Eastern promise:

the arrival of far-eastern passerine vagrants in autumn

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An Eastern Crowned Warbler *Phylloscopus coronatus* in Finland in the second half of October 2004 was discovered on the same day as a Rufous-tailed Robin *Luscinia sibilans* on Fair Isle, Shetland, and eight days after a Chestnut-eared Bunting *Emberiza fucata*, also on Fair Isle. The two previous Western Palearctic records of Eastern Crowned Warbler were both more than two weeks earlier.

Introduction and methods

For many active birders in Britain, some of the most exciting days of the year are those between early September and mid November when conditions suggest that there may be an arrival of migrants on the east coast. Among all the birds from Fennoscandia and beyond, there might be a vagrant from Siberia. Compared with some Nearctic passerine vagrants, which cross four time zones with the advantage of following winds, East Palearctic vagrants have even greater mystique because they may have crossed nine or ten time zones (more than 10,000 km) in more variable weather conditions. In some cases (for example, Pallas's Leaf Warbler *Phylloscopus proregulus*), their natural occurrence is now accepted and even predictable. In the cases of what are potentially the rarest (and therefore most exciting) birds, however, the euphoria of discovery is sometimes overcast by the spectre of the cagebird trade.

Taken individually, it is sometimes difficult to feel confident about the origin of birds which may be here either as exceptionally rare vagrants or as a result of trade. Taken together, however, there are now sufficient records of some of the rarest East Palearctic passerine vagrants in the Western Palearctic for patterns to be discernible. Where these patterns are consistent with the species' normal migration, the case for natural vagrancy seems very strong. As shown below, the occurrence patterns both of regularly occurring species which are not suspected of having been in trade and of some of

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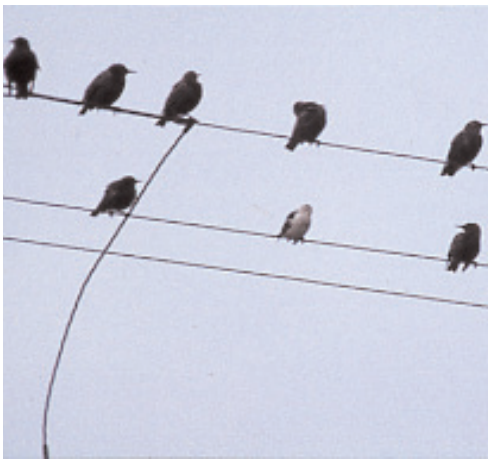

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40 & 41. Daurian Starling *Sturnus sturninus*, with Common Starlings *S. vulgaris* (right), Durness, Highland, September 1998. This bird was closely followed by two Red-flanked Bluetails *Tarsiger cyanurus* (in Scotland and northeast England). The date of the record also accords with normal movements in east Asia.

the rarest species do correspond with migration periods in east Asia. It seems unlikely that the arrival of birds which have been in trade would consistently match these patterns, and in many cases there is no evidence that the species involved have been in trade.

Although it is difficult to form a full or clear picture of the extent of the cagebird trade, there are clues. TRAFFIC (1998) reported that the main European destinations of wildlife from the Russian Far East are Germany, Italy and France, while Lau *et al.* (undated) found that from Hong Kong the birds imported to European countries are mainly finches (Estrildidae and Fringillidae), leiothrixes *Leiothrix*, Sky Lark *Alauda arvensis*, bulbuls (Pycnonotidae), flycatchers (Tyrannidae, Bombycillidae and Muscicapidae,), munias (Estrildidae) and to a lesser extent robins, chats and thrushes (Turdidae). From a British perspective, therefore, neither the balance of species involved nor the fact that birds imported into central Europe would be expected to migrate south in autumn provides support for the argument that far-eastern 'vagrants' have arrived here as a result of trade.

