

that breeds in north-east Asia and winters southwards (Valchuk 2000), conceivably into Lao PDR. Four other woodpecker species were recorded the same morning at the same site, namely Grey-capped Pygmy Woodpecker *D. canicapillus*, Greater Flameback *Chrysocolaptes lucidus*, Black-headed Woodpecker *Picus erythropygius* and Laced Woodpecker *Picus vittatus*, amounting to a total of five species in this relatively small forest site.

This represents the first record of this species for Lao PDR. Previously, it had been listed for the country, through its collection by Harmand in 1875 at 'Kouys'. At this time 'Kouys' (= the land of the Kouy people) lay within Lao PDR, and Oustalet (1899) therefore published the record as from Lao PDR. Shortly afterwards, boundary changes meant that the whole Kouy territory now lies within Cambodia (Duckworth *et al.* 1999, Thomas and Poole 2003), although the Kouys records continued to be listed for Laos (e.g. King *et al.* 1975) until 1999. Rufous-bellied Woodpecker is recorded from Pakistan through the northern part of the Indian subcontinent, Myanmar, Thailand and Indochina, with a northerly extension through China to the Russian Far East (Robson 2000, Valchuk 2000). Across this species's vast range it occupies a wide variety of habitat, but the race *D. h. annamensis* which Kloss (1925) named from southern Vietnam and to which Lao (and the recently re-discovered Cambodian) birds presumably belong, evidently occurs only in dry dipterocarp forest, and seems to have a restricted distribution even within that habitat (W. Duckworth *in litt.* 2006).

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Differences in the diet of three Peregrine Falcon *Falco peregrinus* pairs nesting in Chukotka, north-east Russia

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Peregrine Falcon *Falco peregrinus* is distributed almost worldwide and its breeding range encompasses virtually all major climatic zones. It feeds mainly on medium-sized birds, which are often caught in mid-air. While much is known about its breeding and diet in some parts of its range (e.g. Europe and North America: Ratcliffe 1993), comparatively little information is available from the north-eastern Palaearctic even though it breeds regularly in this region (Stepanyan 1990, Ferguson-Lees and Christie 2001). Here we report our observations on the diet of nesting pairs of Peregrine Falcons in Chukotka, Russia.

METHODS

During the course of two expeditions in 2001 and 2002 to south Chukotka, north-east Siberia, prey remains of

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nesting Peregrine Falcons were opportunistically collected at one inland and two coastal locations. One pair was found about 20 km south of the capital Anadyr (Anadyr Bay, 64°44'N 177°30'E), one in the vicinity of the remote Cape Navarin (62°18'N 179°09'E), and another inland along the river Anadyr (65°29'N 173°18'E; Fig. 1).

The pair in the Anadyr Bay was first spotted on 3 June 2001 but neither adults nor juveniles were seen during a stay of about three hours, two months later (5 August). We concluded that a breeding attempt was unsuccessful, presumably because the falcons had been disturbed during our absence by the building of a fisherman's hut at the base of the breeding cliff. Feather remains of plucked prey were taken during our first visit. These samples were collected from the upper edge and vicinity (up to 150 m) of the nesting cliff, which was about 30 m high at this location.

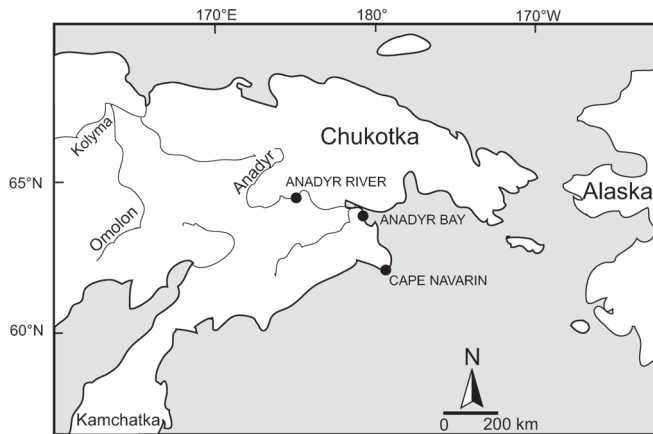


Figure 1. Locations of the three Peregrine Falcon *Falco peregrinus* breeding sites studied in Chukotka, north-east Siberia.

