This issue should have appeared in the summer of last year, and the long delay is a source of profound editorial regret and embarrassment. Initially the cause was paucity of material; in the past six months it has been overcommitment by the editor. In an attempt to redress this latter problem, and in proper recognition of the outstanding qualities he has brought to the editorial process, Tim Inskipp has now become joint editor of the journal. Material for *Forktail* 5 has been accumulating, and I hope therefore that the journal will soon be back on schedule. For all those who have waited with mounting concern for this long overdue issue, I offer my sincere apologies.

N.J.C.

Andrew Leith Adams: a pioneer of Himalayan ornithology

ANTHONY J. GASTON

Adams was active in the Himalayas in the mid-nineteenth century, and provided a detailed but neglected record of his bird observations in a book and two papers. The more interesting of these observations are recounted here, including evidence of the former abundance of game animals in both Himachal Pradesh and Kashmir/Ladakh.

Andrew Leith Adams, a military surgeon, spent seven years in India from 1849. He was a keen hunter and naturalist, and travelled extensively in Himachal Pradesh and Kashmir in search of game. His account of his travels and observations, Wanderings of a naturalist in India, the western Himalayas and Cashmere (Adams 1867), is distinguished from many similar writings of the nineteenth century by his attention to detail and his very specific references to numbers, localities and dates for the animals that he encountered. He also wrote two technical papers detailing his major findings (Adams 1858, 1859). His excellent field descriptions of birds enable many species to be clearly recognised.

In view of Adams's excellent natural history writings, and the fact that Jerdon (1877) included him among the fathers of Indian ornithology, it is surprising that he is rarely referred to by modern authors. I hope that by presenting a brief account of his observations in India I can bring his contribution to Himalayan ornithology to the attention of the many ornithologists now visiting the western Himalayas. I also compare his observations in two main areas with my own notes from visits made to the same places in recent years to indicate changes that have taken place over the past 130 years.

NOTES FROM HIMACHAL PRADESH

Although he is not explicit, Adams appears to have been based at Dagshai, near Simla, during most of the period from 1849 to 1854. While there he noted several species not commonly recorded in the area: Spot-winged Starling Saroglossa spiloptera, which he correctly noted as a summer visitor to the hills, a point confirmed by Whistler (1923), Red-billed Leiothrix Leiothrix lutea, and Lesser Kestrel Falco naumanni, both of which he characterised as common. The latter is normally considered rare in northwest India (Ali and Ripley 1984), and the observation might be considered an error except that Adams (1867:99) states: 'Independent of size the latter [Falco naumanni] is distinguished from the other by the light colour of its claws, which are black in the Common Kestrel'. A similar attention to detail

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is evident in Adams's distinction between the house-martin that occurred at Dagshai and the one he knew from Europe and southern India. Those that he shot were described by Gould (1858) as *Delichon cashmeriensis*, which is now usually treated as a subspecies of the Asian House-Martin *D. dasypus*. Adams correctly noted the smaller size, dark axillaries and less forked tail by comparison with *D. urbica*.

While living at Dagshai, Adams made two excursions to Chor Dhar, the isolated massif which lies south of Simla, beyond the valley of the River Giri. His first visit was in March. The second commenced on 24 September 1851, reaching Chor after six days. His party spent eleven days hunting there, which he described as 'uninterrupted happiness'.

As a sportsman, Adams devotes a good deal of space to the game that he encountered. On the march to Chor he notes many Kalij Pheasants Lophura leucomelana at Narg (Narag), which 'one after another rose before our dogs', as well as Red Junglefowl Gallus gallus, Jungle Bush-quail Perdicula asiatica, Black Francolin Francolinus francolinus, and an abundance of Indian Peafowl Pavo cristatus (now rare in the area). While at Chor, his party based itself at the hamlet of Chauras and found Impeyan Pheasants Lophophorus impejanus in large numbers on the upper parts of the massif, which reaches a maximum of 3,647 m:

One morning we happened to get into a narrow defile leading towards the summit . . . profusely covered with ferns, balsams, dwarf-bamboo jungle and long dank vegetation, through which we could scarcely pick our way, much less see the great numbers of monal pheasants which were continually rising around us. I had just discharged my gun at a flock of upwards of twenty monal which rose in front of us . . . My companion, in spite of the uncertain footing and obstacles, killed ten monal in an hour.