Previous work

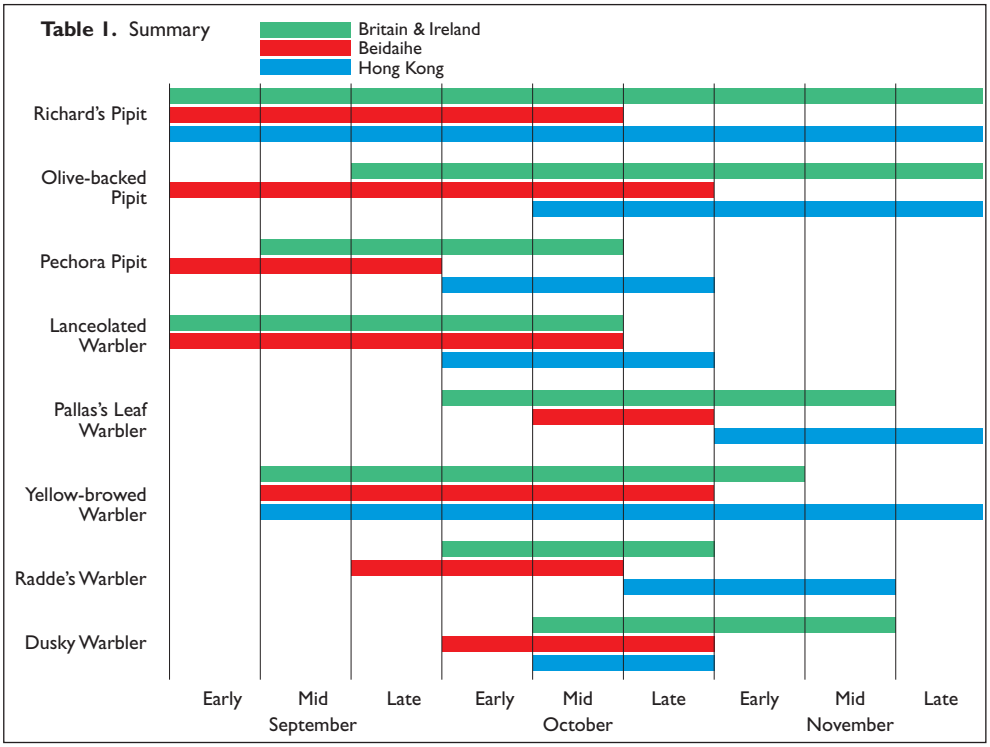
Migration and vagrancy theories are not new. Gätke (1895) included extensive discussions of migration in his work. Among other things, he was impressed by the distance and velocity sometimes involved in migration and calculated that some Richard's Pipits *Anthus richardi* arrived on Heligoland, off the German coast, only about two months after they had hatched. More recent authors have emphasised factors including the effect of the earth's magnetic field (Berthold 2001) and the impact of the easterly airflow along the southern flank of the Siberian anticyclone (Elkins 1983). It is likely that multiple factors are involved: the limitations of simple, though useful, theories like reverse migration (Vinicombe & Cottridge 1996) were emphasised by Gilroy & Lees (2003), who considered that genetic abnormalities may be a cause of the most exceptional vagrancies.

That vagrancy from east Asia occurs is not in question, and in most cases there are far more birds in the wild which may occur as vagrants than there are in trade. Nonetheless, trade from China and other parts of Asia has resulted in significant numbers of East Palearctic passerines being imported into Europe. The difficulties in record assessment caused by this trade were mentioned by Parkin & Shaw (1994) and analysed by Parkin & Knox (1994), though they did not take account of migration strategies and some other relevant factors. This paper aims to add data about migration strategies to the picture.

Since the work of McClure (1974), relatively few data from east Asia were available for comparative purposes until Williams (2000) and Carey *et al.* (2001) published findings from Beidaihe and Hong Kong respectively. Beidaihe lies on the Bay of Bohai, almost due east of Beijing (China), at a similar latitude to Madrid (Spain), while Hong Kong's position north of the South China Sea is at a similar latitude to the Western Sahara. Both lie on one of the main east Asian

Table 1. Autumn migration periods of some regularly occurring passerine vagrants from Asia. These summary data are derived from Dymond *et al.* (1989), Williams (2000) and Carey *et al.* (2001). Some extreme dates have been omitted for the purposes of this comparison.