Table 1. Prey species and (minimum) numbers recorded at three Peregrine Falcon *Falco peregrinus* breeding sites in Chukotka, north-east Siberia.

Species	Anadyr River	Anadyr Bay	Cape Navarin
CRESTED AUKLET <i>Aethia cristatella</i>	0	1	64
DOVEKIE <i>Alle alle</i>	0	0	1
PTARMIGAN sp. <i>Lagopus</i> sp.	0	1	0
LONG-TAILED JAEGER <i>Stercorarius longicaudus</i>	1	3	0
COMMON TERN <i>Sterna hirundo</i>	5	0	0
ARCTIC TERN <i>Sterna paradisaea</i>	0	3	0
PACIFIC GOLDEN PLOVER <i>Pluvialis fulva</i>	0	2	0
WHIMBREL <i>Numenius phaeopus</i>	2	0	0
GREY-TAILED TATTTLER <i>Heteroscelus brevipes</i>	0	1	0
WOOD SANDPIPER <i>Tringa glareola</i>	1	0	0
COMMON SNIPE <i>Gallinago gallinago</i>	1	0	0
LONG-BILLED DOWITCHER <i>Limnodromus scolopaceus</i>	0	1	0
HOUSE MARTIN <i>Delichon urbica</i>	1	0	0
DUSKY THRUSH <i>Turdus naumanni</i>	1	0	0
THRUSH sp. <i>Turdus</i> sp.	0	1	0
SNOW BUNTING <i>Plectrophenax nivalis</i>	0	1	0
ROOT VOLE <i>Microtus oeconomus</i>	0	0	1
Total number of individual birds	12	14	65
Total number of individual mammals	0	0	1

At Cape Navarin, plucked feathers were collected on 25 July 2001, when two juveniles had just fledged and were sitting nearby. Most of the feathers were highly concentrated on a talus just below the presumed nesting cliff. Additionally, one adult appeared with a Crested Auklet *Aethia cristatella* in its talons when we were present. However, as we were fairly close and, therefore, probably disturbed it, the falcon flew away after some minutes, still carrying the auklet.

At the Anadyr River location, prey remains were collected on 12 July 2002, when two nestlings, only a few days old, were found on an easily accessible ledge. Plucked feathers were gathered from close to the nest as most of the nesting slope was steep and covered by dense willow vegetation.

Apart from a few easily identifiable feathers, such as tail-streamers of Long-tailed Jaegers *Stercorarius longicaudus*, all prey remains were collected. About 90% of these were brought to Austria. The rest were identified at Anadyr in 2001 with the assistance with A. V. Kondratyev (University of St. Petersburg), who has long experience with the Siberian avifauna. Feathers brought to Austria were identified later (most by H. Lauermaann), using the reference collection of the Natural History Museum, Vienna. Identification was possible at least to genus level for all feathers. Samples consisted mostly of remiges and rectrices, however, especially in the very common prey species, Crested Auklet, whole wings (obviously dissected by the Peregrine Falcons) were found. As the plucked feathers were fresh, colour and structure were good cues for species discrimination. The minimum number of prey individuals was conservatively estimated from these remains. This was mostly done by comparing the numbers and positions of feathers of the left and right hand, the numbers of rectrices and the numbers of whole wings (especially for Crested Auklet).

RESULTS AND DISCUSSION

Taken together, 92 prey items were identified from the three nest sites (Table 1). Although the number of nests and prey is low, and indirect sampling techniques (Rosenfield *et al.* 1995) as well as individual specialisation (Dekker and Taylor 2005) are known to produce biased results, we believe that our findings are an important addition to the scarce information on the feeding behaviour of Peregrine Falcons in this remote, sub-arctic area (Ratcliffe 1993).

