Khao Dinsor - Thailand
Raptor Migration Summary 2012
Year III

Report Issued: March 2013

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This publication commemorates the life of Nurak Israsena 1929-2012

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This report briefly summarizes our findings on raptor and other bird migration for autumn 2012, for the period 15 August through 9 November – a total of 87 continuous days of observation, averaging approximately 10 hours per day. For comparison, we also include totals of what we saw and counted during the autumn 2010 and 2011 migration – see pages 49-50. Driving directions to Khao Dinsor (Pencil Hill), where to stay nearby, and further information for interested visitors, are provided on p. 38.

The 2012 Season's totals of the raptor species seen and number counted appear in Table 1 (p. 4). Table 2 (p. 7), lists 28 non-raptor species seen migrating – along with total number counted and peak time frame. In the body of this report (pages 8 – 37), we provide a brief summary of migration highlights and trends for different raptor groups such as Eagles, Kites, Falcons, Harriers, Sparrowhawks, etc., as well other birds we saw in 2012. In all, we identified 26 migrant raptor species, five resident (non-migratory) raptors and counted more than 250,000 raptors heading south towards Malaysia, Singapore, Indonesia, Sulawesi and even the Philippines. We also counted almost 29,000 bee-eaters (three species); 20,600 Pacific Swifts; 800+ Needletail Swifts (three species); as well as more than 65,000 Barn Swallows – the first such southbound migration studies of these birds in South-east Asia.

Autumn 2012 also saw the official opening of South-east Asia's first center for raptor research and education: the Chumphon Raptor Migration and Education Center (see pages 44-45). Here, working with scientists of Thailand including Phil Round, Kaset Sutasha and those from the Forestry Department of the Department of National Parks, Wildlife and Plant Conservation, we banded birds and took blood samples for further analysis. Some of the "up close" photos in this report come from this bird banding work – which has also allowed us to note field marks we might have otherwise missed. In the nearby communities, Chukiat Nualsri initiated the first classroom visits to local schools to show kids what is happening at Khao Dinsor, and invite them to visit the Raptor Research Center to help us study the migration.

In October 2012, we lost a great man who supported the arts and sciences in Thailand, Khun Nurak Israsena (1929-2012). On pages 39 – 43, there is a wonderful story about Nurak Israsena and Edmund Pease (Nurak's partner for more than 50 years), written by Philip D. Round.

***Cover photo*: Crested Serpent Eagle, Juvenile (20 October 2012);**
***Above*: Juvenile Crested Serpent Eagle (16 October 2012)**

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Helpful Links (click): (a) Getting to Chumpon from Bangkok: fly **Solar Air**
(b) Where to stay in Chumphon?: **the Morakot Hotel**
(c) **Where to stay in Thung Wua Laen Beach near Khao Dinsor:**
Nana Beach Hotel, Baantalay Thungwualaen Hotel, Chuan Phun Lodge and
Saphli Villa Beach Resort - Book these hotels here: **Link to Thai Visa Hotels**
(d) The Best Birding Lodge in Thailand: Baan Maka
(e) Rental Car/Bangkok: Siam Rent-a-Car

Raptor Species	Total Counted	Peak Time Frame
1. Oriental Honey-buzzard	33,835	30 Sep – 8 Oct / (5,987)
2. Grey-faced Buzzard	10,159	18 Oct – 23 Oct / (3,666)
3. Chinese Sparrowhawk	83,168	20 Sep – 7 Oct / (10,321)
4. Japanese Sparrowhawk	11,907	9 Sep – 8 Oct / (750)
5. Shikra	6,086	13 Oct – 31 Oct / (420)
6. Besra	9	25 Oct – 5 Nov / (2)
7. Eurasian Sparrowhawk	3	Late October
8. Black Baza	119,324	22 Oct – 27 Oct / (29,378)
9. Jerdon's Baza	192	26 Oct – 4 Nov / (43)
10. Osprey	51	15 Oct – 23 Oct / (5)
11. Black Kite	172	2 Oct – 8 Oct / (17)
12. Brahminy Kite	21	6 Oct – 12 Oct / (4)
13. Eastern Marsh Harrier	107	30 Sep – 16 Oct / (11)
14. Pied Harrier	39	20 Oct – 28 Oct / (5)
15. Crested Serpent Eagle	393	14 Oct – 28 Oct / (49)
16. Short-toed Snake Eagle	3	21 Oct – 29 Oct / (1)
17. Greater Spotted Eagle	11	22 Oct – 31 Oct / (4)
18. Booted Eagle	74	19 Oct – 2 Nov / (12)
19. Bonelli's Eagle	1	4 Nov / (1)
20. Rufous-winged Buzzard	9	26 Oct – 4 Nov / (2)
21. Eastern Buzzard (*Buteo japonicus*)	20	26 Oct – 2 Nov / (5)
22. Steppe Buzzard (*Buteo b. vulpinus*)	16	14 Oct – 29 Oct / (4)
23. Oriental Hobby	0	Unknown
24. Eurasian Hobby	3	Early Nov (?) / (1)
25. Peregrine Falcon	17	28 Sep – 7 Oct / (4)
26. Amur Falcon	4	24 Oct – 28 Oct / (2)
27. Eurasian Kestrel	26	21 October – 3 Nov / (3)
Unidentified Raptors	*4,193*	----------
Total 2012	**269,852**	**20 Sep – 2 Nov (30,340)**

2010-11 totals are provided in Table 3 and Table 4, pages 49-50.

Table 1 (above). Raptor species identified and number counted at Khao Dinsor (Thailand), 15 August through 9 November 2012 including unidentified raptors. Number in parentheses in "Peak Time Frame" is the highest **daily** count within the peak migration period. The 2012 total is derived from combining daily observations made of the migrants heading SE past the east side of the ridge from 15 August through 31 October by Robert DeCandido, Chukiat Nuasri, Annika Forsten and Antero Lindholm, and Wanna Phatara-Atikom MD (Dr. Na). We combined these numbers with counts made by Martti Siponen (1 October through 29 October), made from the west side of the same ridge. Martti had the best position to see migrants heading WSW – that we could not see from other positions. From November 1st through 9th, Chukiat Nualsri covered the east side of the ridge, with help from others including his wife Muay, and Dr. Na.

Overall, the best time to see the most species in one day is mid-October – but different species peak at different times during the autumn migration. For example, in 2012 the Chinese Sparrowhawk and Japanese Sparrowhawk peaked from approx. 10 September through 10 October. By comparison another *Accipiter*, the

Shikra was most often seen in late October in 2012. *Note Bene*: the peak time frame for several species in 2012 varied by up to 10 days compared to previous years – compare 2012 data to 2010-11 information for Black Kite and Crested Serpent Eagle.

Best flights at Khao Dinsor occur when winds are westerly – the time of the southwest monsoon that brings rain to Thailand's west coast and places such as Kaeng Krachan National Park. Strong west winds prevail from approx. early May through 10-15 October each year (winds are stronger earlier in the season and then weaken as the calendar advances toward mid-October). These winds are part of a high pressure system over the Andaman Sea to the west that is advancing north, and brings cooling monsoon rain to Nepal and India, as well as heavy rains to western Thailand. In 2010, the winds shifted to the east via the "northeast" monsoon (centered over the South China Sea near Taiwan) approx. 20 October. In 2011 and again in 2012, the winds significantly weakened by mid-October. With east winds, migrants tend to drift further inland, and usually the best place to look for migrants is from the platform at the very top of Khao Dinsor – and not from either Shelter 2/3 – which are closer to the coast. How much weather patterns, especially wind direction and speed, as well as amount of rainfall to our north, affect what we see at Khao Dinsor remains to be determined. For example, in October 2011, it rained heavily in central and northern Thailand, yet we counted high numbers of Chinese Sparrowhawks, Eastern Marsh Harriers and Pied Harriers. In October 2012, the weather was "normal" throughout Thailand – but many fewer individuals of these three species were counted.

When winds switch to the northeast in earnest – meaning the winds come at us from the nearby South China Sea – it signals the beginning of winter in this part of Thailand. Strong winds (often 15-30km/hr) prevail with occasional heavy rains (late October) to frequent downpours (early to mid-November) along the east coast. Some of these rains can last all day – for several days in a row. In November, raptor flights are often good in the morning – in the afternoon the rains come. Patience is needed to wait out the rain for an hour of clearing skies and thermals – then the birds are off, until the heavy rains begin again. For those who have the endurance (or good luck with weather) in late October and early November, uncommon species such as Jerdon's Baza have been seen in flocks of up to 10-15 birds. We also expect the larger eagles, including Short-toed, Steppe and Imperial, to appear as well. In 2012, for whatever reason(s), we had our highest season totals yet for Jerdon's Baza, Black Baza, Crested Serpent Eagle and Shikra – all species that typically peak after 20 October. However, despite good raptor flights, dealing with the rain, wind and surprisingly cool (23C) temps in late October/early November is the most difficult part of hawk watching at Khao Dinsor. In 2012 we did not have much rain at Khao Dinsor…In 2010 we had a deluge beginning in late October; in 2011 we had reasonable amounts of rain…So wind and rain can vary much year to year in the immediate vicinity of Khao Dinsor. This likely affects what species we see at this time – and in what number.