Species	Britain & Ireland	Beidaihe	Hong Kong
Richard's Pipit *Anthus richardi*	early Sep to Dec; peak end Sep to end Oct	mid Aug to mid Oct; peak Sep	early Sep onwards; peak mid Oct
Olive-backed Pipit *A. hodgsoni*	late Sep to Nov	Sep to Oct; peak late Sep	mid Oct onwards; peak late Nov
Pechora Pipit *A. gustavi*	mid Sep to mid Oct	Sep (especially third week)	few records, mainly Oct
Lanceolated Warbler *Locustella lanceolata*	early Sep to mid Oct	Sep to mid Oct; peak end Sep	predominantly October
Pallas's Leaf Warbler *Phylloscopus proregulus*	early Oct to mid Nov	mid to end Oct; peak mid Oct	early Nov onwards
Yellow-browed Warbler *Ph. inornatus*	mid Sep to early Nov	mid Sep to end Oct	from mid Sep onwards
Radde's Warbler *Ph. schwarzi*	October	late Sep to mid Oct	last week Oct to third week Nov
Dusky Warbler *Ph. fuscatus*	mid Oct to mid Nov	Oct	distinct peak last two weeks Oct



flyways, and bird migration has been sufficiently well studied here for meaningful comparisons with data from Britain and the Western Palearctic to be possible.

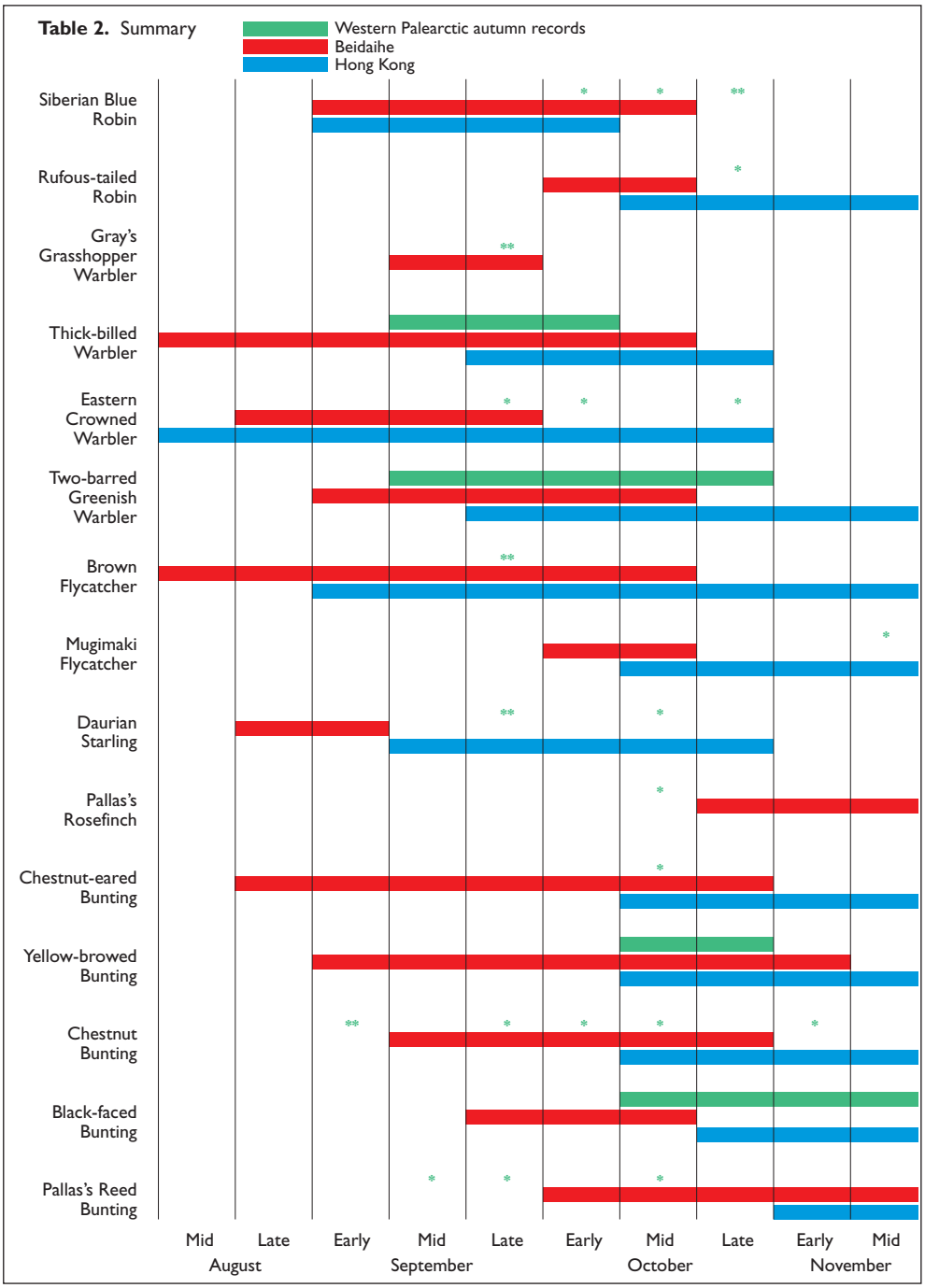
The data in tables 1 and 2 compare the migration periods of Palearctic migrants in east Asia, at Beidaihe and in Hong Kong, with dates of records in the Western Palearctic. Several variables need to be taken into account when interpreting the data (most notably normal