Nearby Adams shot a Golden Eagle Aquila chrysaetos carrying a Kalij Pheasant in its talons. The eagle weighed 8lbs (3.6kg) and had a wingspan of six feet four inches (193cm). Interestingly, no weights at all are given for Indian Golden Eagles by Ali and Ripley (1984). This was the first time Adams had encountered the species in India, despite two years' residence in the hills. Apparently Golden Eagles were no more frequent in the front ranges in the last century than they are today, when they are rarely encountered below 3,000 m.

Despite the abundance of Impeyan Pheasants at Chor, Adams laments:

This splendid bird, once so abundant in the Western Himalayas, is now, comparatively speaking, restricted to certain localities in the wooded slopes of the higher ranges. Whole tracts of forest, once dazzling with the gorgeous forms of these birds, are now without a single specimen.

In a footnote he adds: 'Hundreds are sold at Stevens' sale-rooms. They are bought chiefly to adorn ladies' bonnets!' The famous hunter F. Wilson ('Mountaineer'), who operated mainly in Garhwal, was responsible for killing 1,500 Impeyan Pheasants and tragopans *Tragopan* spp. yearly during

a long career (Hume and Marshall 1878). Presumably similar slaughter had prevailed around Simla prior to Adams's arrival.

Considering Adams's remarks and his own efforts (his party killed 68 Impeyan Pheasants), it is hardly surprising that in September 1983, when I visited Chor with my wife, we met with only small numbers of Impeyan Pheasants. We flushed several ones and twos from steep ravines close to the summit, where the sanctity of the temple may discourage hunting. Elsewhere we did not encounter the species. The Koklas Pheasant Pucrasia macrolopha, characterised by Adams as less common than Impeyan, appeared more abundant during our visit, despite being more cryptic and difficult to see.

Among small birds seen at Chor, Adams mentions Goldcrest Regulus regulus, Spot-winged Tit Parus melanolophus, Grey-crested Tit P. dichrous (in both his 1858 and 1859 papers he described this species, but was unable to put a name to it, but by the time he wrote Wanderings he had apparently been able to confirm the identification), Black-lored (Yellow-cheeked) Tit P. xanthogenys, Bar-tailed Treecreeper Certhia himalayana, White-tailed Nuthatch Sitta himalayensis, Dark-sided Flycatcher Muscicapa sibirica, Red-headed Bullfinch Pyrrhula erythrocephala and flocks of Mistle Thrushes Turdus viscivorus feeding on acorns. We encountered all these species and particularly noted many Mistle Thrushes along the main ridges on open pastures. Another species that we both found at Chor was the Common Hill-Partridge Arborophila torqueola; this species is otherwise hard to find west of the Ganges catchment and reaches its western limit in Chamba (Ali and Ripley 1984).

NOTES FROM KASHMIR AND LADAKH

In 1852 Adams made a prolonged excursion to Kashmir and Ladakh. After reaching the Vale, he visited the Wardwan (Marwan) Valley, a tributary of the Chenab reached from the Vale of Kashmir by crossing the Margan Pass from Islamabad. The area already had a reputation among big-game hunters. Adams's party crossed the pass on 27 May, having some difficulty with deep snow, and spent ten days in the Wardwan Valley. We trekked through the same area in September 1982 and experienced similar difficulties in crossing the pass because of bad weather.

Even before reaching the Vale of Kashmir, about 27 March, Adams discovered and collected the Orange Bullfinch *Pyrrhula aurantiaca* in the Jhelum Valley west of Uri. Gould described the species in 1858 from Adams's specimens. Perhaps because of the bad weather he experienced in the Wardwan Valley he makes little mention of non-game animals, although he notes Goldcrest, Common Cuckoo *Cuculus canorus*, Black-and-yellow Grosbeak *Coccothraustes icterioides*, Indian Blue Robin *Erithacus brunneus* and Upland Pipit *Anthus sylvanus* on the western side of the pass.

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The main result of the trip was the killing of 25 Brown Bears Ursus arctos among three European guns over the ten days and, to judge from Adams's account, the wounding of many more. The idea of three hunters setting their sights on perhaps as many as fifty bears while based in the upper Wardwan for a mere ten days gives some idea of their density at that time. Ward (1887) mentions that by the 1880s seasonal bags in Kashmir had fallen to a mere 6–7 bears from the 20–30 of earlier days. We saw none at all on our week-long visit, although in September they may have been higher up than we ventured. Adams remarks that Himalayan Black Bears Selenarctos thibetanus occur only at the southern end of the Wardwan Valley, near Kishtwar. We were told exactly the same thing by local hunters.

