## ZOOLOGICAL RESULTS OF THE INDIAN CHO-OYU EXPEDITION (1958) IN NEPAL

#### PART 2.—THE COLLECTING STATIONS

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(With 1 Table, 1 Text fig., and 5 Plates)

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#### I—INTRODUCTION

The Indian Cho-Oyu Expedition 1958 started from Kathmandu on March 26, 1958, and returned on June 24, 1958, after climbing the top of Cho-Oyu (8,155 metres) on May 15, 1958. The route followed by the expedition is shown in the accompanying map. (Text-fig. 1). The Zoological field work in the expedition consisted of making extensive collections of the fauna in the Solo Khumbu district in the Eastern Nepal Himalayas upto an elevation of 5,500 metres in the Dudh Kosi, Bhote Kosi and Imja Khola Valleys, by myself. Altogether over 2,000 specimens were collected at the altitude between 2,000 — 5,500 metres in the varying habitats like torrential streams, lakes, high meadows, barren-rocks, ablation valleys, snow fields and glaciers. The collection includes many species of fishes, frogs, lizards, snakes, small mammals, insects and spiders.

In the torrential streams of the Dudh Kosi drainage basin up to an elevation of 3,000 metres, 13 species of fish belonging to 12 genera of 4 families were obtained. The fish Coraglanis kishinonyei Kimura has been recorded for the first time in the Indian region. Lizards, snakes and frogs were collected under barren rocks and in the marshy areas along the long mountainous paths up to an elevation of 3,000 metres. In altitudes of 3,000—5,000 metres in the high solitary Khumbu glaciated moraines, examples of mouse hares, voles, and different species of insects belonging to the families Gryllidae, Nepidae, Meloidae and Coccinellidae were collected in the xerophytic vegetation below rocks and in crevices. Spiders belonging to the genera Tegenaria, Hania, Drassodes, Phaeocedus and Xysticus were collected in the fissures of rocks and boulders in the ablation valleys near the Nagpala and Khumbu glaciers at 5,500 metres altitude.

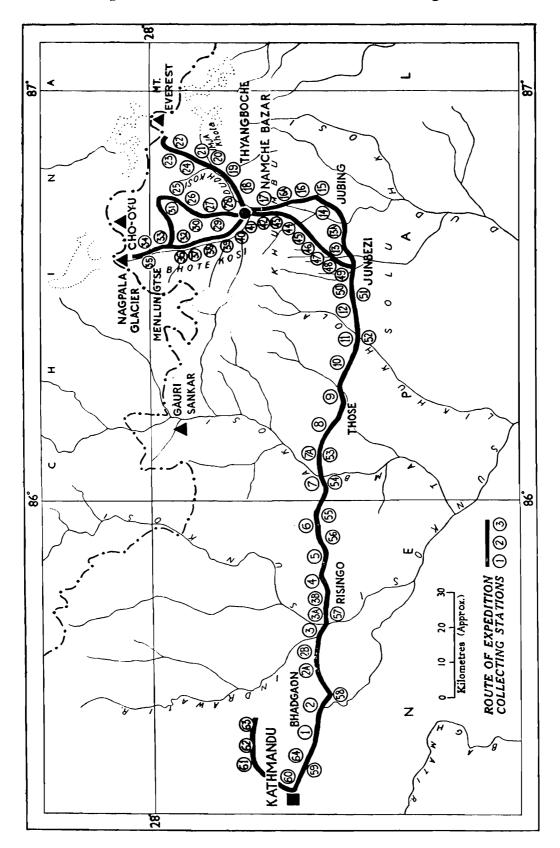
A number of photographs were taken of the habitats where the specimens were collected (Plates 8-12).

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The list of stations where collections were obtained are detailed in Table 1.

# II—LIST OF COLLECTING STATIONS (TABLE 1)

Collections were made at a total of 64 Collecting Stations which are listed in Table 1. Where possible, the air temperatures recorded and the number of specimens collected at each Station are given.



Text-fig. 1—Map of the Eastern Nepal Himalayas, showing the route of the Indian Cho-Oyu Expedition (1958).

TABLE 1.

List of Collecting Stations, etc., in Nepal where halts were made and collections obtained during the Indian Cho-Oyu Expedition (1958) from March 20 to June 24, 1958.

#### Abbreviations:

M., altitude in metres.

Ex., exs., examples (of zoological specimens).

Lat., latitude.

Long., longitude

Sta., Station Number.