Pied Harrier (adult male); 4 Oct 2012 – Robert DeCandido PhD (rdc)

Martti Siponen (Finland) sends a few Khao Dinsor Raptors:

Steppe Buzzard (*Buteo b. vulpinus*), Migrant
5 October 2012

Black-shouldered Kite, 5 October 2012, Local Resident
5 October 2012

Black Baza (female), Migrant; 25 October 2012; all images this page – Martti Siponen

Species	Total Counted	Peak Time Frame
1. Blue-tailed Bee-eater	26,888	27 Sep – 20 Oct / (1,506)
2. Blue-throated Bee-eater	1,863	17 Aug – 6 Oct / (135)
3. Chestnut-headed Bee-eater	144	17 Oct – 3 Nov / (43)
4. Oriental Pratincole	143	19 Oct – 29 Oct / (45)
5. Little Egret	854	4 Sep – 7 Oct / (176)
6. Great White Egret	7	18 Oct – 20 Oct / (4)
7. Black-headed Ibis	18	25 October / (18)
8. Open Bill Stork	1,321	14 Oct – 28 Oct / (202)
9. Ashy Drongo	16	8 Oct – 22 Oct / (5)
10. Black Drongo	2,012	13 Oct – 29 Oct / (685)
11. Pacific Swift	20,666	12 Sep – 22 Sep / (2,213)
12. Black-naped Oriole	141	12 Oct – 23 Oct / (45)
13. Pale-capped Pigeon	3	27 September / (3)
14. Brown-backed Needletail	37	31 Oct – 7 Nov / (7)
15. White-throated Needletail	724	25 Oct – 7 Nov / (125)
16. Silver-backed Needletail	17	19 Sep – 22 Sep (12)
17. Asian House Martin	272	21 Oct – 30 Oct / (83)
18. Sand Martin	10	27 Oct – 31 Oct / (2)
19. Red-rumped Swallow	2,849	1 Oct – 15 Oct (676)
20. Barn Swallow	68,774 (*estimate*)	19 Aug – 22 Oct (6,740)
21. Richard's Pipit	1	13 October / (1)
22. Dollarbird	53	7 Oct – 24 Oct / (16)
23. Grey Wagtail	52	19 Aug – 3 Sep / (7)
24. Forest Wagtail	4	16 October / (4)
25. Ashy Minivet	3,303	12 Oct – 31 Oct / (458)
26. Oriental Scops Owl	1	16 October / (1)
--- Dragonfly spp. (Odonata)	8,582 (*estimate*)	9 Oct – 31 Oct / (6,500)
27. Pin-tailed Parrotfinch (*2011*)	17	2 Oct – 3 Oct 2011 / (14)
28. Blue Rock Thrush (*2011*)	2	15 Oct – 16 Oct 2011 / (1)
Total 2012	26 Bird Species	Late Sep to mid-Oct

Table 2 (above). Diurnal, migrant bird species identified and number counted at Khao Dinsor (Thailand), 15 August through 9 November 2012. Number in parentheses in "Peak Time Frame" is the highest **daily** count within the peak migration period. Methods used here are the same as for how the raptors were counted, except for Barn Swallows. For these, we estimated how many past per hour rather than making counts of individual birds. For many of the species listed above, the number counted, as well as the timing of the migration, are the first data for Thailand, and perhaps all of South-east Asia. Our data show that most diurnal bird migration in Thailand takes place along the coast. For the last three years, our counts of bee-eaters and Pacific Swifts and Needletails have been remarkably similar. On the other hand, counts of Open Bill Stork have increased each year – reflecting their increase throughout the region. Numbers of Oriental Pratincole have significantly decreased in the last 30 years. Other species, such as Pin-tailed Parrotfinch and Blue Rock Thrush, we have only seen in one autumn (2011) – why? This year we added Black-headed Ibis to the list for the first time. Each year we add one or two new migrant species to the list - so our research here on "other" migrants is just beginning…

Where do the migrants head to after passing Khao Dinsor? Many Pacific Swifts as well as the Needletails spend the winter in Australia. Many thousands of bee-eaters, particularly the Blue-tailed and the Blue-throated, make a crossing from the west coast of Malaysia (at Tanjung Tuan/Port Dickson) to Sumatra…these may or may not be the birds that pass Khao Dinsor here on the east coast of Thailand. Much remains to be learned.

Adult Crested Serpent Eagle (14 Oct 2012) – rdc

Eagles (10 Species)

Of the ten eagle species that occur in this area of south-central Thailand, five are migrants we observed in autumn 2012 (Table 1). Another two species, **Steppe Eagle** (photo p. 12; bottom right) and **Imperial Eagle** (p. 10), we have not yet seen at Khao Dinsor. However, we know these two are migrants through the area because a few individuals of both species reach Malaysia in most years. Finally, there are at least three resident eagle species in the area. Two are rarely seen: **Black Eagle** (p. 13) and **Changeable Hawk-eagle** (p. 11). By comparison, the **White-bellied Sea-eagle** (p. 11) is a fairly common resident, seen going up and down the South China Sea coastline just to the east of Khao Dinsor, especially after mid-October. They often cruise right past Shelter Three (Sala 3), and that is where this photo was taken.

This was an unprecedented year for **Crested Serpent Eagle** (CSE) migration. In 2010-11 we averaged about 125 per season. In 2012 we counted 393….a 200% increase! Because we have only been counting for three seasons, we don't know if the 2012 figure represents the usual seasonal count, or if it indeed was an exceptional year (and 2010-11 were typical). Two of our counters, Annika Forsten and Antero Lindholm, made close observations of the ages of the CSE's that passed Khao Dinsor. Their preliminary data suggest that most of the CSE's we saw in 2012 were young birds: juveniles (see cover photo) or second plumage birds. On a related note, the CSE migration also began earlier this year (4 October) than in previous years. For other CSE images, see above as well as page 2 and page 10.

We added one new migrant species to the count: **Bonelli's Eagle** on 4 November – thanks to the teamwork of photographer Wanna Phatara-Atikom and Chukiat Nualsri – who was counting at the time. It was a juvenile bird (*click*: **juvenile Bonelli's Eagle - photo link**). Bonelli's Eagles have been reported from north of Khao Dinsor – but not south of us. See page 12 for a photo of an older Bonelli's Eagle.

Greater Spotted Eagle [migrant] – juvenile; Oct 2011 – Martti Siponen

Greater Spotted Eagle [migrant] 19 Jan 2013 (Petchaburi, Thailand)
***Left*: Adult; *Right*: Juvenile – both rdc**

Imperial Eagle [migrant]; juvenile – January 2013 at Petchaburi (Thailand)
Col. Nattapol Kirdchuchuen

We saw three **Short-toed Snake Eagles** in 2012 – and at least one was an older bird (photo page 11). Typically these eagles come through quite low, sometimes just over the tree-tops. Of **Booted Eagles**, we have seen 70 to 75 each season of our three years of counting. The 2012 count was 74. These eagles will also migrate close to tree-top level (photo p. 12), and the dark morphs closely resemble Black Kites. **Greater Spotted Eagles** (photos p. 9) are uncommon to rare migrants in the area. From 2010-11 we saw 20 each year; in 2012, we counted 11. Martti Siponen's wonderful photo of a juvenile (first fall) Greater Spotted Eagle is from a unique perspective: from above looking down on the bird. Note the smooth white trailing edge of the wings (meaning all secondaries and primaries are the same age), and the ample spotting on the back – characteristic of a juvenile.

Crested Serpent Eagle, Juvenile (20 October 2012) – rdc

Short-toed (Snake) Eagle; 3rd to 4th plumage [migrant]; 29 Oct – rdc

Above Left: **Changeable Hawk-eagle (dark morph), Singapore – Martti Siponen*; and***
Right: **White-bellied Sea-eagle (juvenile/1st plumage), 13 Oct – rdc;** ***both are resident species***

Booted Eagle (light morph), 28 Oct – rdc; ***migrant and winter resident in the area***

Above Left: **Bonelli's Eagle (3rd- 4th plumage), 27 Nov (Nepal) – rdc*; and***
Right: **Steppe Eagle (2nd - 3rd plumage), 24 Nov (Nepal) – rdc;** ***both are migrant species at Khao Dinsor***

Note: not all raptor migration occurs from north to south in the Far East. There is a major east to west autumn migration route as well.
For more information, download the **2012 Raptor Migration in Nepal** article – authored by **Tulsi Subedi** and others:
https://www.dropbox.com/s/gvwl7djbwkic8vt/2012.FinalReport.Nepal.pdf

Black Eagle (adult), 10 November (Nepal) – rdc; *very rare resident in the area of Khao Dinsor*

Oriental Honey-buzzard and the Kites (Black; Brahminy)

We saw approximately the same number of **Oriental Honey-buzzards** (*Pernis ptilorhynchus orientalis*) in autumn 2012 (33,835) as 2011 (36,399), and autumn 2010 (32,870). Two-thirds (67%) of this migration takes place from 9am through 1pm (09h00 to 13h00). Up to 3% of the Oriental Honey-buzzards (OHBs) passing Khao Dinsor have a full crop (photo top p. 14) – or are carrying food with them. In 2012 we again photographed an OHB carrying a honey-comb on migration (photo below). OHBs primarily eat the bee/wasp larvae in these combs. Beginning at first light, these large raptors are likely using the early morning hours to hunt for rodents in the endless agricultural forests of Oil Palm in the area. Once the first strong thermals begin rising at about 8:30am (08h30), the OHBs begin their migration for the day. For the entire season during 2010-2012, peak migration time has always been in early October for this species. Adults (pages 14-15) precede juveniles (p. 15, top right). We see very few juveniles (= first year birds) each autumn, but more second-year birds. Later in the season, the primary migration time of juveniles, they seem to use a different (inland) route several kilometers to our west, particularly once winds have switched to NE.