A later trip to the southern Pir Panjal, not described in detail in Wanderings, led Adams to comment on the status of the Western Tragopan Tragopan melanocephalus:

Oft, in the stillness of an alpine solitude, . . . have I listened to the well-known wa, wa, wa of this bird. I believe the jewar [Western Tragopan] is much more common than is generally supposed, for its habits are cunning and stealthy, always preferring the deepest solitudes of the forest, and seldom taking to wing unless hard pressed.

Notwithstanding this remark, he characterised the species as 'not common' in his 1859 paper on Kashmir birds. It is currently considered endangered, and there are no recent records from the southern Pir Panjal, although it is still found in the Neelam Valley of Pakistan (Gaston et al. 1983).

Following his foray in the Wardwan Valley, Adams, again with two other Europeans, crossed the Zoji La into Ladakh on 7 July. The trio had little success with big game, but Adams discovered and subsequently (1859) named the Black-winged Snowfinch *Montifringilla adamsi* and obtained the first collection of skins ever made in the area. Among the more interesting observations made on his forty-day trip was that of Brown-headed Gulls *Larus brunnicephalus* on Tso Morari (a record apparently overlooked by Vaurie 1972).

On the return journey the party left Ladakh via the Suru glacier. Adams remarks on the abrupt change in the avifauna which he noted part-way up the Suru Valley:

Yesterday, at Shergol [i.e. Mulbekh, in the Wakka Chu Valley between Kargil and Khalatse, the area where he first located Montifringilla adamsi], we had seen the magpie [Pica pica], chestnut-bellied [Güldenstadt's] redstart [Phoenicurus erythrogaster], alpine chough [Pyrrhocorax graculus] and Tartar rock-pigeon [Columba rupestris]; today [at Sanku, in the Suru Valley] their places were taken by roller [see below], Cornish [Red-billed] chough [Pyrrhocorax pyrrhocorax] and blue rock-pigeon [Columba livia]; moreover the Tartar visage had now give [sic] place to the Caucasian.

The question of the identity of the rollers is of interest: Adams (1859) notes Coracias indica (= benghalensis) as frequently seen in Ladakh, and specifically

states that he never saw C. garrulus in the 'western Ranges', but this conflicts with all other records and for example Ali and Ripley (1984) list only garrulus for Kashmir and Ladakh.

Reaching the Kashmir Valley again, Adams recorded Grey Wagtail Motacilla cinerea and White-throated Dipper Cinclus cinclus on the Liddar, one of the few places in the valley where the latter occurs (Bates and Lowther 1952). He also noted Ashy Drongos Dicrurus leucophaeus persistently kleptoparasitising Hoopoes Upupa epops.

Before returning to Britain and thence to Canada (Wanderings was completed in New Brunswick), Adams saw duty with his regiment in Peshawar. Despite some danger from local partisans, once outside the town he managed some birdwatching, noting the arrival of winter visitors: Northern Lapwing Vanellus vanellus, Greylag Goose Anser anser, Cranes Anthropoides/Grus, Rook Corvus frugilegus, Common Jackdaw C. monedula, Great Bittern Botaurus stellaris, Barn Swallow Hirundo rustica and Grey Wagtail. Unfortunately, most of his Peshawar notes were lost, as well as those referring to a second excursion to Kashmir.

Adams, like most of his contemporaries, was impressed with game statistics; the size of 'heads' and 'bags' are given due note. However, his interest in smaller birds and his careful evaluation of the variation within species, which gave him a remarkably modern view of taxonomy, set him apart:

This rage for 'species-making' is not confined solely to cabinet naturalists, but I regret to think, for the sake of science, that rather than be behindhand, or that another should make the discovery, it is the custom with even many of our best-known field ornithologists to give a separate specific name to every individual that differs in the slightest degree from another.

Unlike many explorers of the period, he appears to have done all of his collecting himself. Most of his observations on habitat and behaviour accord well with those of more recent fieldworkers.

