

in the evening. As I had to go past the tree, I watched the bird and found it staring at me, peering directly below as I went under the hole. I returned a little later to observe it closely. The bird was a little shy and tried concealing itself. Not wishing to disturb it, I observed it from a distance. A couple of colleagues joined me and had a look at the bird. As we watched, another bird peeped out, obviously a young one. Ten days later, in early March 2005, I could see the nest occupied by the youngster. It looked greyish, lacking the distinct "horns" as well as the mottled pattern of its parent and instead appeared to have fine vermiculations. I could not see the adult, which no doubt watched from a nearby perch. It was surprising that the numerous crows present nearby did not harass the bird.

A male Asian Paradise-Flycatcher *Terpsiphone paradisi* has been haunting the car park for several years, each winter without fail and, was there this year too. He was used to people and would continue to carry on with his business of snapping flies in mid-air and returning to the same or an adjacent branch giving excellent views. I noticed that he was not alone and was in the company of three females! The three

female birds had spread out over a distance of just 100m along the path. The male took the liberty of visiting their territories whenever he fancied and even chased them away when he located a juicy morsel!

Oriental Magpie-Robins *Copsychus saularis* were in song and this season more birds were seen in the campus than in earlier years. Had there been a population explosion or was it because of the dry conditions that more birds were easily spotted? Last year birds had started using a nest-box put up for them and had successfully raised young ones. It is always wonderful to begin the day with a concert from this lovely songster. Another bird that I often heard each morning (January-February) was the Brown Flycatcher *Muscicapa dauurica* that called from the bare, flowering *Plumeria* sp., next to my house. Apparently, the bird roosted on the tree and called a few minutes after sunrise before leaving the roost to forage. On days when I woke up early, before the sun was up, I would hear the loud calls of the Mottled Wood Owls *Strix ocellata*. The Painted Spurrow *Galloperdix lunulata* is another regular bird that calls in the mornings from the scrub-covered hillside opposite my house.

The hordes of Common Rosefinches *Carpodacus erythrurus* that were noticed four years ago (c. 2,000 in number), were no longer seen in the valley. Their absence was linked to the lack of food crops in the vicinity. Nevertheless, there was some compensation. There was possibly a Jack Snipe *Limnocryptes minimus*, a new bird for me and for the campus, on 21.ii.2005. I noticed it flying up almost vertically from the dried bed of the "Lost Pond" and landed a few meters away under a bush. The small size, long bill, the mottled plumage and the flight pattern suggested it to be this bird but I would like to have a better view before jumping to any conclusion. On 31.iii.2005, three Ashy Woodswallows *Artamus fuscus* turned up on a pylon close to the main road. They called and flew around hawking insects for a while before flying away and disappearing from view. I had never seen these birds here or in the neighbourhood earlier in the past seven years of my stay in Rishi Valley.

Even in a drought year, things do happen, at times taking one by total surprise. If we are not alert just imagine the kind of interesting things we could fail to observe!

Distribution and extent of Pond Herons *Ardeola grayii* with red legs in India

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During the breeding season, Pond Herons *Ardeola grayii* in India change the colour of their tarsi and feet from dull green to yellow or red (Hancock and Kushlan 1980). In other species of the same genera, red legs have been seen on breeding Chinese Pond Heron *A. bacchus* in Hong Kong, China (N. McKilligan, in litt. 2005), on females of the Maldivian subspecies of the Pond Heron *A. g. phillipsi* whose legs are reported to turn rose-coloured during the breeding season (Ali and Ripley 2001), and the Madagascar Pond Heron *A. idea* whose legs turn distinctly reddish during the breeding season (BirdLife International 2005). For the nominate subspecies, this phenomenon is barely documented and it is not known if all individuals obtain the flush briefly during the breeding season, or whether it is restricted to some individuals in an area. Reddish colouration on tarsi and feet in breeding adults was previously