Oriental Honey-buzzard (adult female), with honey-comb;
30 September – rdc

Oriental Honey-buzzard (adult male) with full crop, 25 September 2012 – rdc

Oriental Honey-buzzard (adult female), 5 October 2012 – rdc

Oriental Honey-buzzard (adult male), 5 October 2012

Oriental Honey-buzzard (juvenile), 19 October 2012 - rdc

Oriental Honey-buzzard (adult male), 29 September 2012 – rdc

OHB (adult female), 5 October 2012 - rdc


Left: **Brahminy Kite (juvenile), 19 Jan 2013, Petchaburi (Thailand) – rdc**
Right: **Brahminy Kite (juvenile), 6 Oct 2012, Khao Dinsor – Martti Siponen**

Brahminy Kites migrate through this part of South-east Asia in small number – we average somewhere between 13 and 25 each season. They sometimes pass close to the ridge at Khao Dinsor (photos pages 16-17).

Brahminy Kite (adult), 25 August - rdc

Brahminy Kite (adult), 25 August - rdc

There are two species (or sub-species depending upon which taxonomy one follows) of Black Kite in this area: the northern **Black-eared Kite** *Milvus migrans* ssp. *lineatus*; and the **Pariah (Black) Kite**, *Milvus migrans* ssp. *govinda*. To date at Khao Dinsor, we have only seen Black-eared Kites (*lineatus*) on migration. However, just north of us at the Rice Fields near Petchaburi, there are a number of Pariah Kites (*govinda*). And in our research in Nepal, we have seen Pariah Kites migrating east to west – so we know that this (sub)species migrates in small numbers in at least part of its range.

Black-eared Kite (ssp. *lineatus*); juvenile – showing the black "ear" on light head; 4 October (Khao Dinsor) – rdc


Top left: **Black-eared Kite ssp. *lineatus* (1st – 2nd plumage), Petchaburi (Thailand), 18 January 2013 – rdc**
Right: **Black-eared Kite ssp. *lineatus* (almost adult), Petchaburi (Thailand), 19 January 2013 – rdc**

The problem has been how to distinguish between the two (sub)species? Reading the different field guides to birds in the region from India east to the Thai-Malay peninsula, left us perplexed…some books had fine descriptions but the accompanying visuals were lacking – or vice versa. This year we had the opportunity to photograph both the Black-eared Kite and the Pariah Kite in multiple locations in Thailand and Nepal. And we can report that it is not always possible to separate the two in the field, especially of flying birds. There is overlap in some plumage characters. However, digital photography really helps the identification process…and by selecting individuals toward the extremes, we came up with the following guidelines:

Above are two sub-adult Black-eared Kites (*lineatus*). When looking up at these kites in all plumages, juvenile through adult, note (**a**) that the vent area is noticeably lighter than the upper chest; (**b**) the white streaking on the body is thicker/broader than on *govinda*; (**c**) the white patch at the base of the primaries is usually large – larger than in *govinda*; (**d**) in older birds (2nd plumage through adult), the feet and cere are greenish rather than the deep yellow of *govinda*; and (**e**) *lineatus* kites usually have a distinctive black smudge (= the ear) behind the eye on a light-colored head. Finally (**f**), if individuals of both *lineatus* and *govinda* are present and flying together in an area, *lineatus* will be somewhat (approx. 10-15%) larger. See the next page for information and photos of the Pariah Kite (*govinda*).

For 2012 at Khao Dinsor, we counted 172 migrating Black Kites – which is remarkably similar to the numbers seen in previous years: in 2010 (168); and in 2011 (173). However, each year has seen a slightly different peak time frame of migration – anywhere between early to late October. We don't know why...yet.

Top left: **Black Kite ssp. *govinda* (juvenile), Petchaburi (Thailand), 18 January 2013 – rdc**
Right: **Black Kite ssp. *govinda* (adult), Petchaburi (Thailand), 19 January 2013 – rdc**

Compared to the Black-eared Kite (*lineatus*) photos shown on the previous page, the Pariah *govinda* Kite shows the following characters when photographed in good, even light: (**a**) there is no distinct plumage difference between the upper half of the body and the vent area – it is uniformly dark; (**b**) the white streaking on the body of juveniles is thinner than on *lineatus*; (**c**) the white patch at the base of the primaries is small – and often marked with barring or streaking; (**d**) in older birds, the feet and cere are a lovely golden yellow in color (above right photo); however, caution! Because the cere and feet reflect light…and in Thailand, the light is very strong: not every photo shows this character well – caution must be used. In many photos we have taken, the feet and cere are overexposed – and look white ("burned out"). Finally (**e**), in flight, *govinda* can show a more lunate (forked) tail – but since kites twist and turn so often in flight, this is a less useful character.

Black Kite ssp. *govinda* (adult), Kathmandu (Nepal), 7 December 2012 – rdc
Note the poorly defined "black-ear" characteristic of *lineatus* kites

Grey-faced Buzzard

Grey-faced Buzzards (GFBs) remain an enigma. It is the only species for which we have counted more individuals during spring (northbound) migration, than in any of the three autumn (southbound) counts 2010-2012. In spring 2007-08 we averaged about 18,000 GFBs per season, but in autumn 2010-2012 we are averaging a little more than 11,000 per year. Peak migration time is similar each year, approximately 18 October through 26 October – right about the time the Northeast Monsoon and associated winds are increasing. Perhaps it is the strength of the wind that determines how far inland (vs. along the coast), the GFB flight drifts. Our data show that about 91% of the GFB flight occurs before 12noon (12h00) at Khao Dinsor. This strongly suggests that weather, likely wind direction and speed, shift the GFB further inland by the early afternoon. However, there are other possible explanations, and the GFB migration is complex: some individuals of the continental breeding population migrate from the mainland to Taiwan and then make overwater, offshore flights south to the Philippines and Sulawesi; while others migrate on the continent from China south to pass over us at Khao Dinsor to Malaysia. We don't yet know if migrants use the same route each year, or some birds migrate offshore one year, and then use a continental route the following one.

While we see many Oriental Honey-buzzards on migration with a full crop, we have yet to see a single GFB with a full crop as these raptors pass us at Khao Dinsor. Below and on the following page, we present photographs of juveniles and adults. Martti Siponen's photo of an adult (looking down from above) shows how strikingly handsome this bird is in flight (see p. 21, top right).

Grey-faced Buzzard (adult), 18 October – rdc

Top left: **Grey-faced Buzzard (juvenile), 18 October – rdc**
Right: **Grey-faced Buzzard (adult, likely male), 23 October – Martti Siponen**

Grey-faced Buzzard (juvenile), 18 October – rdc

Falcons

In 2012, we observed four migrant falcon species as we did in 2010-11. We show two below, the **Peregrine Falcon ssp. *japonicus***, and the **Eurasian Kestrel**. In the three years of this count, we have not yet seen the **Oriental Hobby,** which should be a resident in this area. **Eurasian Hobby** was only seen in early November this year, later than in 2010-11, when the first ones were seen in mid- to late October. Our **Amur Falcon** numbers were exactly the same as last year (4). However, our Peregrine numbers were 60% lower than in 2011 (17, compared to 44 in 2011).

Peregrine Falcon ssp. *japonicus* (both adults and probably females), 30 Sep (left) and 1 October (right) – rdc

Eurasian (Common) Kestrel (juvenile female), 22 October 2012

Harriers

In the three years of this count, we have only seen two harrier species on migration: the **Eastern Marsh Harrier** and the **Pied Harrier** (photo p. 5). In 2012, we counted the lowest number of both harrier species. Compared to the 2010-11 numbers, we tallied 38% fewer Eastern Marsh Harriers in 2012, and 27% fewer Pied Harriers. However, the peak flight time for both species has been consistent through the first three years of this count: the first half of October for Eastern Marsh Harrier, and the last ten days of October for the Pied Harrier.

Harriers present difficult identification challenges, particularly individuals in juvenile through sub-adult plumage. Below we present several plumages showing different ages and sexes of the Eastern Marsh Harrier. In flight, Eastern Marsh Harriers are noticeably larger than Pied Harriers.