A striking result was that the availability of certain prey taxa was associated with pronounced differences in prey choice. Peregrine Falcons at Anadyr Bay and along the Anadyr River, with no access to seabird colonies, appeared to take predominantly terns and shorebirds (Table 1). In contrast, the pair at Cape Navarin seemed to hunt Crested Auklets almost exclusively. Hence, the diet of the two coastal falcon pairs showed a greater difference than that between the locations along the Anadyr River and its mouth. Differences between the latter appeared largely to result from differences in local prey availability, with Common Tern *Sterna hirundo* being hunted inland more frequently than Arctic Tern *Sterna paradisaea*. Similarly, species like Wood Sandpiper *Tringa glareola* and Common Snipe *Gallinago gallinago* occur more often on extended floodplains than in the (here) more bare coastal tundra

inhabited by, for example, Pacific Golden Plover *Pluvialis fulva* and Long-billed Dowitcher *Limnodromus scolopaceus*.

Prey remains at Cape Navarin consisted nearly entirely of Crested Auklets, despite the presence of tens of thousands of seabirds, especially Northern Fulmar *Fulmarus glacialis* and Black-legged Kittiwake *Rissa tridactyla*, but also flocks of Pigeon Guillemot *Cepphus columba*, Horned Puffin *Fratercula corniculata* and Tufted Puffin *Fratercula cirrhata*. During our short visit, >2,000 Crested Auklets were seen, apparently from an unreported breeding colony (see Gaston and Jones 1998). Moreover, Dovekie *Alle alle* feathers were found in our sample, even though the nearest reported breeding colony of this species is about 700 km to the north-east, on the Diomed Islands in the Bering Strait. Our observations appear similar to the feeding behaviour known for the subspecies *F. p. pealei*, occurring from the Commander Islands, across the Aleutians to western coastal North America (Ferguson-Lees and Christie 2001), with alcids (Alcidae) like Ancient Murrelet *Synthliboramphus antiquus*, Least Auklet *Aethia pusilla*, and Crested Auklet comprising the bulk of the prey (Beebe 1960, White *et al.* 1973, Dekker 1999). Where present, alcids appear to be important and easily available prey for Peregrine Falcons around the northern rim of the Pacific Ocean.

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First likely breeding record of Yellow-billed Grosbeak *Eophona migratoria* for Kinmen Island, Taiwan

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Yellow-billed Grosbeak *Eophona migratoria* is a large finch that breeds from southern Amurland and southern Ussuriland to Manchuria, Korea and eastern China, and southern Japan (Vaurie 1959). In China the nominate subspecies breeds in the north-east, whereas *E. m. sowerbyi* has a more southerly distribution breeding along the Chang Jiang Valley from Sichuan east to Jiangsu and Shanghai Municipality (Cheng 1987). It winters from Fujian to Guangdong, Guangxi, southern Yunnan, and in small numbers in Taiwan (Meyer de Schauensee 1984). Its habitat includes cultivation, orchards, and woodlands where it feeds on berries and seeds (King *et al.* 1975, MacKinnon and Phillipps 2000).

At 08h25 on 25 July 2006, we observed an adult pair of finches with three juveniles while bird-watching on Kinmen Island, Taiwan. The birds were observed from a

distance of 15 m with binoculars and identified by both of us and a third observer as Yellow-billed Grosbeaks by their massive black-tipped yellow bills, greyish bodies and prominent white wing markings. The male had a dark head and throat; the female did not have any black on the head. The juveniles were similar to the female but the head and underparts were buffier-brown, the wing-bars were buffy instead of white, and the tails were shorter, indicating they had recently fledged. The birds were discovered at a cultivated public garden with orchards. All five were observed briefly on the same branch and flushed together as we approached for a closer look.

Kinmen (24.44°N 118.33°E) is the largest island in a small archipelago located off the west coast of Taiwan roughly 5 km from the south-east coast of mainland China; the climate is subtropical. The Yellow-billed Grosbeak is