Table 2. Western Palearctic autumn records (arrival dates) of very rare passerine vagrants from east Asia up to the end of 2005. This table places Western Palearctic records in the context of autumn migration patterns at Beidaihe and Hong Kong, compared with what is known of status in trade. * denotes extreme dates omitted; ** denotes known in trade but scarce or numbers unquantified.

Species	Western Palearctic autumn records	Beidaihe	Hong Kong	Trade
Siberian Blue Robin *Luscinia cyane*	27/10/1975, 18/10/2000, 23/10/2000, 2/10/2001	early Sep to mid Oct; peak early Sep	early Sep to early Oct; peak late Sep	**
Rufous-tailed Robin *L. sibilans*	23/10/2004	early to mid Oct; distinct peak in second week	from mid Oct, peak mid Nov	**
Gray's Grasshopper Warbler *Locustella fasciolata*	26/9/1913, 25/9/1955	second half Sep		
Thick-billed Warbler *Acrocephalus aedon*	Six records between 14/9 and 11/10 *	Aug to mid Oct; peak mid Sep	late Sep to end Oct	
Eastern Crowned Warbler *Phylloscopus coronatus*	4/10/1843, 30/9/2002, 23/10/2004	late Aug to end Sep; peak Aug/early Sep	mid Aug to end Oct; peak early Sep	
Two-barred Greenish Warbler *Ph. trochiloides plumbeitarsus*	Five records between 17/9 and 27/10 *	early Sep to mid Oct; peak early Oct	from late Sep; peak mid Oct	
Brown Flycatcher *Muscicapa dauurica*	24/9/1959, 27/9/1986 *	Aug to mid Oct; peak late Aug/early Sep	from early Sep; peak late Sep to third week Oct	
Mugimaki Flycatcher *Ficedula mugimaki*	16/11/1991	first half Oct	from mid Oct; peak third week Nov	**
Daurian Starling *Sturnus sturninus*	29/9/1985, 24/9/1998, 11/10/2005 *	late Aug/ early Sep	mid Sep to late Oct	Thousands in trade in Asia (Shepherd 2006)
Pallas's Rosefinch *Carpodacus roseus*	12/10/1987; also Oct/Dec 1850	end Oct to mid Nov		Frequent in trade
Chestnut-eared Bunting *Emberiza fucata*	15/10/2004	late Aug to late Oct; peak early to mid Sep	from mid Oct	
Yellow-browed Bunting *E. chrysophrys*	Seven records between 12/10 and 23/10	early Sep to early Nov; peak early Oct	from second week Oct; peak mid Nov	**
Chestnut Bunting *E. rutila*	5/11/1937, 13/10/1974, 10/10/1987, 2/9/1994, 4/9/2002, 30/9/2002	second week Sep to end Oct	mid Oct to mid Dec	Frequent in trade
Black-faced Bunting *E. spodocephala*	Seven records between 12/10 and 16/11	late Sep to mid Oct	end Oct to early Dec	**
Pallas's Reed Bunting *E. pallasi*	29/9/1976, 17/9/1981, 17/10/1991	early Oct to end Nov	8 Nov to 14 Dec (three records)	

