



27.0 Protocol for Monitoring Megapode and its Habitats

K. Sivakumar

Wildlife Institute of India, P.O.Box 18, Chandrabani, Dehradun 248 001, Uttarakhand
Email: ksivakumar@wii.gov.in

The mound nesting Nicobar megapode is endemic to the Nicobar group of islands. As mounds are stationary, inanimate and represent breeding, the best way to estimate and monitor the megapode populations is by counting mounds (Sankaran, 1995; Sivakumar, 2000; Sivakumar and Sankaran, 2003). The methods adopted for monitoring megapode in Nicobar Islands is presented below.

The coastline of 15 islands where the species is present was surveyed for mounds after tsunami and 38 transects (sites) were identified for long-term monitoring of this species. Detailed information about transects locations, habitat, mound presence and other details are available in Sivakumar (2007). Average length of these transects was 2 km, however, in some cases, the length of transects were small due to smaller size of islands. All the mounds along transects were counted. The width of transect was from the sea shore up to the end of the low-lying forests or 300m distance whichever is less. Data on total number of active mounds, abandoned mounds, mound size (circumference and height), number of pits present in a mound, and the distance between high tide mark and mound was collected by walking along the transect. Parameters such as plantation, fire, logging, wood cutting, evidence for hunting and invasion of weeds in the transect area were also recorded. The data sheet that was used to record the information from the field

(Data sheet I) could be made available to the field staff by the State Forest Department especially in the Office of the Divisional Forest Officer, Campbell Bay, Great Nicobar.

Active mounds in use can be identified by signs of recent digging by megapodes or by checking the mound whether the soil is compact and hard with vegetation growth over it (abandoned mound) or loose and easily penetrable with a stick (active mound).

A total of 111 active mounds observed from 38 transects have been identified for permanent monitoring (Sivakumar, 2007 also see Annexure I), which is 65.68% of the total active mounds observed from all transects surveyed in 2006. Hence, it is believed that any major changes in the abundance of active mounds from these permanent transects would directly reflect the total population of mounds as well as megapodes.

Monitoring the megapodes from permanent transects will give an idea about the trends in the population and changes in the habitat, but not the actual size of the population. For estimating the total coastal population of megapodes, a total survey of mounds in all transects identified in Annexure I at five years interval is highly recommended.

Table 1 : Details of mounts along permanent transects.

Island	No. of permanent transects (PT)	Active mounds observed in PT in 2006	Abandoned mounds observed in PT in 2006	Proportion of abandoned mounds
Great Nicobar	11	46	12	0.26
Kondul	1	1	0	0.00
Little Nicobar	4	15	6	0.40
Menchal	1	3	1	0.33
Meroe	1	2	1	0.50
Pilo Milo	1	0	0	
Trax	1	3	1	0.33
Treis	3	3	0	0.00
Nancowry	3	3	0	0.00
Katchal	2	2	0	0.00
Camorta	3	3	2	0.67
Tillanchang	3	9	5	0.56
Trinket	2	10	0	0.00
Teressa	4	6	0	0.00
Bampoka	1	5	1	0.20



Annexure I : Details of transects surveyed in the potential coastal habitat in 2007 and the location of permanent transects for the continuous monitoring of the Nicobar megapode population.