Wanderings could usefully be employed by a modern visitor to the western Himalayas to get an idea of the birds that they might encounter, although obviously the status of large game animals has changed drastically; a situation for which Adams himself cannot be entirely absolved of blame. With Hodgson, active earlier in Nepal, Adams laid the groundwork for subsequent Himalayan ornithology. We are fortunate that he left such a lucid record of his experiences.

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REFERENCES

Adams, A. L. (1858) Notes on the habits, haunts etc. of some of the birds of India. Proc. Zool. Soc. Lond.: 466-512.

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Adams, A. L. (1859) The birds of Cashmere and Ladakh. Proc. Zool. Soc. Lond.: 169-190.

Adams, A. L. (1867) Wanderings of a naturalist in India, the western Himalayas and Cashmere. Edinburgh: Edmonston and Douglas.

Ali, S. and Ripley, S. D. (1984) Handbook of the birds of India and Pakistan. Compact edition. Delhi: Oxford University Press.

Bates, R. S. P. and Lowther, E. H. N. (1952) Breeding birds of Kashmir. London: Oxford University Press.

Gaston, A. J., Islam, K. and Crawford, J. A. (1983) The current status of the Western Tragopan Tragopan melanocephalus. World Pheasant Assoc. J. 8: 40-49.

Gould, J. (1858) Description of two new species of the family Hirundinidae. Proc. Zool. Soc. Lond.: 355-356.

Hume, A. O. and Marshall, C. H. T. (1878) Game birds of India, Burma and Ceylon, 1. Calcutta: published by the authors.

Jerdon, T. C. (1877) The birds of India. Calcutta: P. S. D'Rosario.

Osmaston, B. B. (1925) The birds of Ladakh. Ibis (12)1: 663-719.

Vaurie, C. (1972) Tibet and its birds. London: Witherby.

Ward, A. E. (1887) The sportsman's guide to Kashmir and Ladak. Calcutta: Calcutta Central Press

Whistler, H. B. (1923) The Spotted-winged Starling (Psaroglossa spiloptera, Vigors). J. Bombay Nat. Hist. Soc. 29: 290-292.

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The migration of raptors south of Annapurna, Nepal, autumn 1985

FRANK E. DE RODER

Raptor migration was observed over Khare, south of Annapurna, Nepal, from 20 October up to and including 7 November 1985. Nearly 9,000 raptors of some 30 species were counted, with Steppe Eagle Aquila rapax nipalensis being the most numerous species.

Birds of prey have recently been found to use the Himalayas as an east-west pathway in autumn. This phenomenon was first described by Fleming (1982), who made observations in October and November 1975 in the Kathmandu Valley, and also at Dampus south of Annapurna where at least 490 raptors were seen from 3 to 5 November 1976.

In 1984 between 26 and 28 October I was accompanied by Rob Bijlsma, Steen Christensen and Mogens Henriksen in the area between Birethante and Naudanda south of Annapurna, where we observed 1,047 raptors of 15 species migrating to the south-west (Bijlsma in prep.). In 1985 I decided to return to the area to observe the migration of raptors for a longer period. I was accompanied by Gerard Verschoor throughout the study and by Rob Lensink for the period 20-25 October. We found a suitable observation point near Khare, and this paper describes the migration of raptors over Khare from 20 October up to and including 7 November 1985.

LOCALITY AND WEATHER

The Annapurna massif lies near the northern border between Nepal and Tibet and includes 11 high peaks of 7,000-8,000 m (Figure 1). It is bounded at the west and the east by two large rivers, respectively the Kali Gandaki and Marsyandi, whereas the southern side is drained by the Modi Khola, Seti Khola and Madi Khola (Figure 2). Between the high peaks and the lowlands there is an enormous variety of hills and mountains. At altitudes below 2,000 m most of the land is used for agriculture and between 2,000 and 3,000 m there are oak/rhododendron forests.

Khare (1,646m) is a very small village (c. 50 houses) along the trail from Naudanda to Birethante. From a ridge south of the village there is an excellent view towards Pokhara. The small villages near Naudanda are all situated on top of a mountain ridge which has an east-west direction. On the north and south side of the ridge there are rivers which feed Phewa Tal, the lake near Pokhara.

During the observation period the wind blew very consistently from the south to south-east, force 1-3 (Beaufort). The daily temperatures fluctuated between 13 and 23°C. The visibility was usually very good, except over 27-29