Serial number	Date (1958)	Station number	Locality; approximate altitude (in metres); approximate latitude (N.) and longitude (E.); and description		perature recorded Collections made alt (in degrees C.) (Nos. approx.)		Remarks
				Minimum	Maximum		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	19-3-58 to 25-3-58	Sta. 0	Kathmandu, 1371 m. Lat. 27°44'; long. 85°20.'	34°	45°	Nil.	
2	26-3-58	Sta. 1	Banepa, 1577 m. Lat. 27°42'; long 85°31'	38°	52°	Nil.	
3	27-3-58	Sta. 2	Stream 2 miles N. of Panch Khal, 1800 m. Lat. 27°43'; long. 85°33'.	34°	55°	fishes	
3(a)	27-3-58	Sta. 2A	Small shallow pool at Panch Khal.	34 °	55°	frogs	
3( <i>b</i> )	27-3-58	Sta. 2B	At. Alt. 1890 m. Small Pool	34°	55°	frogs	
4	28-3-58	Sta. 3	Stream of Dolaghat, 710 m. Lat. 27°44'; long. 85°48'.	32°	53°	fishes	
						aquatic insects	

List of Collecting Stations, etc., in Nepal where halts were made and collections obtained during the Indian Cho-Oyu Expedition (1958) from Murch 20 to June 24, 1958.

TABLE 1-contd.

Serial Date (1958) number		Station number	Locality; approximate altitude (in metres); approximate latitude (N) and longitude (E.); and description	Air temperat during halt (i	ture recorded n degrees C.)	Collections made (Nos. approx.)	Remarks
			and description	Minimum	Maximum		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
5	28-3-58	Sta. 3A	On way to Phokda village, 700 m. Lat. 27°40'; long. 85°42'.	32°	53°	insects	
6	29-3-58	Sta. 4	Stream N.E. of Chaubas, 2021 m. Lat. 27°41′ long. 85°44′.	; 29°	50^	fishes	
7	30-3-58	Sta. 5	Pool with rocky bed at Rdisingo, 2200 m. Lat. 27°43′; long. 85°43′.	27°	53°	tadpole	
8	31-3-58	Sta. 6	Stream at Phoktey, 2000 m. Lat. 27°45'; long. 85°47'.	28°	55°	fishes	
9	1-4-58	Sta. 7	On way to Namdu, 2030 m. Lat. 27°46'; long. 85°46'.	28°	51°	insects	
10	1-4-58	Sta. 7A	Stream at Namdu, 2000 m. Lat. 27°46'; long. 85°46'	27°	54°	fishes	
11	2-4-58	Sta. 8	Fast flowing stream with rocky bed at Sikri, 2100 m. Lat. 27°37'; long. 86°10'.	25°	<b>60</b> °	fishes	
12	3-4-58	Sta. 9	Stream at Thosey, 2600 m. Lat. 27°38'; long. 86°17'.	25°	53°	fishes	
13	4-4-58	Sta. 10	Bhandar. 2745 m. Lat. 27°41'; long. 86°40'.	24°	51'	insects	
14	<b>5-4-</b> 58	Sta. 11	Stream, on way to Shate, 2700 m. Lat. 27°40′; long. 86°30′.	20°	55°	fishes	
15	6-4-58	Sta, 12	Stream N. of Jumbezi, 3000 m. Lat. 27°40'; long. 86°35',	20°	48°	fishes	

16	7-4-58	Sta. 13	On way to Taksindu, 3200 m. underneath stone boulders, Lat. 27°41'; long. 86°37'.	19°	45°	snake frogs		1961]
17	7-4-58	Sta. 13A	Stream, N. of Takasindu, 3100 m. I.at. 27°42'; long, 86°39'.	19°	45°	fishes		J
18	8-4-58	Sta. 14	On way to Khari Khola, 3108 m. Lat. 27°44′; long 86°43′.	20°	38°	frog		
19	9-4-58	Sta. 15	Ghat, 3200 m. Lat. 27°45'; long. 86°44'	19°	40°	fishes		
20	10-4-58	Sta. 16	Stream N. of Ghat, 3200 m. Lat. 27°45'; long. 86°45'.	18°	34°	fishes		A. K.
21	10-4-58	Sta. 16B	N. E. of Ghat, 3100 m. Lat. 27°44'; long. 86°44'.	19°	32°	insects		Datta :
22	15-4-58	Sta. 17	From Shrubby vegetation, 3500 m. N. of Namche Bazar, Lat. 27°46'; long. 86°44'	18°	39°	insects	11-4-58 to 14-5-58 halt at Namche Bazar.	: Pisces
23	16-4-58	Sta. 18	On way to Thyangaboche, 4150 m. from Shrubby vegrtation, Lat. 27'31'; long. 86°46'	19°	35°	insects	Halt at Thyangaboche from 17-4-58 to 19-4-58.	es
24	20-4-58	Sta. 19	On way to Pangboche, 4572 underneath stones with vegetations. Lat. 27°42'; long. 86°47'.	16°	29°	insects		
25	21-4-58	Sta. 20	On way to Thaparma, 4572. Lat. 27°43'; long. 86°49'.	14°	30°	insects		
26	22-4-58	Sta. 21	On way to Phariche, 4600 m. Lat, 27°45'; long. 86°46'.	10°	29°	insects		229

TABLE 1—contd.