thought to be rare. However, in some locations, red-legged Pond Herons occur regularly each year throughout the breeding season though they constitute a small percent of the population (Etawah-Mainpuri districts: 2.1 - 2.6% of the total population; Sundar 2004). Red-legged Pond Herons have been seen in Gujarat, Uttar Pradesh and Kerala in India (Abdulali and Alexander 1952, Parasharya and Naik 1987, Relton 1996, Wesley 1993, 1996, Sundar 2004). In addition to change in leg colour, Pond Herons acquire a distinct blue colouration on the base of the bill and bluish-green facial skin during the breeding season. This change in colour of the beak is well documented and is widespread with birds in Thailand and Sri Lanka also sporting this colouration (Dharmakumarsinhji 1955, Grimmett *et al.* 1998, Rasmussen and Anderton 2005, www.orientalbirdimages.org). In this note I report new locations in India with red-

legged Pond Herons, and present information on the percentage of Pond Herons with red legs in the population from some locations. These findings are discussed in the light of known information on this aspect.

Methods

Records of red legs in Pond Herons were obtained opportunistically during travels in India. In addition, experienced bird watchers were consulted to determine if they had sighted Pond Herons with red legs. Requests for observations on red-legged Pond Herons were sent out on web-based discussion groups that focussed on birds.

To ascertain the population-level incidence of this phenomenon, standardised road transects were conducted in Gujarat, Karnataka and Uttar Pradesh. Counts of non-breeding Pond Herons and those with red and yellow legs were

maintained along pre-determined road transects. All Pond Herons seen beside the road up to 10 m and in wetlands along the transects were included. The vehicle was stopped briefly to determine leg colour for each individual heron along the road, and wetlands were scanned along the side for herons. All transects were adequately far away from each other to safely assume that each sighting was independent. Proportion of individuals with red and yellow legs was determined.

In Bangalore, a road transect of 30 km was covered by volunteers along the Kanakapura road and included the wetlands of Nelaguli and Horahalli. In Uttar Pradesh, transects were carried out in Rae Bareli and Unnao districts in various road transects totalling 130 km in an area bounded by the towns of Basaha, Bihar, Chanrauli, Gurbakshganj, Ketarkhera, Maurawah, Purwa, Oonchahar, Rae Bareli, Raghuraj Singh, Salon, Samaspur, Semri, and Umran. The third transect was carried out in Another transect of 95 km were carried out in Etawah-Mainpuri districts covering the towns of Begumpur, Etawah, Hawaii Patti, Karhal, Kudaiyya, Kumhavar, Kurra, Lohia, Saman, Sarsai Nawar, and Takhrau.

Results

Opportunistic observations and secondary reports

Red-legged Pond Herons were seen in multiple locations in Gujarat, Haryana, Kerala, and Rajasthan, and one location each in Bangalore, Delhi and West Bengal (Table 1). The colour on the legs varied from bright coral-red to a much lighter fleshy pink, and was always seen on individuals that were in full breeding plumage. Sightings of individuals were made during opportunistically and are not indicative of periods of maximum occurrence of red legged individuals. Blue coloration on the beaks was present on herons with breeding plumage in all locations. Observations for red-legged herons were carried out in Himachal Pradesh (J. den Besten, verbally 2005), Jammu and Kashmir (T. Sinclair, verbally 2005), and Assam (B. P. Lakhar, verbally 2005) but none were seen.

Four reports of observations at nesting sites were obtained through discussion groups. One was from the heronry at Saras Baag in Pune with observations carried out in the 1990s (K. Kunte, in litt. 2005) and the second was from Kumarakom in Kerala when detailed observation were carried out in 2004 (P. Narayanan, in litt. 2005). No red-legged

individuals were seen in either heronry. However, in the third observation from the Pamburuthi heronry in Kerala, red-legged Pond Herons were seen nesting alongside others with yellow legs (Sashi Kumar, in litt. 2005). About 15% of all Pond herons had red legs in 2005 and in four nests both birds had red legs (Shashi Kumar, in litt. 2005). In the observation in West Bengal, red-legged Pond Herons were apparently engaged in nesting activities suggesting completion of courtship. The late date of the observation suggests that egg-laying was also very likely completed.