Eastern Marsh Harrier; *Left:* juvenile female (25 September); *Right:* juvenile (7 October); Both – rdc

Eastern Marsh Harrier; *Left:* Adult male 23 September 2012;
***Right*: 2nd Year Male, 5 October 2011; Both – rdc**

Eastern Marsh Harrier, adult female; 2 October – rdc

Bazas

The 2012 **Black Baza** (119,000) count was 14% higher than the 2011 total, and 38% higher than the 2010 total. This reflects increased coverage by experienced observers in 2012 – as well as more Black Bazas passing through the area. In 2012, 82% of the Black Baza flight occurred before 12noon (12h00), with 73% of the flight occurring from 9am-12pm (09h00 to 12h00). Most of this flight was best seen along the east (coast) side of Khao Dinsor – nearest Shelters 2/3; in 2011, most Black Bazas were counted to the west of Khao Dinsor – by Martti Siponen and Matti Pajunen from the very top of the ridge, often looking far to the west. When the 2012 Black Baza data are compared to 2011 data, the pattern is remarkably similar: in 2011-12, > 80% of the Black Baza migration occurred before noon (12h00); and in both years, the peak hour of migration was 11am-12noon (11h00-12h00). Our best interpretation in what we are seeing is that in the morning until about 10am (10h00), the Black Baza flight drifts towards the east coast on very light westerly winds. Beginning at about 10am (10h00), with increasing thermals and rising continental air, a northeast sea-breeze kicks in, and the Black Baza flight begins to drift inland. It may be that by the mid-afternoon, the bulk of the Black Baza flight drifts much further inland – where we cannot see it from our current vantage points at Khao Dinsor. Comparing the data from Black Bazas to Grey-faced Buzzards, we see a very similar pattern in this late October flight: a very strong (>80% of the daily flight) movement before 12 noon (12h00) at Khao Dinsor, and significantly fewer flocks and individuals seen in the afternoon.

Much confusion exists in the literature regarding how to distinguish males from females. We have chosen a method developed in India: researchers determined by watching adults at a nest, the female (when looking up at her from below) had more red barring than the male. Others contend there is much variation in plumage… However, it is unusual to see a female-type bird (below left; see also photo bottom page 6) with such heavy, black markings on the distal portion of her tail, and the trailing edge of her wings. Is this a different subspecies? More photographic research is needed. The bird on the right might be a sub-adult male with that amount of chestnut-brown in the tail and secondaries.

Black Baza; *Left:* adult female (26 October); *Right:* adult male (31 October 2011) – rdc

This was also a banner year for **Jerdon's Bazas** – we counted 192, which is more than double the 2011 total (78), and almost ten times(!) as many as we counted in 2010 (20). In 2010-2102, the Jerdon's Baza flight has always started after 21 October, and peaked in the last few days of October into early November.

Jerdon's Baza, juvenile male (27 October) – *Robert DeCandido PhD*

Sparrowhawks *(Accipiters)*

Six species of Accipiters *can be seen at Khao Dinsor – more than at any other raptor migration watch site in the world. After approx. 18 October, it is possible to see all six species in one day. Five are migratory (see Table 1), and another (Crested Goshawk) is resident and breeds in the region – even at Khao Dinsor. We are trapping and banding raptors, primarily Japanese and Chinese Sparrowhawks, on a regular basis. For permission to do this, we thank the Wildlife Conservation Office of the Department of National Parks. We want to fit several sparrowhawks with satellite telemetry tracking devices so we can (**a**) involve students from schools in Thailand to follow "their birds" south via computer as these raptors migrate through Thailand to Malaysia and beyond; and (**b**) better understand the route(s) taken by males vs. females vs. young* Accipiters *as they head south, and then return north.*

At Khao Dinsor, the **Chinese Sparrowhawk** is the most commonly seen *Accipiter* (83,000 in 2012; 124,000 in 2011; 83,000 in 2010) – and raptor species. Adults and juveniles migrate together throughout the autumn, with juveniles making up an increasingly greater proportion of the flight by approx. 5 October. By comparison, most (>70%) of the adult **Japanese Sparrowhawks** have already passed us, by the time the first-year birds begin migrating in earnest – about 10 October. Japanese Sparrowhawks have the longest migration period of all the Asian raptor species. In 2012 this flight began on 21 August and continued until 9 November – we counted 11,900 in 2012, down 10% from 13,174 in 2011. The **Shikra** migration begins in late September with a strong movement of juveniles; adults don't begin migrating in earnest until after 15 October, composing 50% of the Shikra flight for the remainder of the season. Our 2012 Shikra total (6,086) was the highest seasonal count to date – a 40% increase from 2011.

The timing of Chinese Sparrowhawk, Japanese Sparrowhawk and Shikra migration has been remarkably consistent in 2010-12. Chinese Sparrowhawks peaked in late September through early October, while Japanese Sparrowhawks peaked from about 10 September through 10 October. Shikra migration peaked from approx. 15 October through early November. On a daily basis in 2010-2012, Sparrowhawk migration occurred throughout the day: 50% of the Japanese Sparrowhawk and Shikra flight occurred from 12noon through 6pm (12h00 to 18h00), while 40% of the Chinese Sparrowhawk flight occurred in the afternoon – probably because some flocks got so high we could not accurately count them. This pattern is very different than the Black Baza and Grey-faced Buzzard migration – more than 80% of the Black Baza flight (and > 90% of all Grey-faced Buzzards) were counted before 12noon (12h00) in 2010-2012.

Japanese Sparrowhawk, adult females (*Left:* 18 September; *Right:* 20 September) – *rdc*

It is much fun to watch the Sparrowhawk migration at Khao Dinsor. Local weather conditions (moderate southerly headwinds until about 10-15 October each year) keep many Japanese Sparrowhawks migrating low – especially the smaller males who use the ridge to block the headwinds generated along the ridge. (Females are larger and stronger fliers so can migrate higher.) We are able to trap males easily with mist nets strung along the ridge-line. We trap most of the Chinese Sparrowhawks later in the day (after 4pm; 16h00) – the close-up images of sparrowhawks above and on the following pages are individuals we trapped in those mist nets.

Japanese Sparrowhawk, adult male (17 September) – rdc

Japanese Sparrowhawk, juvenile females *(Left:* 20 September; *Right:* 18 October) – rdc

Left: **Chinese Sparrowhawk, adult female (15 September);** ***Right*****: Chinese Sparrowhawk, adult male (7 October) – rdc**

Left: **Chinese Sparrowhawk, juvenile, likely female (3 October);** ***Right*****: Chinese Sparrowhawk, juvenile (20 September)**


Shikra, adult female [both images]; *left:* 25 September 2012 – rdc*; Right: 2* October 2012 – Martti Siponen

Shikra, juvenile; 11 October 2012 – *Robert DeCandido PhD*

So far we have not had much luck trapping the Shikra on migration – probably because the main migration period for this species is after 15 October – when winds slacken considerably. At this time, *Accipiters* tend to migrate higher over the ridge, because they have no need to use the ridge to block a headwind. However, we remain optimistic: with so many juveniles passing Khao Dinsor, at least a few must be very hungry and fly low and through the forest in search of prey…and end up in our nets. Late October seems to be the best time to see the two least common *Accipiters* at Khao Dinsor: the **Besra** and the **Eurasian Sparrowhawk**. In 2012 we took the first good photographs of juvenile Besra (see following page). However, the Eurasian Sparrowhawk remains elusive – we do think they are more common than our numbers to date (about five per year) indicate.

Besra, juvenile male (19 October 2012) - rdc

Shikra, adult male (15 Oct 2012) – rdc

Adult male Crested Goshawk [resident], 30 August 2012 – rdc

The **Crested Goshawk** bred at Khao Dinsor in summer 2012, just as it did in 2010 (but not 2011). When I arrived on 15 August 2012, two young Crested Goshawks often chased one another in the area, and the young male liked to perch just outside Shelter 3. By October, I saw the young birds less frequently, possibly because the adults were nesting again in the forest south of Shelter 3. The adult male, and occasionally the female, would perform display flights in the area – extending their ventral feathers and doing a "winnowing" wing beat (shallow, rapid wing beats for 3-6 seconds) – ostensibly to warn other raptors that their territory was occupied. The guide books are not clear on which sex does such flights – our observations indicate that both sexes perform these display flights.

For those interested primarily in identification, and not behavior, please note that three of our sparrowhawks have strongly colored eye rings: Japanese Sparrowhawk, Besra and Crested Goshawk.

SIX! Accipiter Species (Five are Migrants)


Japanese sparrow hawk Juv


crested goshawk juv


Shikra juvenile


Chinese Sparrowhawk juvenile


Besra juvenile

Oriental Scops Owl (Rufous Morph); 16 October 2012 – Kaset Sutasha DVM

Other Birds

Khao Dinsor correctly receives recognition as a Raptor Migration Watch Site of **global** significance. However, attention is steadily increasing on the "other" bird species that migrate through this area. The data we are collecting for many species including the drongos, swifts, needletails, swallows, minivets, herons and others – are the first such information in South-east Asia, and for most of these, the first information from the Oriental region. See Table 2, page 7 for more information.

