

A GROUND SURVEY OF WADERS ALONG THE COAST OF THAILAND, NOVEMBER AND DECEMBER 1984

by Rob G. Bijlsma and Frank E. de Roder

INTRODUCTION

The International Southeast-Asia Wader Study Project (Interwader) is an international cooperative research project launched in 1983 to investigate the numbers, distribution, ecology and conservation status of the fifty plus species of waders recorded in Southeast-Asia. The target areas for 1984 were Thailand and Borneo, where limited studies in the past have indicated significant wader populations (McClure 1974, Parish and Wells 1984).

As part of this project, we made aerial surveys along Peninsula Malaysia and most of the Thai coast, in the autumn of 1984. In order to get details about the species and age composition of waders, ground surveys were necessary in conjunction with the aerial surveys. During November and December 1984 we visited seven coastal sites in Thailand. Full details will be published in a report, whereas information on the feeding ecology of Terek Sandpipers and Nordmann's Greenshanks will be published elsewhere. This note summarises our survey.

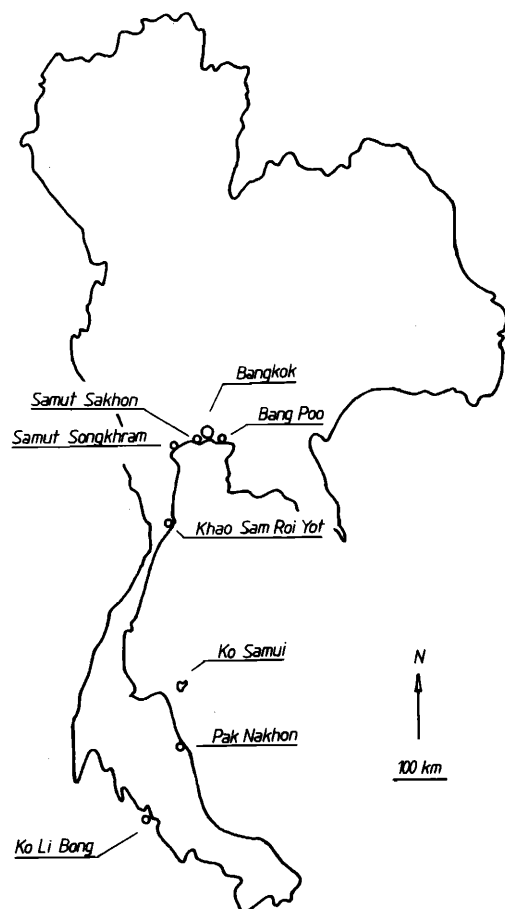


Figure 1. Map of Thailand, showing localities mentioned in the text.

AREAS VISITED AND METHODS

The seven coastal sites visited are shown in Figure 1. Four of these areas consist of saltpans and fish and shrimp ponds, viz. Bang Poo (13°30'N 100°65'E), Samut Sakhon (13°31'N 100°13'E), Samut Songkhram (13°25'N 100°01'E) and Pak Nakhon near Nakhon si Thammarat (8°24'N 99°58'E). Especially near the latter three localities, the area of potential wader habitat is very extensive. Only minor parts of these sites were surveyed during 7-12 November and 8 December, viz. areas of 1, 10, 20 and 0.1 km² respectively. Khao Sam Roi Yot National Park (12°04'N 99°52'E) along the eastern coast of Thailand has a good juxtaposition of habitats with open sandy shore, small mudflats, dry coastal flats and freshwater marshes (Lekagul, Round and Komophalin 1985). Some 15 km² was surveyed in the vicinity of Park headquarters during 13-21 November. Ko Li Bong (7°16'N 99°20'E), a small island off the western coast, has extensive sandy mudflats along the northern and southern shore, with large stretches of mangrove forest covering the eastern half of the island. The southern shore, with an estimated area of 14 km², was surveyed from 1-6 December, including the tiny island of Hin Bangyu just south of the easternmost tip of Ko Li Bong. The island of Ko Samui (9°26'N 99°58'E) off the east coast of Thailand mainly consists of mountains, whereas the lowlands are covered with palm plantations and some paddyfields. An 1.5 ha paddyfield near Ban Maenam in the central northern part of the island was surveyed on 10-12 December.

The sites were visited on foot. We found that the best period to make observations was the early morning and the late afternoon. The oppressive heat during the middle of the day made long-distance observations impossible. In the saltpans, and fish and shrimp ponds, the use of a bicycle or moped would have been a great help!

RESULTS AND DISCUSSION

A total of nearly 15 000 waders of 39 species was counted at the seven sites (Table 1). The actual number of wintering waders may have been much higher because we surveyed only minor parts of large stretches of potentially highly attractive wader sites, especially in the area between Samut Sakhon and Samut Songkhram (Lekagul, Round and Komolphalin 1985).

