mentioned by Brooks *et al* (1987). Coordinates given are those of Yarim. Habitat: millet field.
12. Observed by Brooks *et al* (1987) and later mentioned in Evans (1994) who gives number of individuals as '6–7'. Habitat: wadi with cultivated terraces and uncultivated rocky areas interspersed with wooded areas and areas rich with grasses, herbs, ferns and mosses (1900m asl); more details found in Evans (1994).
13. Observed by J Dunn and Rod Martins (Sunbird Tours) and reported in Kirwan (1993). Habitat: no information.
14. Observed by D Farrow (*in litt* 2004). Habitat: wadi with cultivated terraces and uncultivated rocky areas interspersed with wooded areas and areas rich with grasses, herbs, ferns and mosses; more details found in Evans (1994).
15. The species is cited as 'passage migrant/winter visitor' in Evans (1994) without further details. Habitat: low-intensity agricultural areas on plains and lower slopes and dense low shrubbery interspersed with herbs and grasses on higher rocky slopes (1800–3000m asl); more details found in Evans (1994).
16. The species is cited as 'scarce winter visitor' in Evans (1994) without further details. Habitat: relatively well-wooded highland area with scattered *Acacia* woodlands, mountain meadows, and terraced hillsides; more details found in Evans (1994).
17. Reported in Kirwan (1995). Habitat: no information.
18. The individuals observed by Zinner (2001) were feeding on flower seeds in a manner similar to European Goldfinches *Carduelis carduelis* and were flocking together with several Ortolan Buntings *E. hortulana* and African Citrils *Crithaga* [*Serinus*] *citrinelloides* (D Zinner *in litt* 2004). Habitat: open grassland and *Eucalyptus* grove near dam (2200m asl, D Zinner *in litt*); more details in Zinner (2001).
19. Observed by C. Wiklund (*in litt* 2004). Habitat: the individual was accompanied by a few *Petronia* sp individuals and was drinking from a small rain-water pool in a deserted courtyard of an old Italian public bath, now a ruin, surrounded by very steep semi-arid mountain slopes covered with boulders, stones and gravel, and some sparse vegetation, *eg* bushes and small forest patches.
20. Singing male observed by K. Nørgaard and cited as 'accidental straggler' in Thomsen & Jacobson (1979, p.152). Habitat: no information.

Additions and corrections to Table 1, Basra Reed Warbler *Acrocephalus griseldis* in Walther *et al* (2004).
The Tanzanian records from 'east of Mubeza (= Mubesa)' and 'near Tanga' are identical and originate from the same male specimen deposited in the British Museum (Natural History), Tring, UK (BMNH 1934.11.21.62) collected by RE Moreau on 24 March 1934.

Additions and corrections to Table 3, Cinereous Bunting, in Walther *et al* (2004).
The three individuals mentioned as Records 5–6 were collected on 2 April 1914 (*cf.* Sclater & Mackworth-Praed 1918 p464) between 3000 & 4500ft [= 914 & 1372m] asl and were, according to the specimen labels, accompanied by several other conspecifics when shot. The specimen mentioned as Record 8 was collected, according to the specimen label, 'on maritime plain about 15 miles from sea'.

DISCUSSION

For the moment, the Cinereous Bunting is classified only as near-threatened (BLI 2004), but field ornithologists working both in the breeding and wintering grounds should continue to monitor the species for possible population decreases. As mentioned above, some breeding habitats continue to be destroyed, but we know much less about the state and possible change of wintering habitats (but see, for example, Evans 1994). Indeed, it appears to be exceedingly hard to even find the species in its wintering quarters in northeastern Africa. For example, C Wiklund (*in litt* 2004) suggested that the Cinereous Bunting may be becoming extinct in Eritrea because his only observation of the species (Record 19) occurred during two years of field observations (over the months of February to August and involving at least 1200 hours [his estimate] of birdwatching) in many regions of Eritrea (including the Asmara, the Dubarwa – Mendefera, the Massawa and the Senafe areas, the surroundings of Adi Abeita, Adi Kuchet, Adi Zarna, Ali Gedir, Amne Tekle, Barentu, Campo Achera, Decamere, Demba ne ar Adi Quala, Ghandien, Ghatelal, Ghinda, Grtetit, Gurgussum, Hirgigo, Keren, Nefasit, Tessenei, Tira Amni, the Elabered estate and the water reservoir of Mai Serva, the northern road to Filfil, the riverbed and riverine forests of the river Gash close to the Sudanese border, and the islands Dahlac Kebir, Dur Gaam, Dur Ghella, Enteara, Enterdebir, Entraya, Nocra, and Seil Nokra of the Dahlac Archipelago). Similarly, H. Shirihai (*pers comm* 2004) made no observation of the species at all during five years of extensive field observations in Ethiopia over the months of August to November. Perhaps neither observer was present at the right time of year to detect the main wintering population, but the general paucity of winter records in the literature and from experienced and well-travelled field ornithologists makes one wonder whether there are undiscovered wintering sites. One ongoing atlas project (Ash & Atkins, *Birds of Ethiopia and Eritrea*) may close some of these sampling gaps.

Walther *et al* (2004) used modelling techniques to predict possible undiscovered wintering sites for the Cinereous Bunting, and suggested that a combination of suitable temperatures, elevations, habitat and forest cover existed in the plains and hills along the Red Sea coasts in southern Egypt, Sudan, Eritrea, Ethiopia and Somalia as well as in a few inland areas in Sudan, Ethiopia and Kenya which may provide putative wintering grounds for the Cinereous Bunting. Given the paucity of information concerning the breeding, migration and wintering areas of this species, it is essential to gather further information on the status of this species. This desk study and the studies cited above (which summarise most known information on the winter distribution and habitat use) can provide a starting point for further fieldwork on the Cinereous Bunting.

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Plate 1. Northern Lapwing *Vanellus vanellus* and Sociable Lapwing *V. gregarius* Erzerum, Turkey, 2005. © *Soner Bekir.*

Plate 2. Sociable Lapwing *Vanellus gregarius* taking off, Erzerum, Turkey, 2005. © *Soner Bekir.*

Plate 3. Sociable Lapwing *Vanellus gregarius* climbing, Erzerum, Turkey, 2005. © *Soner Bekir.*