breeding and wintering distribution, which in some cases is poorly documented; see examples in figs. 1 & 2, p. 110). Nonetheless, what is striking is how arrivals of vagrants which have travelled farther than birds on conventional routes tend to mirror normal movements in date rather than being significantly later. Although it is difficult to be sure about the reasons, it is tempting to speculate that since birds heading in the 'wrong' direction will experience lower temperatures and longer nights (as opposed to the 'expected' higher temperatures and shorter nights), this may add impetus and dissuade them from taking prolonged

Table 2. Summary



stopovers. This seems to be true of both nocturnal migrants and species such as pipits *Anthus* and buntings which also migrate by day.

Most of the species in table 1, which on average have less far to travel than those in table 2, arrive in Britain & Ireland at about the same time as normal passage through Beidaihe begins, though passage of Richard's Pipits, Yellow-browed *Ph. inornatus* and Dusky Warblers *Ph. fuscatus* also begins in Hong Kong at a similar time. Most of the far-eastern species in table 2, however, appear to reach the Western Palearctic at about the same time as birds arrive in Hong Kong, with the exceptions of Gray's

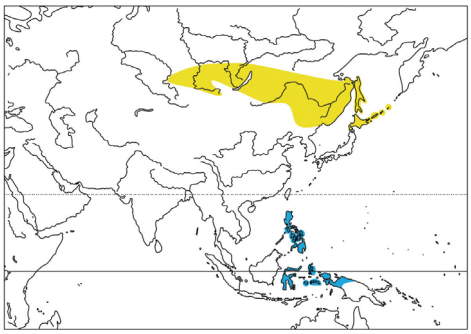


Fig. 1. Migration of Gray's Grasshopper Warblers *Locustella fasciolata* in autumn is rapid; birds leave the breeding areas in late August/early September, and arrive in the wintering areas from September. The two September records from the Western Palearctic demonstrate that long-range vagrancy by this species is similarly rapid.

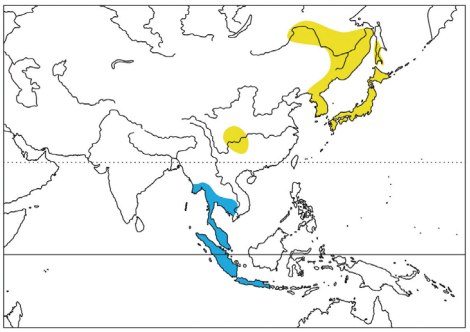


Fig. 2. Eastern Crowned Warblers *Phylloscopus coronatus* leave the breeding areas during the second half of August, and migration continues through September into October. This species is locally abundant in southeast Russia, the most likely origin of vagrants to the Western Palearctic.