The discovery of an important roost with 3000 waders near Ko Li Bong resulted in the identification of three rare and endangered species which are listed in the ICBP Red Data Book, viz. 2 Asian Dowitchers *Limnodromus semipalmatus*, 1 Little Curlew *Numenius minutus* and 4 Nordmann's Greenshanks *Tringa guttifer*. These species are little known. Only recently, notable numbers of Asian Dowitchers have been recorded in Thailand: a concentration of 400 birds was discovered in the Gulf of Thailand in April 1984 (Lekagul, Round and Komolphalin 1985), and a second flock of 339 birds showed up three weeks later in the Mai Po marshes near Hong Kong (Interwader Newsletter 3). This

Table 1. Counts of waders at seven sites in Thailand during November and December 1984

	Bang Poo	Samut Sakhon	Samut Songkhram	Khao Sam Roi Yot	Ko Li Bong	Pak Nakhon	Ko Samui	Total
<i>Rostratula benghalensis</i>	4	-	-	-	-	-	-	4
<i>Himantopus himantopus</i>	5	12	51	16	-	28	-	112
<i>Dromas ardeola</i>	-	-	-	-	4	-	-	4
<i>Charadrius dubius</i>	440	114	124	1028	-	11	-	1717
<i>Charadrius alexandrinus</i>	163	19	11	95	29	-	-	317
<i>Charadrius peronii</i>	20	3	-	10	1	-	-	34
<i>Charadrius mongolus</i>	41	390	25	95	451	-	-	1002
<i>Charadrius leschenaultii</i>	9	21	-	23	197	-	-	250
<i>Pluvialis dominica</i>	688	10	-	-	-	15	77	790
<i>Pluvialis squatarola</i>	4	6	-	29	132	-	-	171
<i>Vanellus indicus</i>	-	-	-	16	-	-	18	34
<i>Charadrius sp.</i>	-	-	5	-	-	-	-	5
<i>Calidris tenuirostris</i>	4	3	-	-	74	-	-	81
<i>Calidris canutus</i>	-	-	-	1	1	-	-	2
<i>Calidris alba</i>	10	24	21	35	14	-	-	104
<i>Calidris ruficollis</i>	66	122	90	112	7	-	-	397
<i>Calidris temminckii</i>	15	58	80	281	8	4	-	446
<i>Calidris subminuta</i>	777	62	-	535	2	-	-	1376
Stint sp	-	-	270	-	-	-	-	270
<i>Calidris ferruginea</i>	240	317	220	135	194	2	-	1108
<i>Calidris alpina</i>	12	-	-	7	8	-	-	27
<i>Limicola falcinellus</i>	-	-	-	3	-	-	-	3
<i>Philomachus pugnax</i>	-	-	-	-	4	-	-	4
<i>Gallinago gallinago</i>	10	-	-	3	-	1	1	15
<i>Gallinago stenura</i>	13	2	-	130	-	2	59	236
<i>Gallinago sp.</i>	33	-	-	-	-	-	-	33
<i>Limnodromus semipalmatus</i>	-	-	-	-	2	-	-	2
<i>Limosa limosa</i>	20	-	-	2	-	-	-	22
<i>Limosa lapponica</i>	-	-	-	-	1182	-	-	1182
<i>Numenius minutus</i>	-	-	-	-	1	-	-	1
<i>Numenius phaeopus</i>	3	-	-	18	599	-	-	620
<i>Numenius arquata</i>	28	-	-	28	97	-	-	153
<i>Tringa erythropus</i>	4	2	-	4	-	2	-	12
<i>Tringa totanus</i>	227	34	252	40	325	106	-	984
<i>Tringa stagnatilis</i>	850	54	-	121	174	158	-	1357
<i>Tringa nebularia</i>	218	90	82	56	82	61	2	591
<i>Tringa guttifer</i>	-	1	-	-	4	-	-	5
<i>Tringa ochropus</i>	1	1	-	1	-	-	1	4
<i>Tringa glareola</i>	316	65	147	154	-	93	95	870
<i>Xenus cinereus</i>	4	-	-	2	248	-	-	254
<i>Actitis hypoleucos</i>	50	17	10	32	36	18	1	164
<i>Arenaria interpres</i>	7	-	-	1	64	-	-	72
Total	4282	1427	1415	3038	3940	501	285	14888

species was not previously recorded for the west coast of Thailand. The Great Knot *Calidris tenuirostris* is another scarce species, with the greatest number recorded in Thailand so far being 26 birds at Ko Li Bong in March 1983 (Lekagul, Round and Komolphalin 1985). We found a flock of 74 birds there. Considering the vastness of potential wader sites, and the difficulties of making reliable counts, there can be little doubt that future research will reveal many hitherto unknown wintering sites and much higher numbers.

Unfortunately, there are many threats to waders in Thailand. Catching and shooting may involve large numbers of waders. Furthermore, the destruction of mangrove forests (of which we did not see one single unmolested stretch; in many instances huge areas of mangroves had been converted into saltpans and fish and shrimp ponds during the last decade) will certainly have a harmful effect on the bottom fauna of bordering mudflats (Berry 1972, Diemont and Van Wijngaarden 1975), thereby reducing the suitability of these areas as wintering and migration sites for waders.

ACKNOWLEDGEMENTS

In the persons of Steen Christensen and Mogens Henriksen we not only had excellent companions

but also specialists in the identification of difficult species *pur sang*. Jon Starks and Phil Round kindly provided information, advice and maps.

REFERENCES

- Berry, A.J. 1972. The natural history of West Malaysian mangrove faunas. *Mal. Nat. J.* 25: 135-162.
- Diemont, W.H. and Van Wijngaarden, W. 1975. Nature conservation of mangroves in West-Malaysia. Report 293 of the Nature Conservation Department, Landbouwschool, Wageningen.
- Lekagul, B., Round, P.D. and Komolphalin, K. 1985. Birdwatching for Palearctic migrants in Thailand. *Brit. Birds* 78: 2-39.
- McClure, E.H. 1974. Migration and survival of birds in Asia. U.S. Army Component SEATO Medical Research Laboratory, Bangkok.
- Parish, D. and Wells, D.R. 1984. Interwader '84, prospectus. Kuala Lumpur.

Rob G. Bijlsma, Bovenweg 36, 6721 HZ Bennekom, The Netherlands.

Frank E. de Roder, Raapopseweg 70, 6824 DT Arnhem, The Netherlands.