Oriental Pratincole Flock; 28 October 2012 – rdc

On 16 October, Dr. Kaset Sutasha made a wonderful discovery. By setting up his mist net near the top of the ridge, and before earliest light, he was able to trap the first **Oriental Scops Owl** (top photo) at Khao Dinsor. In Thailand, it is well-known that this owl migrates in good number, and we believe there is a large migration of this species along the coast – just as the Northen Saw-whet Owl migrates in large number in eastern North America. In 2013, perhaps by using an audio lure (as is done to trap migrating saw-whet owls in North America), we can trap more owls – and determine the extent of Oriental Scops Owl migration in Thailand.

***Left*: Blue-throated Bee-eater (sub-adult); 20 August*; and Right:* Blue-tailed Bee-eater; 26 September – both rdc**

Bee-eaters continue to interest us. In 2012 we discovered that the **Blue-throated Bee-eater** migration begins by mid-August, and possibly by late July. On 20 August we photographed (above left) a sub-adult Blue-throat which was not in juvenile plumage, nor complete adult plumage. This transitional (second-year) plumage is not described in the literature so far as we are aware. By comparison, the **Blue-tailed Bee-eater** migration begins later in the season, peaking later than the Blue-throated migration. The almost 27,000 Blue-tails we counted this year are the highest total to date. It is the rare exception when we see a Blue-tail mixed into a Blue-throat flock or vice-versa. Finally, in 2012 we tallied our highest number of **Chestnut-headed Bee-eaters** (144) – this species peaks in late October through early November each year.

***Left:* Ashy Minivet (adult female); 16 October*; and Right:* Dollarbird; 10 October – both rdc**

Autumn 2012 was also a good year for **Ashy Minivets** (previous page, bottom left). Small flocks of these birds first passed us on 10 October and continued for the rest of the month. Peak migration time was 18-19 October, when approx. 900 were counted, and a few were captured in Dr. Kaset Sutasha's mist nets (bottom p. 34). We tallied more than 3,300 in 2012 – our highest total to date. Autumn 2012 was also a good year for **Dollarbirds** – we counted 58. The peak of the season is about 10-15 October. Most Dollarbirds are seen in flight later in the afternoon (after 3pm; 15h00) suggesting that their migration continues after dark.

Pacific Swift migration peaked in mid-September this year, while in 2011 the peak time frame was the last ten days of September. In 2012, two-thirds (68%) of the Pacific Swift flight occurred in the afternoon (after 12noon; from 12h00 to 18h00), while in 2011, 70% of the flight occurred in the afternoon. These are remarkably consistent results, suggesting that something is happening in the atmosphere that brings most Pacific Swifts to us after 12noon (12h00). By comparison, **Needletail** numbers (three species) were down by 15% from 2011. However, the peak flight time during the day was in the afternoon in both years – very similar to the Pacific Swift and Blue-tailed Bee-eater daily migration pattern. In all years, the **White-throated Needletail** (724) has been the most common species (in 2012, 93% of all needletails). The Needletails are sometimes seen in mixed species flocks with **Brown-backed Needletail** (6% of the Needletail flight) and very rarely a **Silver-backed Needletail** (1%), the other species we see on migration.

Left: **Pacific Swift, 28 August; and** ***Right:*** **Pacific Swift, 29 August**

White-throated Needletail; 1 October – rdc

Barn Swallows roosting together at night; 16 September; Chumphon City – Wanna Phatara-Atikom MD

Early in the evening, 6:10pm (18h10) on 16 September, there was a major migration of **Barn Swallows** along the coast that was easily seen at nearby Thung Wua Laen Beach – most swallows were only a meter or two above the beach or adjacent South China Sea. A few thousand came through in 45 minutes. (These are not included in the 2012 Khao Dinsor count.) Several Japanese Sparrowhawks were also migrating and diving to catch (unsuccessfully) the migrating Barn Swallows. After approximately 6:45pm (18h45), with just a trace amount of light left, the Barn Swallows that had been migrating as lone birds, came together to form tight flocks – something I had never seen Barn Swallows do. Late that same evening (approximately 10:30pm; 22h30), Dr. Wanna Phatara-Atikom emailed me a photo (above) she had taken when she left her office in Chumphon City for the night. There were hundreds of Barn Swallows roosting in the parking lot of her hospital. Chumphon City is approx. 15km (9 miles) south from Thung Wua Laen Beach.

Open Bill Storks, 11 October – rdc

Other migrants of note at Khao Dinsor in autumn 2012 include **Open Bill Storks** (photo previous page, bottom). The stork flight was exceptional this year (1,321), and it is no wonder why our colleagues in Malaysia started reporting large numbers of Open Bills by November 2012. Previous counts of Open Bill Storks at Khao Dinsor were 38 (2010) and 49 (2011). This species is on the increase in South-east Asia. Interestingly, until the 1980s Open Bill Storks migrated in largest number from east to west across South-east Asia to winter in Sri Lanka. By the late 1980s, with the introduction of a non-native wetland snail (the Apple Snail), Open Bill Storks increased in number throughout South-east Asia – and now migrate predominantly north to south. In 2012 we added a new wetland species to the list of migrants seen at Khao Dinsor: on 25 October a flock of 18 **Black-headed Ibis** (below) passed to the east of Shelter 2, and they were immediately identified by an excited Annika Forsten and Antero Lindholm of Finland.

Black-headed Ibis; 19 January 2013 (*seen at Khao Dinsor on 25 October*)

Brown Shrike; 26 September – rdc

Finally, there are many other migrants we see or catch in our nets at Khao Dinsor that do not fly past the watch site during the day. Sometimes these make an appearance in the nearby trees – the Brown Shrike (above) is the most obvious example. Andy Pierce, Chukiat Nualsri, Kaset Sutasha and Phil Round have banded individuals of the following species: Paradise Flycatcher (Light Morph), Eastern Crowned Warbler, Pale-legged Leaf Warbler, Plain-tailed Warbler, Yellow-rumped Flycatcher, Orange-bellied Flowerpecker, Siberian Blue Robin, Stripe-throated Bulbul and Crow-billed Drongo.

View looking southeast from Khao Dinsor in Infra-red, 17 August 2012

Directions via Car to Khao Dinsor from Highway 4

Khao Dinsor (Pencil Hill) is south of the town of **Pathiu** by about 10km, and approximately 25 km north-east of **Chumphon**. Khao Dinsor is also approx. 6 km northwest of the lovely, beach resort town of **Thung Wua Laen Beach** located right on the South China Sea, see photo page 46. To get to Khao Dinsor from Highway 4 (also known as Petchkasem Highway and the King's Highway), whether traveling from the north or the south, find the Tha Sae junction, north of Chumphon. At this junction, turn onto the well-marked road 3180. Travel towards the coast along the 3180 for 15 km until a sign indicating "Pathiu, Chumphon Airport" appears, and turn left off the 3180 onto the 3201. Take the 3201 for 4 km. A large wat (temple complex) on the left is the signal point for the Khao Dinsor Hill about 1 km beyond. The Khao Dinsor sign (note Pencil sculpture!) is on the left side of the road. Take the access road (*see photo below*) which twists and turns up the hill for roughly 1 km until a large car park appears on the left. You may park here (bathrooms nearby) and walk up the nearby concrete stairway, OR continue driving another 125 meters to a smaller parking lot (holds 10 cars) – the Chumphon Raptor Center Building is here (bathrooms may or may not be open at this location). Adjacent to the Raptor Center, a narrow concrete trail leads into the forest. It is a 45-60 minute walk up hill until you reach the top, though there are a number of observation points along the trail, some of which have wooden shelters that provide protection from sun and rain. Please take away all your garbage, since there are no receptacles along the trail. There are no restrooms along the trail itself – the only restrooms are in the Parking Lot. Please bring water with you – about 1.5 liters per person is good.

Note: if arriving by air at the Chumphon Airport (located about 5km directly east of the town of Pathiu), there are free shuttle buses to both Chumphon City and Thung Wua Laen Beach. **If you can arrange to stay at Thung Wua Laen Beach, we think you will have a better experience.** You can hire a small taxi/car/tuk-tuk to take you up to Khao Dinsor each day. From Thung Wae Laen Beach you will pass through the very small town of Saphli where you can purchase breakfast and lunch to take with you (many small food vendors along the main street). For dinner, at Thung Wua Laen Beach, there are several fine restaurants – about $10 person for a fine meal. If using a GPS in your car, these are the GPS coordinates for the entrance road to Khao Dinsor (photo below):