List of Collecting Stations, etc., in Nepal where halts were made and Collections obtained during the Indian Cho-Oyu Expedition (1958) from March 20 to June 24, 1958.

Sérial number	Date (1958)	Station number	Locality; approximate altitude (in metres); approximate latitude (N.) and longitude (E.); and description	Air temperature recorded during halt (in degrees C.)		Air temperature recorded during halt (in degrees C.		Air temperature recorded; during halt (in degrees C		; Air temperature recorded ; during halt (in degrees C		; Air temperature recorded; during halt (in degrees C		Collections made (Nos. approx.)	Remarks
				Minimum	Maximum										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)								
27	23-4-58	Sta. 22	On way to Lobujeige, 4876. m. Lat. 27°44'; long. 86°48'	8°	28°	spider	9								
28	25 <b>-4-5</b> 8	Sta. 23	On way to camp at 4376 m.			spider, insects									
29	24-4-58	Sta. 23A	Gorashan, \$334 m. Lat. 27°49'; long. 86°45'.	5°	25°	insects									
						spiders									
						mammal									
30	26-4-58	Sta. 24	On way to Labujeye, 4876 m. Lat. 27°50'; long. 86°50'.	4°	25°		No collections, due to bad weather.								
31	27-4-58	Sta. 25	On way to Panjboche, 4500 m. long. 86°49'. Lat. 27°45'.	8°	26°		Ditto.								
32	28-4-58	Sta. 26	On way to Thyangaboche, 4260 m. Lat. 27°44′; long. 86°45′.	. 10°	<b>29</b> ^		Ditto.								
33	29-4-58 to 30-4-58	Sta. 27	On way to Phorche, 4300 m. Lat. 27°50'; long. 86°45'.	10°	25°		Ditto.								
34	1-5-58 to 3-5-58	Sta. 28	On way to Namche Bazar, 3810 m. from Shrubby vegetations. Lat. 27°52'; long. 86°44'.	20°	31°	ínsects	•								
35	4-5-58	Sta. 29	On way to Thami, underneath bouldery with shrubby vegetation, 4000 m. Lat. 27°38'; long. 68°40'.	19^	32°	insects									

36	5-5-58	Sta. 30	On way to Marlung. 4500 m, Lat. 27°50'; long. 86°40'.	19^	30°	insects		1961]
37	<b>6-</b> 5-58	Sta. 31A	On way to Chule, 5000 m. Lat. 28°; long. 86°36'.	15°	30°	insects		
38	7-5-58, 8-5-58, 10-5-58	Sta. 31B Sta. 32, Sta. 33	Round about Lunak, 5100 m. Lat, 28°25'; long. 86°34'.	13*	20°	spider an insects		
39	11-5-58	Sta. 34	On way to Lehengo, 5100 m. Lat. 28°10'; long. 86°40'.	13°	21°	insects		Α.
40	12-5-58	Sta. 35	On way to Mosamba Lake, 4600 m. Lat. 28°20'; long. 86°42'.	15°	25°	insects		<b>κ</b>
41	13-5-58 to 14-5-58	Sta. 36 Sta. 36A	On way to Dudh, Pokhari, 5000 m. Lat. 28°10'; long. 86°45'.	14°	23°	insects		DATTA:
			Small pool on the N. of Dudh Pokhari, 5000 m. Lat. 28°20'; long. 86°46'.	14°	25°	Oligochaets		Pisces
42	15-5-58	Sta. 37	On way to Dob, 5000 m. Lat. 27°58'; long. 86°50'.	14°	25°	insects		•
43	16-5-58 to 20-5-58	Sta. 38	Round about Namche Bazar, 3800 m. Lat. 27°48'; long. 86°43'.	19°	31^	insects		
44	21-5-58	Sta. 39	On way to Puyan, 3350 m. Lat. 27°40'; long. 86°47'.	19°	32°		No. Collections due to bad weather	
45	22-5-58	Sta. 40	Round about Puyan, 3500 ni. Lat. 27°40'; long. 86°47'	20°	39°		Ditto.	231

List of Collecting Stations, etc., in Nepal where halts were made and Collections obtained during the Indian Cho-Oyu Expedition (1958) from March 20 to June 24, 1958.

