

# Identification of Daurian Jackdaw

Paul J. Leader

**ABSTRACT** Daurian Jackdaw *Corvus dauuricus* has three distinct age-related plumages: both juveniles and adults are pied, but first-years have largely black plumage. Some authorities state that adults can occur in two plumage morphs, pied and all-dark; examination of almost 200 skins of Daurian Jackdaws, however, showed that, without exception, all-dark individuals proved to be first-years, while pied individuals were adults. Furthermore, the head streaking of first-years, often mentioned as a key separation feature from Eurasian Jackdaw *C. monedula*, varies according to time of year. As a consequence, first-winter Daurian Jackdaws may be overlooked in Europe.

Daurian Jackdaw *Corvus dauuricus*, is the eastern counterpart of Eurasian Jackdaw *C. monedula*, breeding across southern Siberia from 96°E, east to Amurland and Ussuriland in eastern Siberia, and south to northern and western China (Cramp & Perrins 1994). Southern populations are largely resident and form large, nomadic, post-breeding flocks, while northern breeders are short-distance migrants which move south to winter in eastern China, the Korean Peninsula and southern Japan, but are uncommon in southern China and rare farther south.

Daurian Jackdaw is unique among corvids in having three distinct plumages, which enable adult, first-winter and juvenile birds to be readily aged in the field. In summary, the adult is pied (plates 322-323), the first-winter plumage appears largely black (plates 324-325), and the juvenile plumage is dark grey-cream and grey-black. In the past, this has led to considerable confusion over the species' moult sequence, and also over whether adults can show two colour phases – the familiar pied plumage and one which is completely dark. Furthermore, there are also some misleading statements in the literature regarding the identification of birds in first-winter plumage. It is possible that some of this confusion has arisen from the tendency for some first-summer birds to associate closely with adults during the breeding season (PJL pers. obs.).

In order to help resolve these issues, I examined 80 non-pied Daurian Jackdaw specimens, at the Natural History Museum, Tring and Academia Sinica, Beijing, which established that all such specimens were individuals in first-winter plumage. These birds were aged on the basis of brownish primaries, and narrow, pointed and brownish rectrices (these characters are widely accepted as valid criteria for ageing first-winter Eurasian Jackdaws: Svensson 1992). By contrast, 115 pied individuals were examined, and all were readily aged as adults on the basis of glossy-black primaries and rectrices, the later also being obviously broad. Only three specimens in juvenile plumage were examined, and these superficially resembled the adults. They were, however, obviously duller, with the black-and-white patterning of the adult being replaced with brownish- or grey-black and cream. All three were recently fledged birds, with all the primaries still growing.

While identification of adults and juveniles is straightforward, it is more difficult to distinguish between first-winter Daurian Jackdaws and Eurasian Jackdaws of a similar age. It is widely stated (e.g. Madge & Burn 1994, Beaman & Madge 1998) that first-winter birds can be separated from Eurasian Jackdaw using a combination of iris colour and the extensive silvery streaking on the ear-coverts and the rear portion of the sides of the head, but, while the majority of first-winter birds examined had



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322-323. Adult Daurian Jackdaw *Corvus dauuricus*, Beizha Forestry Farm, Qinghai Province, People's Republic of China, June 2000.



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extensive streaking on the ear-coverts, 16% lacked streaking and on a further 11% this streaking was faint. There was also a marked seasonality regarding the collection dates of

such birds: all unstreaked birds were collected between September and November, while all those with faint streaking were collected between September and February (table 1). By

**Table 1.** Extent and frequency of head streaking in first-winter Daurian Jackdaw *Corvus dauurica*, based upon examination of specimens in the Natural History Museum, Tring, and the Academia Sinica, Beijing.

Period when specimen collected	No streaking	%	Faint streaking	%	Medium streaking	%	Heavy streaking	%	Total
September-November	13	59.1	6	27.3	1	4.5	2	9.1	22
December-February	0	-	3	33.3	3	33.3	3	33.3	9
March-May	0	-	0	-	13	32.5	27	67.5	40
June-August	0	-	0	-	4	44.4	5	55.6	9
<b>Total</b>	<b>13</b>		<b>9</b>		<b>21</b>		<b>37</b>		<b>80</b>

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324-325. First-summer Daurian Jackdaw *Corvus dauuricus*, Beizha Forestry Farm, Qinghai Province, People's Republic of China, June 2000.

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December, all birds exhibited some streaking, which by March was conspicuous on all individuals and defined as either medium or heavy (table 1). Typical individuals representing the heavy, faint and no streaking categories referred to in table 1 are shown in plate 326.

Accordingly, there is a clear tendency for first-winter Daurian Jackdaws to show little or no head streaking in autumn and early winter, and obvious streaking thereafter. Whether this change in the extent of the streaking is a result

of wear or due to partial moult is unclear. Although Cramp & Perrins (1994) noted that the extent of ear-covert streaking varies on first-winter Daurian Jackdaws, and that some birds lack pale-streaked ear-coverts, this was attributed to the belief that two different morphs, 'dark-headed' and 'silver-eared', existed. Given the seasonal variation summarised in table 1, this explanation now appears highly unlikely.

#### *Daurian Jackdaw in Europe*



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326. First-year Daurian Jackdaws *Corvus dauuricus*, showing the variation in ear-covert streaking referred to in table 1: from heavy streaking (left), through faint (centre) to none (right).

There have been seven records of Daurian Jackdaw in Europe, with two from the Netherlands and single records from Russia, Finland, Sweden, Denmark and France. Perhaps surprisingly, all have been conspicuous pied adults in spring (A. van den Berg, verbally), and it seems possible that first-winters are being overlooked within large flocks of Eurasian Jackdaws, especially poorly marked birds early in the winter. This spring-only pattern is unprecedented for an Eastern Palearctic passerine in western Europe. It is possible that these birds are escapes, although there is no evidence that this species is traded; alternatively, it has been suggested that the birds occurring in western Europe are from populations which migrate farther east in autumn (A. van den Berg, verbally). Another possibility is that in autumn such birds are migrating overhead in corvid flocks and thus avoid detection by birders.

First-winter Daurian Jackdaws which lack streaking on the ear-coverts closely resemble juvenile Eurasian Jackdaw. They are, however, readily separable from first-winter and adult Eurasian Jackdaws by their lack of a pale-grey nape. In addition, first-winter Daurian Jack-

daws have a glossy-black throat which contrasts with the sooty-black upper breast. Furthermore, the iris colour is always dark in Daurian Jackdaw, but ranges between light grey and white in Eurasian Jackdaw. This last difference is diagnostic at all ages, except for recently fledged juvenile Eurasian Jackdaws, which have dark irides.

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Paul J. Leader, Asia Ecological Consultants Ltd, 127 Commercial Centre, Palm Springs, Yuen Long, New Territories, Hong Kong