10° 38" 000' North and 99° 17' 193" East

Memories of Birdwatching with Nurak

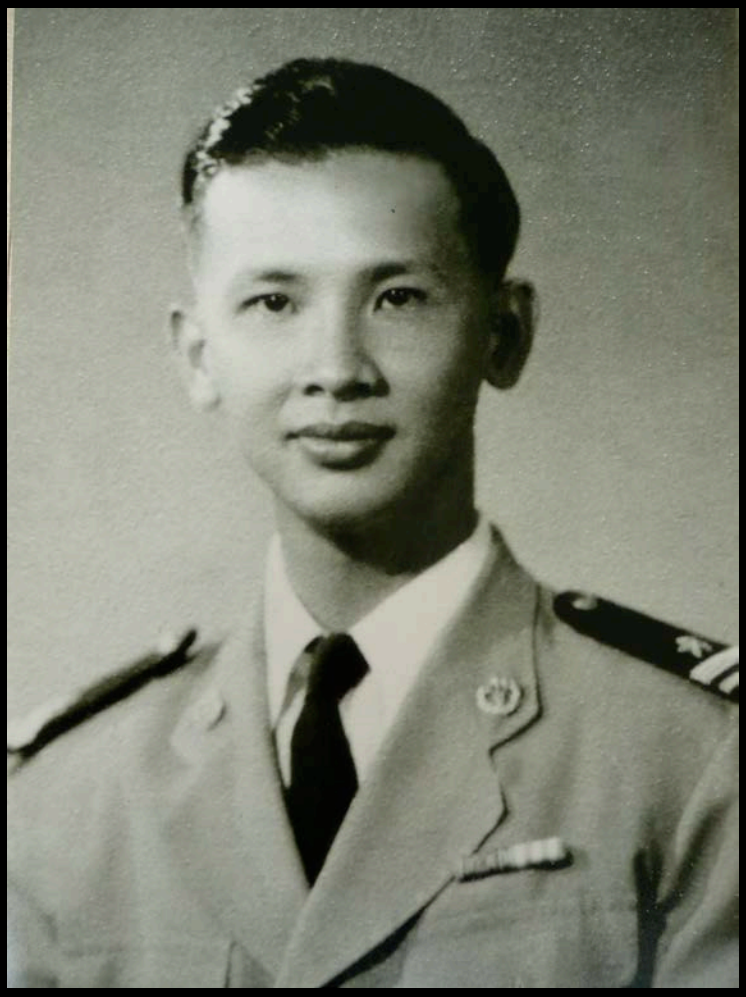
Philip D. Round

My first trip with Khun Nurak, and with Edmund, was in January 1982, when we went birding together on Doi Inthanon. It's so long ago that I don't recall how my introduction to Khun Nurak came about, but in all likelihood it came *via* Dr. Boonsong Lekagul. I imagine that I must have met Nurak and Edmund earlier, in Dr. Boonsong's office, but if so my diary fails to record the event. Doctor Boonsong's dusty office was a large room, with a ceiling fan, the walls of which were lined with bookcases and cabinets of bird specimens, and adorned with the antlers and horns of extinct or endangered deer and wild cattle.

Dr. Boonsong was a prominent Thai conservationist and authority on Thai wildlife, with whom I then worked, and in those far off days anybody who wanted advice on birds or wildlife in Thailand had little option but to consult with him. At that time I was also teaching ornithology at Chiang Mai University, where I would be throughout the Christmas and New Year Period, and it was somehow agreed that, as a bird expert, I would accompany Khun Nurak and Edmund during their visit to Doi Inthanon.

We set out for the mountain from Chiang Mai on the afternoon of 6 January 1982. Now, all my previous visits to the mountain had been as a backpacker, more or less, and moreover when I overnighted on the mountain myself, it was in a usefully vacant, disused and semi-derelict national park bungalow which was supposedly haunted by the ghost of a police officer, murdered there some time before by the Hmong tribesman who reportedly stole his pearl-handled pistol. I used to buy rice and tinned fish for my evening meal from a shop in the Hmong village at Km 31, and shiver in my sleeping bag on the hard wooden floor of that draughty, empty, house during the nights.

To travel to the mountain with a vehicle and driver, as I did with Edmund and Nurak, was an unaccustomed luxury for me. But I remember that, owing to the difficulty of booking park accommodation, and in the absence of any alternative (the park and surroundings were much less



developed in those days), I had suggested we should sleep in the town of Chom Thong, near the base of the mountain, where I was sure we would find a hotel. That was my first mistake! These days there are any number of resorts around Chom Thong that offer accommodation in pleasing surroundings, but in those far-off days, there just weren't any!

My Thai language skills at that time were worse than rudimentary, and it fell to our driver, whose name I can no longer remember, and to Khun Nurak, to sort things out. The driver reported back that there just weren't any hotels to be had in Chom Thong. (There probably were, but the unspoken implication, if they existed at all, was that they all either doubled as "knocking shops", and/or were dirty, ramshackle and rat-infested.). What were we to do? Absolutely no worries at all! There may not have been any tourist accommodation, but we could always overnight at the temple, at Namtok Mae Klang, as Khun Nurak suggested. And so that is where we spent the next couple of nights.

This was a great illustration to me of Nurak's unflappability, adaptability and unfailing good humour (and, it must be said, Edmund's too) in the face of minor adversity. These traits of course, are shared widely among Thai people and were again recently displayed on a national scale, in the face of much greater adversity, when the 2011 floods caused so much distress. (And when Nurak and Edmund were marooned in their house near Wat Raikhing, so was I in mine, in Nong Khaem).

My 1982 notebook dwells mostly on the great many birds that we saw during our stay on the mountain, and gives scant attention to the logistics of that particular trip. But I do remember our driver became worried when I suggested that we should bird watch along the road to Mae Chaem. In those days, there was still an active insurgency in some places, and Mae Chaem District was apparently still among them. Even though Doi Inthanon has changed considerably since those days it hasn't changed THAT much. Today, as then, there are few trails for birdwatchers beyond the Ang Ka boardwalk on the summit, which necessarily has to be shared with the noisy tourist multitudes. In fact, the tallest most species-rich forest on the mountain (in terms of both plants and birds) is not on the summit, but part way up the mountain, by what is now the second park

checkpoint, around 1600m to 1700m elevation, where the Mae Chaem road branches off. Now, just as then, if you want to see scarce and hard to observe understory birds, you have little option but to head off into the forest undergrowth, where there are no trails as such. You must follow the course of damp gullies, working along slowly, clambering over obstacles, trying not to trip over fallen logs or exposed tree-roots, looking for movement and listening for bird calls in the dank and gloomy vegetation of the forest floor. And that is what Nurak, Edmund and I did for an hour or two, chasing, and finally seeing, Slaty-bellied Tesia (aptly named, that teaser!) and many other kinds of birds

Rockport, Massachusetts in October 1963 – *Edmund Pease*

Returning to the mountain summit, a day later, we also found what was then Thailand's first record of Dusky Thrush, and spent a good time watching it. Red-throated Thrushes (another first country record) and Chestnut Thrush also enthralled us. In fact, that year the summit of the mountain was alive with flocks of migrant thrushes from northern China. The experience seemed utterly magic to me, as I hope it did to Nurak and Edmund too. Thirty years have since elapsed, but I have waited in vain to experience another thrush influx that compares in magnitude and diversity with that of January 1982.

I am also reminded that Nurak was much amused by my occasional propensity to hurl myself to the ground and unfurl my three-feet long, "brass-and-glass", Broadhurst-Clarkson telescope which, as I stretched out prone, I supported on my knees, in order to examine perched and stationary birds in close-up at 30x magnification. Such 'scopes were scarcely known to either Nurak or Edmund from their North American birding milieu, where the instrument of choice was the (optically far superior) Bausch and Lomb prismatic telescope, mounted on a tripod. My telescope may have looked like a genuine antique from a Royal Naval frigate of the late eighteenth century, but in reality it had been purchased by me brand-new from the makers, as recently as 1970, when I was still a schoolboy, for the then-princely sum of GBP 27 and ten shillings. In the mid to late 1960s such telescopes were *de rigeur* among hardcore British birdwatchers, and they remained in widespread use for at least another decade.

As I remember Nurak and Edmund left Doi Inthanon later that day, but I stayed on, as I had a group of Chiang Mai students and lecturers that were joining me on the mountain.

Another fifteen years elapsed before Nurak, Edmund and I did another major birding trip together. This was in the course of an organized birdwatching tour for a US-based company. Improved access and facilities had, by then, opened up additional mountain areas to visit and explore. In the trip's concluding days we overnighted at a lovely resort in the hills of Chiang Dao District that was ideally placed to enable us to strike out, on successive days, for the mountains of Doi Ang Khang to the north (holding such treasures as Red-faced Liocichla and Chestnut-headed Tesia), and Doi Chiang Dao, a little to the south, for the magnificent and charismatic Giant Nuthatch. My principal memory concerning Khun Nurak on that trip was gastronomic/gustatory rather than ornithological, however. The resort had its own orange orchard and, moreover, some of the staff delighted in harvesting the oranges from which they manufactured their own rough-cut, bitter marmalade. This home-made

Chukiat Nualsri, Robert DeCandido, Edmund Pease & Nurak Israsena
Promsri Hill just west of Chumphon, Thailand in March 2008 – *Santi Lojanayonkit*

Chiang Dao breakfast marmalade was a marvel, indeed, compared to the sugary mass-produced stuff that passes for marmalade in most hotels and resorts. Admittedly, on a birding tour, where you may consume cereal, ham and eggs, or *khao tom,* bleary-eyed, as early as 04:30am in order to reach the best watching spot at the crack of dawn, you have scant time to appreciate the finer points of the breakfast experience. But the marmalade made an impression, even so, and on our last day, when we returned to the resort for lunch, and before heading back to

Chiang Mai for our late afternoon flight back to Bangkok, both Nurak and I made sure that we each secured a pot of that Chiang Dao orange marmalade to take with us to our respective homes.