Road transects

Details of road counts are presented in Table 2. In Bangalore, very few Pond Herons were counted and none had red legs though all were in breeding plumage. In Uttar Pradesh, individuals with red legs were comparable at 38% and 30% respectively in the Rae Bareli-Unnao districts and Etawah-Mainpuri districts. Again, the red colour varied from pale pink to bright coral-red and was on individuals with complete breeding plumage. Blue beaks were present on all breeding birds irrespective of the colouration of the legs, but individuals with red legs appeared to have a higher extent and darker blue on the beak.

Discussion

Breeding Pond Herons with red legs are clearly wide-spread in India and likely to be present throughout its distribution range. Very few records were obtained from eastern states and more focussed observations are required from these areas to better understand the distribution and extent of Pond Heron individuals with red legs.

The road count in Bangalore was carried out in an area that is experiencing rapid development and may explain the few Pond Herons counted. Sightings of red-legged individuals in Lal Bagh may mean that breeding areas are close by. Road transects in Uttar Pradesh in two areas with similar land use and habitat conditions showed that about the same proportion of the population has red legs. In the Etawah-Mainpuri region, the percent of individuals with red legs varied greatly between years (Sundar 2004, Table 2). This variation is likely due to the fact that transects during 2000-02 were carried out at the onset of the breeding season and the recent transects were during the peak breeding season (see Sundar 2004 and Table 2). During 2000-02, rainfall was normal in the districts while in 2005, the

monsoon had barely begun when the transect was carried out. This probably caused a shift in the breeding period thereby causing a shift in the incidence of individuals with red legs.

The ubiquitous nature of red-leggedness indicates that this phenomenon is more related to individual differences and to a lesser extent to food or related specific parameters. Observations of pale pink colour on some individuals and bright red on others at different times may be indicative of the colour being prevalent on the individual throughout the breeding season. Observations of red-legged birds at heronries after pairing/ mating has occurred indicates that the colouration is not a partial flush but more long-lived. Lighter colours may be present on individuals just getting into breeding plumage, or on individuals that have already paired up and/ or mated, and may retain this colouration for the entire breeding season before becoming greenish, which is characteristic of non-breeding individuals. This requires confirmation through observation of colour-banded individuals.

The observations of rose-coloured legs in the females in the Maldivian sub-species (Ali and Ripley 2001), and on a female in India (Relton 1996) has led to the formation of a hypothesis that only females obtain this colouration in this species. However, at least in one heronry in Kerala, both individuals at nests had red legs suggesting that this hypothesis is not accurate. Verification of this information by observations at other heronries is required. Other specific reasons for individuals obtaining the red colour are unknown though many specific surmises have been made (Relton 1996, Wesley 1993, 1996) and are worthy of specific attention.

Descriptions of changes in bare part colouration of the Pond Heron in published literature have been inadequate (Table 3). This has been primarily due to lack of information previously and need to be updated in future descriptions.

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Table 1. Locations in India with red-legged Pond Herons *Ardeola grayii*.

