

Nest defense behaviour by River Tern *Sterna aurantia* and Little Tern *Sternula albifrons*

Yashodhan Bhatia: 'Birding or Nothing', C/O Bhatia Stores, Old Station Road, Jamnagar, India. jamnagarbirds@gmail.com

Nest defense is a very important behaviour as it is an integral part of the life of every avian species. Unlike forest birds which can build nests that are not conspicuous, most *Larid* species that inhabit coastal areas make nests on islands, shores, larger inland water bodies or salt-pans. Here, they do not have shelter or extensive vegetation to conceal the nest from the view of predators. Practically, such nesting areas are limited in size and thus crowded. These birds have to defend their nests against conspecifics which can be the neighbours of their own species. In spite of this risk, they rely on colonial or semi-colonial nesting to get through a successful breeding season. This obviously has its own benefits. Colonial nesting birds detect predators from a distance and that too more quickly as there are more eyes on guard. So, on one call everyone 'concerned' becomes alert and chases the intruder, however large, collectively, and can drive it away from the vicinity of the nesting area. Here, I present two such interesting observations of terns (*Sterna* species) that are both very diverse in selection of nesting sites and behaviour; however, in both instances, a larger predator was badly mobbed by the extremely aggressive smaller birds in the defense of their fledglings.

Little Terns (*Sternula albifrons*) and River Terns (*Sterna aurantia*) together breed on the islands of large water bodies like lakes and dams. Here, natural islands are formed when the water level starts receding during the summer months. Such islands also offer natural protection by providing a safe haven from predatory mammals and even feral dogs. River Terns generally do not breed in the salt-pans (*pers. observation*), but Little Terns are more adaptable in their choice of nesting areas and tend to breed in the salt-pans too, along with Black-winged Stilts (*Himantopus himantopus*), Red-wattled Lapwings (*Vanellus indicus*) and other species. Terns are altricial species and have the tendency to defend their chicks strongly after they have hatched. It is observed that aggression in tern sp. is less frequent during incubation period since they themselves spend more time on their respective nests, incubating the eggs. This aggression becomes more apparent and frequent from

the time the eggs are hatched till throughout the fledgling stage. Nest defense activity increases as the breeding season progresses. Terns are highly flexible in their reactions to the 'trespassers'; they have the ability to recognize if the intruder is a threat and thus assess the potential risk from it whilst it is violating the 'airspace' around the nesting area (*pers. observation*).

We had come across a huge water-body near Jamnagar that was accommodating a healthy nesting site of River Terns and Little Terns on a single island. I was along with my birder friends Mehul Bhadania and Ashish Pankhania. There were 300 plus pairs of River Terns and 30 plus pairs of Little Terns. In April 2021, while observing the activities of these nesting terns from the edge of this water-body, sudden panic calls of River Terns were heard around the island. A Peregrine Falcon (*Falco peregrinus*) made an attempt to hunt a fledgling, but was not successful. A group of River Terns created chaos and confused the falcon. Mobbing a deadly predator such as Peregrine Falcon can be a dangerous venture, but they mobbed it by screaming and swooping on it and chased it till the predator was out of the 'fortified' airspace. I was able to shoot a few frames to get a record of the incident (though only a couple of photographs were in focus), while my birder friends observed the entire incident with binoculars (photo 1).



Photo: Yashodhan Bhatia

In another incident at the salt-pans around Jamnagar, I had observed Little Terns mobbing a Indian Pond Heron (*Ardeola grayii*), at a fair distance away from their nests. A Pond Heron, in flight, was coming from a distance and was mobbed well before the area where the nests were present. Two pairs of Little Terns confronted the 'intruder' midair. Screaming and diving very aggressively

on it, they made the larger predator land on the bund where it tried to hide between the boulders from the assault. From there, one pair went back and the assertive ones continued with the strikes. The assault was so severe that the Pond Heron found itself ducking every time the tern dashed down on it, ripping noisily through the air. Whenever the heron raised its head to recover, the terns came-in very fast, targeting its face. This continued for over a minute as the offensive terns did not give any chance to the Pond Heron to recuperate and fly away. I was able to capture the footage of the incident along with few photographs. In one of the frames, a unique moment is frozen as the Little Tern is literally bombarding the heron! It defecated mid-air and splattered liquid excreta on the panicky Pond Heron (photo 2). Moments later, as the frequency of the raid reduced, the Pond Heron revived itself and flew in the opposite direction of the nest!

Though this is well documented by experienced birders that terns have a retentive capability to categorize and evaluate the risk that can be posed by other birds using the same 'airspace' for their movements where the terns nest, but recording these confrontations on camera was

an exceptional experience for me as a natural history photographer.