S.No	Island	Place	Total Length (km)	Active Mounds	Abandoned	Inactive	Substratum	Megapode sighting	GPS N	GPS E	Direction from GPS location	Transect for Permanent monitoring
1	Great Nicobar	Trinket Bay	2	5	0	0	Sandy	Yes	71247.7	935103.2	North	Y
2	Great Nicobar	South Trinket	2	4	1	1	Sandy-loam	Yes	71305.5	935208.5	North	
3	Great Nicobar	Lawful North	2	4	1	1	Sandy-loam	Yes	71143.7	935255.9	North	
4	Great Nicobar	lawful	2	8	4	1	Sandy-loam	Yes	71018.1	935242.8	North	Y
5	Great Nicobar	North Dungi nala	2	3	1	0	Sandy	No	70352.9	935419.1	North	
6	Great Nicobar	Navy Dera South	2	1	0	0	Sandy-loam	No	70438.5	935341	North	
7	Great Nicobar	Navy Dera	2	2	2	1	Sandy	Yes	70814.4	935306.8	North	Y
8	Great Nicobar	Chodi nala	2	5	4	3	Loamy	Yes	70726.7	935314.8	North	Y
9	Great Nicobar	Ganges creek	2	0	0	0	Clay	No	71405.9	934951.5	West	Y
10	Great Nicobar	Indira point	2	0	0	0	Sandy	No	64525.2	934936.1	North	
11	Great Nicobar	Megapode camp	2	2	0	0	Clay	No	64552.1	935010.7	North	Y
12	Great Nicobar	Binfen	2	0	0	0	Sandy	No	64811.7	935247.1	South	
13	Great Nicobar	Pulo Bhabi	2	4	1	0	Sandy	No	65402.4	934613.3	South	Y
14	Great Nicobar	Kosingdon	4.5	10	1	0	Sandy	Yes	65616.8	934508.8	North	Y
15	Great Nicobar	Alexandria	2	3	0	0	Sandy	No	65851.8	934358.9	North	
16	Great Nicobar	Pulo Kunj	2	1	0	0	Sandy	No	70148.9	934016.8	South	
17	Great Nicobar	Pilo Bakka	2	2	0	0	Sandy-loam	No	64941.1	934735.8	South	Y
18	Great Nicobar	Pulo Bed	2	2	0	0	Sandy	No	70352.1	934010.6	South	
19	Great Nicobar	Rekoret	2	6	0	0	Sandy	No	70810.5	934021.2	South	Y
20	Great Nicobar	Habra Bay	2	2	0	0	Sandy	No	71119.3	934220.1	West	Y
21	Kondul	Kondul	1	1	0	0	Sandy	Yes	71231.8	934307.9	North	Y
22	Little Nicobar	Pulo Patia	2	2	1	0	Loamy	Yes	71918.5	934341.6	North	
23	Little Nicobar	North Patia	1.5	6	1	1	Sandy	Yes	72121.2	934511.6	North	Y



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24	Little Nicobar	Pulo Panja	2	2	2	1	Sandy-loam	Yes	72256.1	934437.1	North	
25	Little Nicobar	School Point	2	1	3	0	Loamy	No	72339.4	934333.2	North	Y
26	Little Nicobar	Minlana	3	5	2	1	Clay-Loam	No	72505.9	934236.1	South	Y
27	Little Nicobar	Pulo Kiyang	1.5	0	1	0	Sandy-loam	No	71504	933827.8	South	
28	Little Nicobar	Muhincohin	2	4	0	0	Sandy-loam	No	71812.6	933748.2	South	
29	Little Nicobar	Bahua	2	2	0	0	Sandy	No	71933.7	933817.4	North	
30	Little Nicobar	Enfok	1.5	3	0	0	Sandy	No	72217.7	933829.9	West	Y
31	Menchal	Men	0.5	3	1	0	Loamy	No	72343	934554.2	North	Y
32	Meroe	Meroe	2	2	1	0	Sandy	No	73257.1	932450.4	South	Y
33	Pilo Milo	Pilo Milo	1.5	0	1	0	Clay	No	72402.3	934134.1	North	
34	Trak	Trak (NCHM)	<1	0	0	0	Sandy	No	72839.1	933755.5	South	Y
35	Treis	Treis	2	3	1	0	Sandy	No	72831.5	933852.8	North	Y
36	Nancowry	North to Tapang	2	0	0	0	Sandy	No	80044.4	933411.7	North	Y
37	Nancowry	Tapang	2	0	0	0	Sandy	No	75913.5	933448.1	North	
38	Nancowry	Connaught Bay	2	3	0	0	Sandy	Yes	75605	933446.1	North	Y
39	Nancowry	North to Cape Connaught	2	1	1	0	Sandy-loam	No	75627	933342.6	North	
41	Nancowry	South to Hindrah	2	1	0	0	Sandy-loam	No	75716.1	933243.6	North	
42	Nancowry	South to Lapat	2	0	0	0	Sandy-loam	No	75847.5	933058.3	North	Y
43	Nancowry	North Lapat	2	2	0	0	Sandy	No	75918.7	933032.3	North	
44	Nancowry	Chinla	2	0	0	0	Sandy-loam	No	75947.5	933310	West	
45	Kaichal	South Point	2	2	0	0	Loamy	No	75508	932753.7	South	Y
46	Kaichal	South to Kallatopaini	2	0	0	0	Sandy-loam	No	75541.4	932742	South	
47	Kaichal	East Bay	2	0	1	0	Sandy-loam	No	75736	932527.7	South	
48	Kaichal	Yuns Yenku	2	0	0	0	Sandy-loam	No	75313	932157.2	North	Y