Date of sighting	Location (district, state)	No. with red legs	Source of information and comments
28.iv.1988	Palayamkottai (Kerala)	2	Wesley 1993
v.1990s	Goa	2	K. Kunte, in litt., August 2005.
1996	Ramankary (Alappuzha, Kerala)	1	P. Narayanan, in litt., August 2005.
Undated.	Neelamperoor (Alappuzha, Kerala)	1	P. Narayanan, in litt., August 2005.
Undated.	Chengalam village (Kottayam, Kerala)	1	P. Narayanan, in litt., August 2005.
Undated.	Kannur (Kerala)		S. Kumar in litt., August 2005. Individuals with red legs seen for past several years.
Undated.	Heronry at Pamburuthi (Kerala)		S. Kumar in litt., August 2005. About 15% of nesting population with red legs; in four nests, both individuals with red legs.
21.iii.2004	Colaba Seaface (Mumbai, Maharashtra)	1	M. Macker, in litt., August 2005.
25.v.2005	Delhi Zoo (New Delhi)	1	Pers. obs.
vi. 2005	Bhubaneshwar (Puri, Orissa)	2	M.S. Chaitra and Padmawathe, verbally, 2005.
5.vi.2005	Kishore Sagar (Kota, Rajasthan)	1	Pers. obs.
6.vi.2005	Keoladeo National Park (Bharatpur, Rajasthan)	2	Pers. obs.
14.vi.2005	Sultanpur National Park (Jhajjar, Haryana)	3	Pers. obs.
18.vi.2005	Right wing Ganga canal (Sonipat, Haryana)	1	S.C. Sharma, verbally, July 2005.
10.vii.2005	Lalbagh Botanical Gardens (Bangalore, Karnataka)	4	J.N. Prasad, in litt., August 2005.
vi.2005	Thol Lake (Mehasana, Gujarat)	2	K. Kathju, verbally, August 2005.
2.viii.2005	Mehasana district (Gujarat)	1	K. Kathju, in litt., August 2005.
24.viii. 2005	Shamshernagar heronry, Sundarban Tiger Reserve (24 Paraganas, West Bengal)	2	Sujan Chatterjee, in litt, August 2005.

Table 2. Details of leg colour in Pond Herons *Ardeola grayii* from road transects.

Date transect was conducted	Location (district, State)	Transect length (km)	Total counted	% with red legs	% with yellow legs	Source
16.iv.2001	Etawah and Mainpuri districts (Uttar Pradesh)	85	1,075	2.6	—	Sundar 2004
25.v.2002	Same as above	85	904	2.1	—	Sundar 2004
16-19.vii.2005	Rae Bareli and Unnao districts (Uttar Pradesh)	130	50	38	54	Pers. obs.
31.vii.2005	Kanakapura road (Bangalore, Karnataka)	30	8	0	100	J. Pathak, Sahastrarashmi and B. Venugopal, in litt. August 2005
4-5.viii.2005	Etawah and Mainpuri districts (Uttar Pradesh)	95	64	30	62.5	Pers. obs.

Table 3. Expressions used to describe reddish colouration on legs of Pond Herons *Ardeola grayii* in published literature.

Source	Description
Hancock and Kushlan 1984	"sometimes show a salmon-pink flush early in the season"; "legs turn red before individuals acquire full breeding plumage".
Wesley 1993	"coral red legs"
Grimmett <i>et al.</i> 1998	"legs can be bright yellow or even reddish"
Ali and Ripley 2001	"salmon pink in some breeding individuals"
Rasmussen and Anderton 2005	"legs briefly pinkish"

Notes on pelagic and uncommon offshore records from Mumbai

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A naval officer in Mumbai (Maharashtra, India) has many opportunities to watch birds at sea, which are hard to come by for land-locked birders. Also, defence being a large landowner in the city, there are many areas in Mumbai that remain largely inaccessible to local birdwatchers. Many of these defence areas are also extremely nice habitats for birds. I have now been stationed in this city for over two years. Some of my birding experiences including a few notable pelagic and offshore sightings are described here.

Occasionally, as part of my current duties, I embark ships for daylong trial sorties at sea. The fringe benefits, a much-used phrase these days, are quite obviously, the opportunity to watch some pelagic and offshore birds.

The first sailing, on 17.vi.2005, was just before the monsoons reached Mumbai and therefore we had fairly calm seas, very clear visibility and lovely blue skies. The second on 23.vi.2005 was in the thick of the monsoons with sheets of rains hitting almost continually and the accompanying rough seas making almost everyone seasick. Under such conditions, one would undoubtedly need to be a mad birder to stand in the bridge of the ship without any compulsions of duty and constantly gaze at sea in the hope of catching sight of a stray pelagic!