Since then our paths have crossed frequently, at Laem Phak Bia, on the coast in Phetchaburi; in connection with the Bird Conservation Society of Thailand; and also with the newly established Raptor Research and Education Center at Khao Dinsor, Chumphon Province, developed and promoted by the extraordinarily dedicated, committed and far-sighted Chukiat Nualsri. Both Edmund and Nurak were enthusiastic supporters and financial sponsors of conservation and awareness efforts associated with migratory raptors in Chumphon from the earliest days. When Nurak's increasing physical frailty began to constrain his field activities, I suggested that he be designated a "National Treasure" rather as was David Attenborough in UK, another octogenarian, since each, in their own way, shared a similar lifelong preoccupation with, and concern for, the wonders of the natural world.

While I shall sorely miss Khun Nurak, like his other friends in the birdwatching community I shall always be reminded of his sweetness, greatness and goodness every time I return to visit the birding haunts that he so much enjoyed.

Philip Round
21 January 2013

Note: *Phil Round 's* Reflection *will be included in a memorial book to be issued late this year. The book includes bird photography contributed by friends of Nurak, and a variety of interesting material that illuminates the life of this multi-faceted individual. If you are interested in receiving a free copy of Nurak's Book, just send an e-mail with your* Name *and* Mailing Address *to Edmund Pease, Nurak's partner of more than 50 years, at* **Baan.Suksabye@gmail.com**

Chumphon Raptor Migration and Education Center, March 2013 – Chukiat Nualsri

The ***Chumphon Raptor Research and Education Center*** *was completed in late summer 2012. On Sunday, 21 October 2012, the Center was officially opened to the public. Guests came from all parts of Thailand, Indonesia, Malaysia, Taiwan, Japan, the Philippines and as far away as North America. Below and on the following page, are a series of photos by* ***Chukiat Nualsri*** *showing some of the visual highlights of the complex and related facilities including two new (February 2013) observation platforms at Shelter 2 (bottom p.45) and another at the very top of Khao Dinsor (photo p.47); below left (bottom) shows the presentation of a Buddha statue in honor of Nurak Israsena.*

Everyone turned to watch as a Booted Eagle passed overhead at the Opening Ceremony, 21 October – Chukiat Nualsri

Presentation of a Buddha Statue at the Chumphon Raptor and Education Center in Honor of Nurak Israsena, 13 January 2013

Malaysian Nature Society representatives including Lim Aun Tiah, Khoo Swee Seng and Irene Loke; also Chukiat Nualsri (white shirt) with his wife Muay (blue shirt) and son, Poom; Dr. Kaset Sutasha has the raised fist and smile.

Cutting the Ribbon at the Opening Ceremony for the Chumphon Raptor Research and Education Center, 21 October – Muay Nualsri

Khao Dinsor March 2013; view from Shelter Two looking north

Thung Wua Laen Beach approx. 6km from Khao Dinsor, 8 August 2012

Acknowledgements

We gratefully acknowledge and thank the following people: the kind and erudite Dr. Chuenchom Hansasuta who patiently translated the daily raptor totals and English summary into Thai – we thank her for her efforts on behalf of all Thai people – and for being friends with everyone.

A giant thanks to those who helped count raptors with us including K. F. Chan, Irene Loke, as well as Neil and Eunice Parker. We could not have done the research without your help, perseverance and humor.

To Edmund Pease, Santi Lojanayonkit and the entire Baan Suksabye household – thank you all for inspiring us to do right, do better and always do more.

For advice on raptor identification we thank Pinit Saengkaew, Annika Forsten, Antero Lindholm, Terence Ang, Dick Forsman, Tou Jing Yi, Mark Mallalieu, Asman Adi Purwanto, Desmond Allen, Sariddej L., William (Bill) Clark, Yoshio Yamane PhD, Tulsi Subedi and the raptor hall of fame members from Malaysia: Lim Aun Tiah, Ooi Beng Yean, Sein Chiong Chiu, K. F. Chan, Khoo Swee Seng, Lim Kim Chye and Swee Yian. Thank You all for your sage advice…and thanks also to anyone not mentioned here who asked questions or provided insights - the many, many others from Thailand and around the world.

Many thanks to the Khao Dinsor raptor banders, particularly Andrew J. Pierce, Kaset Sutasha DVM, Chukiat Nualsri and Phil Round, who took the time to show everyone what they were doing and patiently answered numerous questions from curious observers.

Our thanks also to the many photographers who took photos and showed us birds we missed (!) or different views of the migrants – that made us think: Sariddej L., Guide Paan Thailand, Chuenchom Hansasuta MD, Chairatna Nilnond PhD, Mark Mallalieu, Suppalak Klabdee, Teo Nam Siang, Sahanan Dejudom, Alice Tan MD, Wanna Phatara-Atikom MD, Corry Chen, Martti Siponen and Buriporn Chaiprasit – to name just a few.

We thank the many people who visited Khao Dinsor (and Shelter 3) including Pattaporn Charoenosot, Wannee Luckanachoke, Punjapa Phetsri (Games) and Ian Dugdale, Koklos Termtanan, Khemthong Tonsakulrungruang, Tipwan Surintraboon, Deborah Allen, Rungsrit Kanjanavanit MD, Paibul Sugirungkuhn, Tavaris Cha and Jutima Busayajaru (Mighty) – …there were many more. Thank You all.

Thank You to conservation groups and international organizations that took an interest in our activities including the Bird Conservation Society of Thailand (BCST); the Wildlife Conservation Office of the Thailand Department of National Parks; the Malaysian Nature Society (MNS); the Asian Raptor Research and Conservation Network (ARRCN); the Foundation for Independent Living of Thai People with Disabilities; and the Thai Raptor Group (TRG). For permission to trap and band migratory birds, we thank the Department of National Parks (DNP), Wildlife and Plant Conservation, Wildlife Conservation Office.

There are many people who have worked together toward making Khao Dinsor a globally significant watch site for raptor and bird migration study. We wish to thank Pathiu District Sheriff, Somsak Chareonpaitoon; village headman Jareak Kosin and his assistant, Chonggod Boonyapijit; and Community Chairman Wichai Skulthatanit. Former Governor Karan Supakitvilekakarn and his wife, Mrs. Panit Supakitvilekakarn, have played a leadership role in getting the Chumphon Raptor Center established. Director of Nakorn si thammarat Provincial Public Health Office, Dr. Utumporn Kambhu na Ayudthaya, has been a tireless supporter of the new environmental center as well. Kriangsak (Jo) Khlong Saeng of the Wildlife Conservation Office of the DNP has been a long-time friend of birds and bird conservation – thank You.

Thank You to our friends Tom Backlund (+ Nid and Kevin), Narida Adithapworaphan and Kittipon Bouranasompop of Baan Maka, Penny Bundhurat, Neoh Hor Kee, Vises Chansrichawla, Lynn Bantley, Damian Smith PhD, Gerald Brett, Wakako Matsushita, Surya Bahadur Gurung, Jack and Jane Rothman, Wiroj Onganunkun MD, Thanakom Laisakul, Kasem Sanitwong Na Ayutthaya, Tea Maeklong, Kongkarawiwan Puk, Teo Nam Siang, Parinya Padungtin, Chutinand Yuwawidhyaphanich, Khong Tuck Khoon, Susan Wong Chor Mun, Ben Goloff, Alan OwYong, Pisitsak Daongyod, Wichkarn Chotikut, Ike Suriwong, Petch Manopawitr PhD, Lim Kim Seng, Colin Poole, Martin Williams PhD, Keith Bildstein PhD of the Hawk Mountain Sanctuary in North America, Hendrik Haverkamp, Pichai Borriboonchaisiri, Ooy Jaja, Dr. Toru Yamazaki, President ARRCN, Corry Chen, Alex Tiongco, Phattharin Khumthukthit, Krishna Mani Baral, Ahli Chung, Menxiu Tong, Matti Pajunen, Leo Evans, Uthai Treesucon and Ben Wildlifevet DVM (soon). And big hugs to our neighbors, the Promsri women: Waruka, Umpira and Suparp Yungying – and their parents.

Chukiat Nualsri wishes to thank his wife Aree (Muay) Nualsri and son, Naratip (Poom), for their love & support – particularly during this last year when the new environmental center demanded so much attention and time.