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49	Katchal		2	0	0	0	Sandy	No	80034.8	932423.2	North	
50	Katchal	South to Julia	2	2	0	0	Sandy	No	80120.8	932301.9	West	
51	Katchal	Julia	2	0	0	0	Sandy	No	80034.7	932122.7	East	
52	Camorta	Near Pullaw (Expedition harbour)	2	0	0	0	Sandy	No	80427.2	933030.2	South	
53	Camorta	Dring	2	1	1	0	Loamy	Yes	80618.4	932929.8	South	Y
54	Camorta	South to Dring Harbour	2	1	1	0	Clay	No	80445.5	932903.6	South	
55	Camorta	North to Iltiya Harbour	2	0	0	0	Clay	No	81038.6	932740.6	South	
56	Camorta	Ronyok	2	1	1	0	Sandy-loam	No	80812.8	932741.9	South	Y
57	Camorta	Ol Hinpun	2	0	0	0	Sandy	No	80953.8	932723.7	South	
58	Camorta	Nighreak	2	0	0	0	Sandy	No	81157.7	932938.8	South	
59	Camorta	Bada Eneka	2	0	1	0	Clay	No	80447.6	933244.1	North	
60	Camorta	Kakana	2	0	0	0	Sandy	No	81005.6	933133.3	North	
61	Camorta	Kakana North (Interior)	1	1	0	0	Loamy	No	81235.5	933222	North	Y
62	Camorta	Kakana Noth coastal	2	0	0	0	Sandy	No	81139.5	933232.1	North	
63	Tillanchang	Castle bay	1	2	1	0	Sandy	Yes	82634.8	933823.9	North	Y
64	Tillanchang	South to Cape Mand	2	3	1	0	Sandy	No	83215.3	933757.7	South	Y
65	Tillanchang	Near Maharani Peak	2	3	2	0	Sandy-loam	No	83042.4	933841.9	South	
66	Tillanchang	Noth cheela	2	4	3	0	Sandy	No	82925.4	933745.8	North	
67	Tillanchang	Cape Winifred	2	4	3	0	Sandy	No	82624.9	933712.8	South	Y
68	Trinket	Piyang	2	4	0	0	Sandy	No	80513.8	933522.5	South	
69	Trinket	Muk Kang	1.5	3	0	0	Sandy	No	80346.5	933529.8	South	
70	Trinket	Safed Balu	2	1	0	0	Sandy-loam	No	80712.5	933354.4	East	



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71	Trinket	Trinket (Laful)	2	2	0	0	Sandy	No	80338.3	933432.5	North	Y
72	Trinket	Trinket	2	2	0	0	Sandy-loam	No	80455.8	933500.5	North	
73	Trinket	Near Light House	2	8	0	0	Sandy	Yes	80303.5	933458.1	South	Y
74	Teresa	North to Bangala	4	1	0	0	Sandy-loam	Yes	81854.5	930754.1	North	Y
75	Teresa	Alurang	2	2	0	0	Sandy-loam	No	81944.3	930548.5	North	Y
76	Teresa	Hiram	2	0	0	0	Sandy	No	81534.3	930546.1	South	
77	Teresa	Minyuk	2	0	0	0	Sandy	No	81528.6	930813.6	South	Y
78	Teresa	Laksi	2	0	0	0	Sandy	No	81219.4	930934.1	North	
79	Teresa	Kolaru	2	1	0	0	Sandy	No	81328.4	931108.1	South	
80	Teresa	Rakraka	2	3	0	0	Sandy	No	81206.4	931209.8	West	Y
81	Bampoka	Poakat	2	5	1	0	Sandy	No	81432.9	931325.9	North	Y