Photo 2

Photo: Yashodhan Bhatia

I am also providing a table of my observations of Little Terns chasing away bird species along with such birds that were tolerated through the breeding season around the nesting area.

	List of species chased by Little Terns during nesting		List of species tolerated by Little Terns during nesting
1	Great Thick-knee (<i>Esacus recurvirostris</i>)	1	Little Cormorant (<i>Microcarbo niger</i>)
2	Red-naped Ibis (<i>Pseudibis papillosa</i>)	2	Spot-billed Duck (<i>Anas poecilorhyncha</i>)
3	Red-wattled Lapwing (<i>Vanellus indicus</i>)	3	Comb Duck (<i>Sarkidiornis sylvicola</i>)
4	Yellow-wattled Lapwing (<i>Vanellus malabaricus</i>)	4	Chestnut-bellied Sandgrouse (<i>Pterocles exustus</i>)
5	Pond Heron (<i>Ardeola grayii</i>)	5	Sykes's Crested Lark (<i>Galerida deva</i>)
6	Cattle Egret (<i>Bubulcus ibis</i>)	6	Ashy-crowned Sparrow Lark (<i>Eremopterix griseus</i>)
7	Large Egret (<i>Ardea alba</i>)	7	Eurasian Spoonbill (<i>Platalea leucorodia</i>)
8	Little Egret (<i>Egretta garzetta</i>)	8	Whiskered Tern (<i>Chlidonias hybrida</i>)
9	River Tern (<i>Sterna aurantia</i>)		
10	Pied Kingfisher (<i>Ceryle rudis</i>)		
11	House Crow (<i>Corvus splendens</i>)		
12	Kentish Plover (<i>Charadrius alexandrinus</i>)*		
13	Little Ringed Plover (<i>Charadrius dubius</i>)*		
14	Eurasian Coot (<i>Fulica atra</i>)*		

*These species were only chased after the eggs hatched and that too when they came closer while foraging. The rest of the birds were chased away throughout the breeding season.

River Tern....

In *Larid* species, colonies are often defended by group defense, and potential predators in the colony are met with aggressive dive-bombing, including alarm-calling and defecating upon and striking the intruder (Winkler *et al.* 2020). Here, I was able to document nesting River Terns and Little Terns using group defense while chasing intruders aggressively and protecting fledglings from predators.

References

Winkler, D. W., Billerman, S. M., & Lovette, I. J., 2020. Gulls, Terns, and Skimmers (*Laridae*), version 1.0. Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.larida1.01> □

Further evidence of breeding of Collared Pratincole *Glareola pratincola* in Kachchh

Shantilal Varu: Temple Street, Junavas, Madhapar (Bhuj), Kachchh. snvaru@gmail.com



On 17 April 2022, I visited Chhari-Dhandh Conservation Reserve, Kachchh, with Jaysinh Parmar, Ibrahim Darvadia, Mahesh Parmar, Mahendra Tank and Manoj Tank. The wetland was entirely dry. While roaming there, we saw six Collared Pratincoles (*Glareola pratincola*) flying and settling in a dried grass patch. Owing to ongoing breeding period, we thought that it could be nesting here. We waited for a while and after sometime, one bird landed on the ground with an insect in its beak; we thought there must be chicks around. After scanning the nearby area, we found two chicks resting in the shade of a broken concrete platform made by the forest department. We took some photographs and confirmed the identification.

The Collared Pratincole was first recorded in Kachchh on 18 October 1992 at a water body between Loriya-Bhirandiyara (it is now known as Vekariya Dhandh in Banni area) by M. K. Himmatsinhji, the members of Pelican Nature Club, Bhuj and I (Himmatsinhji 1999). At that time, along with adult birds, juveniles were also seen. Dr. Bharat Jethva visited Chhari-Dhandh in the summer of 2008 and saw a pair with two chicks. The whole wetland was dry at that time too (*personal communication*). It was the first breeding record of this species

here. Thereafter, on 11 May 2014, A. O. Langa, forest guard, and I saw a pair with one chick. The wetland was dry at that time. Thus, it seems that this species occasionally breeds here in Chhari-Dhandh when the wetland gets totally dried and conditions turn favourable for nesting. More Collared Pratincoles were seen nesting in another part of Chhari-Dhandh this year and nests were observed in the periphery of the area [*see elsewhere in this issue –Eds*].

References

Himmatsinhji, M. K., 1999. The occurrence of Collared Pratincole or Swallow Plover *Glareola pratincola* in Kutch. *Journal of the Bombay Natural History Society* 96 (2): 316-317 □