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March 2013
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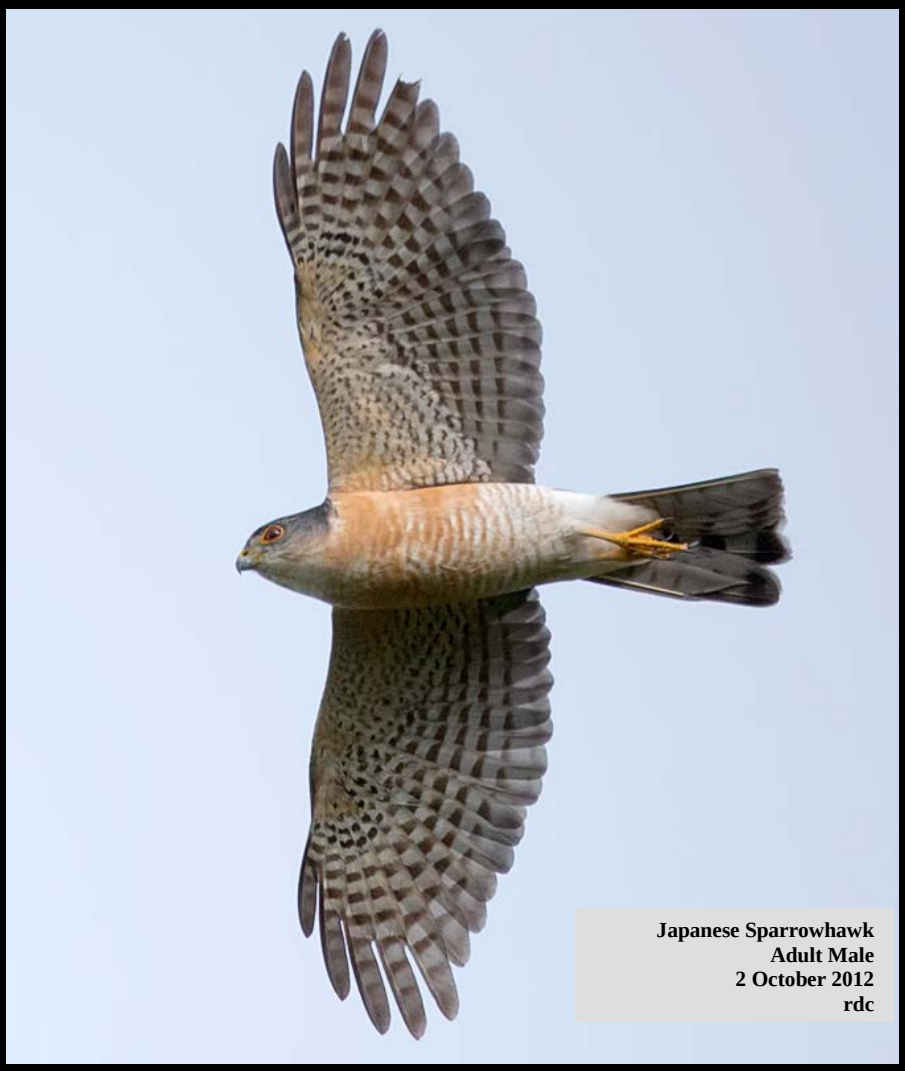
Khao Dinsor March 2013; view from the top (Shelter 5) looking north – Chukiat Nualsri



Japanese Sparrowhawk
Adult Male
2 October 2012
rdc

Japanese Sparrowhawk; Adult Female; 18 September 2012; Robert DeCandido PhD

Species 2010	Total Counted	Peak Time Frame
1. Oriental Honey-buzzard	32,870	9 Oct – 17 Oct / (9,330)
2. Grey-faced Buzzard	14,434	22 Oct – 26 Oct / (4,558)
3. Chinese Sparrowhawk	83,308	8 Oct – 22 Oct / (11,256)
4. Japanese Sparrowhawk	5,452	6 Sep – 15 Sep / (411)
5. Shikra	2,772	20 Oct – 30 Oct / (257)
6. Besra	< 15	Mid-October?
7. Eurasian Sparrowhawk	<10	Late October?
8. Black Baza	74,033	28 Oct – 4 Nov / (10,595)
9. Jerdon's Baza	20	29 Oct – 4 Nov (10)
10. Osprey	57	19 Oct – 24 Oct (10)
11. Black Kite	168	14 Oct – 24 Oct / (30)
12. Brahminy Kite	18	3 Oct – 9 Oct / (3)
13. Eastern Marsh Harrier	173	8 Oct – 15 Oct / (52)
14. Pied Harrier	65	20 Oct – 26 Oct / (21)
15. Crested Serpent Eagle	126	21 Oct – 25 Oct / (25)
16. Short-toed Snake Eagle	<10	Early November?
17. Black Eagle	1	18 October (1)
18. Greater Spotted Eagle	21	22 Oct – 31 Oct / (7)
19. Booted Eagle	71	21 Oct – 30 Oct / (13)
20. Rufous-winged Buzzard	1	9 October (1)
21. Steppe Buzzard	37	15 Oct – 22 Oct / (9)
22. Common Buzzard	46	22 Oct – 24 Oct / (21)
23. Eurasian Hobby	7	17 Oct – 21 Oct / (2)
24. Peregrine Falcon	30	8 Oct – 18 Oct / (3)
25. Amur Falcon	1	30 October (1)
26. Eurasian Kestrel	12	20 Oct – 26 Oct / (4)
Total 2010	**214,678**	**5 Oct – 28 Oct**

3. Appendix A: Table 3. Raptor species identified and number counted at Khao Dinsor, 6 September through 5 November **2010** including unidentified raptors. The number in parentheses in "Peak Time Frame" is the highest **daily** count within that period. The 2010 total is derived from combining daily observations made on the east side of the ridge by Robert DeCandido, Henk Smit and others (24 August through 5 November), with those made by Martti Siponen and others (1 October through 31 October), who counted from the west side of the same ridge.

Autumn 2010 was especially interesting for the number of Grey-faced Buzzards we counted – the highest total of the three years of the count (2010-12). Numbers of Black Baza are lower than other years because the weather in late October (after 26 October) was often horrible: heavy rains often and strong northeast winds – this made viewing difficult if not impossible for long periods. Consequently, we missed many late October and early November migrants.

Finally, since this was our first year counting at this location, we had to get used to how the birds looked in flight here; where to direct one's attention (where to look?) – and how the route the migrants chose changed during the day. We also had to learn that new species we had not seen before on migration such as Amur Falcon, Short-toed Snake-eagle and Brahminy Kite, were moving past Khao Dinsor. This "learning curve" kept numbers lower than expected.

Species 2011	Total Counted	Peak Time Frame
1. Oriental Honey-buzzard	36,399	3 Oct – 9 Oct / (7,347)
2. Grey-faced Buzzard	9,646	20 Oct – 24 Oct / (1,732)
3. Chinese Sparrowhawk	124,006	26 Sep – 8 Oct / (15,045)
4. Japanese Sparrowhawk	13,174	13 Sep – 6 Oct / (1,359)
5. Shikra	3,739	28 Oct – 5 Nov / (512)
6. Besra	3	Late Oct – Early Nov?
7. Eurasian Sparrowhawk	0	Late October?
8. Black Baza	102,889	22 Oct – 29 Oct / (33,445)
9. Jerdon's Baza	78	23 Oct – 1 Nov (30)
10. Osprey	50	9 Oct – 17 Oct (7)
11. Black Kite	173	5 Oct – 16 Oct / (21)
12. Brahminy Kite	13	11 Sep – 26 Sep / (2)
13. Eastern Marsh Harrier	171	1 Oct – 17 Oct / (19)
14. Pied Harrier	53	12 Oct – 17 Oct / (9)
15. Crested Serpent Eagle	127	24 Oct – 29 Oct / (39)
16. Short-toed Snake Eagle	1	Early November?
17. Greater Spotted Eagle	20	22 Oct – 31 Oct / (4)
18. Booted Eagle	70	15 Oct – 24 Oct / (14)
19. Rufous-winged Buzzard	4	29 Oct – 4 Nov (2)
20. Steppe Buzzard	20	14 Oct – 28 Oct / (2)
21. Common Buzzard	27	15 Oct – 24 Oct / (4)
22. Oriental Hobby	0	Unknown
23. Eurasian Hobby	4	Mid to Late Oct? / (2)
24. Peregrine Falcon	44	30 Sep – 16 Oct / (4)
25. Amur Falcon	4	24 Oct – 5 Nov (1)
26. Eurasian Kestrel	11	Mid to Late October / (2)
Unidentified Raptors	1,266	----------
Total 2011	**291,992**	**30 Sep. – 31 Oct.**

4. Appendix B: Table 4. Raptor species identified and number counted at Khao Dinsor (Thailand), 24 August through 5 November **2011** including unidentified raptors. The number in parentheses in "Peak Time Frame" is the highest **daily** count within the peak migration period. The 2011 total is derived from combining daily observations made on the east side of the ridge of migrants heading SE by Robert DeCandido, Henk Smit and others (24 August through 5 November), with those made by Martti Siponen and Matti Pajunen (1 October through 5 November), who counted from the west side of the same ridge, of migrants heading WSW.

Autumn 2011 brought the worst rains to central and northern Thailand in a generation. It was the year Bangkok and the surrounding communities were flooded beginning in early October, lasting through early December. Along the coast in southern Thailand, we were spared the rains – we had generally nice weather and little rain. During the 2011 migration we counted our highest totals of Chinese Sparrowhawks, Japanese Sparrowhawks, Oriental Honey-buzzards, Steppe Buzzards, Eastern Buzzards and Peregrine Falcons. This suggests that the rains of South-east Asia in autumn 2011 either forced more migrants south – or something in the weather parameters (wind direction/speed/rain inland) made these birds choose a coastal route that put them over Khao Dinsor in greater number than other years.