GULL-BILLED TERN *STERNA NILOTICA* FEEDING ON GROUNDNUT

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Although the Gull-billed Tern *Sterna nilotica* is an aquatic bird, it has been reported to scoop up caterpillar or grasshopper - from gram or groundnut (Ali & Ripley, 1984). A recent study on the foraging behaviour of the tern revealed that it devours grasshoppers and *Helicoverpa* larvae from the upper canopy of pearl millet plants also (Mathew *et al*., 1998).

During a line transect study of birds in agricultural habitats in Jamnagar, a coastal district of Gujarat state in western India, Gull-billed Tern was observed actively searching for groundnut pods exposed during ploughing operation by bullock/tractor (light ploughing for field preparation) in the winter months (Table 1). These observations were made on four days between 08.00 and 10.32hrs, the maximum time for which the birds remained in the field. The tern searched for groundnut pods in the freshly exposed furrows on their wings. After sighting a pod, the bird alighted on ground and picked it up and flew to sit on the nearby part of a field where the soil was not very loose as it was ploughed a few months earlier. This behaviour ensured the bird that it could pick up the dropped pod or extricated seed easily and successfully than from the ground with loose soil, clods and furrows. Similar behaviour is reported in Grey Heron *Ardea cinerea* which takes large eels from waters edge to a place from where escape is difficult (Campbell & Lack, 1985) and Gull-billed Tern which takes grasshoppers from pearl millet field to fallow land to ensure the retrieval of prey in case it slips from the beak (Mathew *et al.,* 1998)

In the process of extricating the seed, the tern pressed the pod between its mandibles for a few seconds and dropped it on the ground, and repeated the 'act' several times till the seed was exposed. Our observation showed that in order to successfully extricate the seed, the bird pressed the pod between its mandibles 2 to 43 times, with a combined mean of about 13 times (Table 1). The presence of more than one seed in a pod and the variation in the hardness of the individual shell due to exposure to different soil conditions, sun, etc appear to be the reasons for a wide range in the number of attempts made.

The terns also foraged on groundnut spillage socially with the Black Ibis *Pseudibis papillosa*. The number of individuals of the tern feeding in the field ranged from 3 to 52. Its number during tractor ploughing was much higher as compared to that during the bullock ploughing (Table 1). In both the days of tractor ploughing, intraspecific piracy was observed; probably because of a decreased ratio of food to individuals due to the higher number of birds. Out of the total seven attempts observed, only once a bird could successfully get a pod from the host.

Table 1. Mean number of attempts made by Gull-billed Tern to extricate groundnut seed from a pod.

S.No	Date of observation	Attempts on pod extricate nut mean + s.d. (n; range)	Remarks
1	21.i.2001	11.80 + 8.41 (5; 3-25)	3 GBT & 2 BI: Bullock ploughing
2	1.ii.2001	16.05 + 9.87 (20; 6-43)	52 GBT: Tractor ploughing
3	2.ii.2001	13.50 + 7.54 (8; 2-27)	14 GBT & 16 BI; Bullock ploughing
4	3.ii.2001	11.33 + 7.83 (15; 5-37)	43 GBT; Tractor ploughing
Mean	-	13.17 + 2.13 (4; 2 –43)	-

GBT - Gull-billed Tern; BI - Black Ibis.

Grainivory in the Gull-billed Tern may be a rare feeding habit as in the case of Black Drongo *Dicrurus adsimilis* which is reported to feed on grains also (Khacher, 1976; Dodia *et al*., 1989) or Ring-billed Gulls *Larus delawarensis* which is observed to feed occasionally on cherries (Blockpoel & Strugger, 1988). The major reason for such a large number of terns being attracted to groundnut fields during tractor ploughing is either the reduced availability of prey in the aquatic habitats in winter or the high nutritive value of groundnut. Since the tern feeds also on groundnut, it could be offered as a supplementary food to the terns in captivity.

The present observation is also the first record of large flocks of about 40 to 50 individuals of Gull-billed Tern feeding in any type of agricultural habitat.

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