Grasshopper Warbler *Locustella fasciolata*, and Yellow-browed *Emberiza chrysophrys* and Pallas's Reed Buntings *E. pallasi*, which have Western Palearctic records more closely matching their movements through Beidaihe. All the species listed have autumn records from the Western Palearctic which correspond in timing with their normal movements, though Siberian Blue Robin *Luscinia cyane* is unusual in that the majority of its discovery dates in the Western Palearctic are later than its normal movements in east Asia.

Deryk Shaw

42. Adult female Chestnut Bunting *Emberiza rutila*, Fair Isle, Shetland, September 2002. Although this individual and another adult female in Shetland (Out Skerries, in 1994) arrived on closely similar dates in early September, their arrival was somewhat earlier than would be expected on the basis of observed migration periods in east Asia.

The extraordinary 21,000-km autumn migration of Northern Wheatears *Oenanthe oenanthe* which breed in Alaska and cross Asia and the Middle East to winter in Africa south of the Sahara is a reminder of what some relatively small birds are capable of. There can no longer be any reasonable doubt that some far-eastern species have occurred naturally in the Western Palearctic although, as demonstrated by Knox (1993), birds of captive origin may sometimes appear to have occurred naturally unless subjected to critical scrutiny. Data about migration strategies presented here may be helpful in resolving some of the more difficult cases.

Case studies

It is interesting to consider three species not yet admitted to the British List: Eastern Crowned Warbler *Ph. coronatus*, Daurian Starling *Sturnus sturninus* and Chestnut Bunting *E. rutila*. Unlike some of the other species listed in table 2 (cf. Tove 1988), these three have not yet been recorded in western North America. Although there are not yet any British records of the warbler, the three Western Palearctic records fall within the species' normal migration period in Hong Kong and this species is not known in trade. There is no reason to believe that they did not arrive naturally. The starling is more problematic, because although there are Western Palearctic records (including one British) which fall within the species' normal migration period in Hong Kong, there are also records outside

this period and the species is frequent in trade. The bunting does have Western Palearctic records which fall within its normal migration period in Hong Kong, but the two British records (in Shetland in the first week of September) are arguably less convincing because they occurred significantly earlier (albeit on closely similar dates, just one week earlier than the beginning of autumn migration through Beidaihe), and both involved adults. This species is also frequent in trade, and the majority of British records are spring records, quite unlike the usual pattern of far-eastern vagrants, whose autumn records far outnumber those in spring.

In conclusion, autumn arrivals in western Europe of eastern passerine vagrants which have travelled farther than birds on conventional routes tend to mirror their normal movements (in terms of timing); they therefore occur earlier than might be expected based on simple calculations of their normal speed and distance of movement. Those records which accord with this pattern deserve serious consideration.

Acknowledgments

Josep del Hoyo kindly allowed us to reproduce the two maps from *Handbook of the Birds of the World*, and Amy Chernasky at Lynx provided technical assistance.

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Announcement

Bird Photograph of the Year 2007

As always, this competition, established in 1976, seeks to recognise the best and/or the most scientifically interesting bird photographs. Preference is given to photographs taken in the Western Palearctic (Europe, North Africa and the Middle East), but those of species on the Western Palearctic List taken anywhere in the world are also eligible. Up to three images, each taken during the previous year (in this case 2006), may be submitted by each photographer. As in the past three years, both transparencies and digital images are acceptable. For full details of the rules (essential for those who wish to submit digital photos) and this year's sponsorship, visit our website (www.britishbirds.co.uk/bpy.htm), or write to Peter Kennerley (BPY), 16 Coppice Close, Melton, Suffolk IP12 1RX, e-mail peterkennerley@onetel.net

In addition, prizes will be awarded for the best digiscoped entry and the best entry received from a young photographer, aged below 26 (please state your age if you are entering in the latter category).

The closing date for entries will be 25th March 2007 and, as in previous years, the winning entries will be exhibited at the British Birdwatching Fair in August, where the awards will be presented.