TABLE 1—contd.

Serial number	Date (1958)	Station number	Locality: approximate altitude (in metres); approximate latitude (N.) and longitude (E.); and description	Air temperature recorded during halt (in degress C.)			Remarks
				Mnimum	Maximum		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
46	23-5-58	Sta. 41	}				
46(a)	24-5-58	Sta. 42	On way to Lukhla, 4870 m. Lat. 27°45';	20°	32°	insects	
46(b)	26-5-58	Sta. 43	long. 86°45′.				
47	27-5-58	Sta. 44	On way to Chama, 3000 m. Lat. 27°42'; long. 86'43'.	20°	39°	insects	
48	28-5-58	Sta. 45	On way to Tata, 4400 m. Lat. 27°41'; long. 86°40'.	19°	34°	insects	
49	29-5-58	Sta. 46	On way to Jamnaso, 4876. Lat. 27°42'; long. 86°29'.	20°	39°	spider, and fishes	
50	30-5-58	Sta. 47	On way to Thanja, 3600 m. Lat. 27°48'; long, 86°35'.	25°	40°	insects	
51	1-6-58	Sta. 48	On way to Jumbezi, 2700 m. Lat. 27°40'; long. 86°35'.	35°	45°	insects and fishes	
52	1-6-58	Sta. 49	Round about Jumbezi, 2600 m. Lat. 27°40'; long. 86°35'.	33°	50°	lizard, frog	
53	1-6-58	Sta. 50	At Jumbezi, 2895, stream with rocky bed. Lat. 27°40'; long. 86°35'.	3 <b>5°</b>	51°	fishe:	
54	2-6-58	ta. 51	On way to Chinga stream with rocky bed, 2438 m. Lat, 27°38'; long, 86°39',	32°	49°	fishes	

55	3-6-58	Sta. 52	On way to Chagma, stream (fast flowing, rocky bed), 2895 m. Lat. 27°40'; long. 86°18'.	32°	55° tishes, frog	1961]
56	<b>4-6-</b> 58	Sta. 53	Fast flowing stream at Mekchang, 2590 m. Lat. 270°35'; long. 86°16'.	39°	56° fishes	
57	5-6-58	Sta. 54	Fast flowing stream at Yarshah, 2286 m. Lat. 27°34′; long. 86°10′.	37°	51° fishes	
58	<b>6-6-</b> 58	Sta. 55	Stream with rocky bed, fast flowing at Kerantichap. 1828 m. Lat. 27°38"; long. 86°2'.	40°	60° fishes	A
59	<b>7-6-</b> 58	Sta. 56	Stream at Chetra, 24000 m. Lat. 27°40'; long. 86°.	41°	65° fishes	7
60	8 <b>-6-</b> 58	Sta. 57	Stream at Sangsholi, 2133 m. Lat. 27°38'; long. 85°48'.	39°	64° leech and fishes	DATTA:
61	9-6-58	Sta. 57A	Dolaghat, 1066 m. Lat. 27°38'; long. 85°40'.	37°	No collection, due to bad weather.	Pisces
62	10-6-58	Sta. 58	Baneppa, 1066 m. Lat. 27°35'; long. 85°32'.			
63	11-6-58 to 19-6-58	Sta. 59	Kathmandu, 1371 m. Lat. 27°40'; long. 85°20'.	38°	52° ish s	
64	20-6-58	Sta. 60	Baghmati River, Kathmandu Valley, 1370 m. Lat. 27°45'; long. 85°30'.	38°	65° fishes	
65	21-6-58	Sta. 61	Stream near Nilkanth, alt. 1524 m. Kathmandu Valley. Lat. 27°45'; long. 85°15'.	38°	68° fis hes	233

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TABLE 1—concld.

Serial number			Locality; approximate altitude (in metres); approximate latitude (N.) and longitude (E.); and description	Air temperar during halt		Collection made (Nos. approx.)	Remarks
				Minimum	Maximum		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
66	22-6-58	Sta. 62	Stream near Soumbhunath, 1370 m, Kathmandu Valley, Lat. 27°35'; long, 85°15'.	35°	<b>6</b> 9°	fishees	
67	23-6-58	Sta. 63	Stream near Thankot,. 1800 m. Kathmandu Vally. Lat. 27°40'; long. 85°10'.	35°	<b>6</b> 9°	fishes	
68	24-6-58	Sta. 64.	Stream near Kirtipur, 1981 m. Kathmandu Valley, Lat. 27°43": long. 85°19".	35°	65°	fishes	