On 17.vi, about 10 miles off Mumbai, I sighted a frigatebird species flying low over the water a few hundred meters away. The large dark bird with forked tail and long wings was quite likely a Lesser Frigatebird *Fregata ariel*. Although seen in clearly from the high vantage of a warship's bridge, it was difficult to conclusively identify the species.

During the second sailing on 23.vi, in spite of rough seas that tossed the ship mercilessly, I managed to spend a couple of hour's sea-watching from the bridge. The highlight of the day, undoubtedly, was a

Brown Noddy *Anous stolidus* that was swimming in the sea as the ship sailed past, barely 100 feet from it. There are very few records of this magnificent ocean tern from here. I have, however, had some good experience of watching the Brown Noddy near Cochin in late April 2004 while I was posted on a ship. They were particularly numerous during the five days that we spent sailing within about 30-40 miles from coast.

On both days, just offshore near the outer approaches to Bombay harbour, White-cheeked Terns *Sterna repressa* were fairly common. Great Crested Terns, *Sterna bergii* were also sighted on both days but were not as common. Great Crested Terns are large birds with rakish wings and a prominent lemon yellow bill that is hard to miss even at a distance. White-cheeked Terns have gray upperparts, with concolorous rump and tail. The thin tail streamers and the white cheeks were prominent in many. It is likely to be confusable with Common Tern *Sterna hirundo* and Roseate Tern *Sterna dougallii*. However being a winter visitor one is unlikely to encounter Common Terns around Mumbai in early July. While the Roseate, besides being larger, with its variable amount of white in the tail feathers and different flight action, is also rarely reported around Mumbai.

On 06.vii.2005, at end of the day about a dozen terns gave us company, following the wake of the ship as we were returning to harbour. They were all Lesser Crested Terns *Sterna bengalensis* and White-cheeked Terns. However, a lone Sooty Tern *Sterna fuscata* flew in briefly. Interestingly, all these terns followed the ship till about the fairway buoy that indicates the outer entrance to the harbour, which is about two miles out from the southernmost tip of the land. The offshore nature of these terns also explains why the local birders in Mumbai rarely ever report any of these species.

Recently, on 11.ix.2005, after a morning of

family birding at Karnala Bird Sanctuary and Uran mudflats, we ended up for lunch at Admiral Perriera's resort at Peeranwadi beach near Uran town. Stormy winds blew that day bringing with them plenty end of the season rains that, generally, ruined our day's birding. The saving grace on this wet Sunday turned out to be close views of a lone Bridled Tern *Sterna anaethetus* that flew low along the surf line at the beach. The tide was high and the tern flew low, trying to feed over the breaking surf at the beach while, simultaneously, maintaining its balance in the strong winds. Bridled Terns breed at Vengurla Rocks, but they are rare along the shore of Mumbai.

In Bridled Tern the upper parts, including the mantle, wings, rump and tail were uniformly brownish-gray. The underparts, in comparison are quite strikingly white. The dark crown and mask was clearly prominent. Once familiar with the tern sp. that we can see around Mumbai, the only species that can really be confused with Bridled is the Sooty Tern. In flying birds, trying to figure out the size of forehead white patch to differentiate Bridled from Sooty is, in my opinion, quite a vain exercise. In my experience, besides the obvious darker and bulkier appearance of Sooty the best differentiator in flying birds at a distance is the extent of white in underside of primaries. The Bridled Tern, which I saw at Uran, had extensive white in the underwings primaries with black restricted to the extremities only. Interestingly, Bridled, Great Crested and Roseate Terns have been reported to be breeding at Vengurla Rocks during monsoon months (Lainer 2001).

Easily accessible by a naval ferry that regularly runs between Colaba and Karanja naval base near Uran, Peeranwadi beach and the rocky shores north of it, adjacent to the naval base, were one of my regular stomping grounds for birding during my earlier tenure in Mumbai in early 1990s. Going through my notes, I discover that on