

APPENDIX

(OCCASIONAL PAPER 281)

Taxonomic list of specimens collected during TTU-UNIMAS Sowell Expedition 2006. Taxonomic arrangement follows Simmons (2005) except for the rearrangement of several tribes in the family Vespertilionidae and the recognition of family Miniopteridae, which follows Hooper and Van Den Bussche (2003). Conservation status: VU=Vulnerable; LR=Lower Risk; nt=Near Threatened; lc=Least Concern (following IUCN 2007). (●)=Recorded in this study; (○)=New record for the collecting locality; N=Total individuals collected; (♀)=Female; (♂)=Male. All measurements were taken in millimeters (mm), body mass in grams (g). Numbers in parentheses (following measurement) indicate the number of individuals from which measurements were taken, if less than the total.

FAMILY Subfamily Species	Conservation status	Study Sites					Measurements						
		Krau	Monggis	Bako NP	Kubah NP	Mt. Penrisen	N	Forearm	Tail	Hind Foot	Ear	Total	Weight
PTEROPODIDAE													
<i>Aethalops aequalis</i>	LR/nt					●	1♀	43	0	8	9	62	9.9
							4♂	42-46	0	6-10	10-13	65-70	14.6-18.0
<i>Balionycteris maculata</i>	LR/lc			●	●	●	5♀	39-41.5	0	7-10	9-11	56-67	8.3-11 <sup>(4)</sup>
							2♂	40-42	0	8-9	9-10	62-70	10.5-14.5
<i>B. seimundi</i>	None	●					1♀	43	0	11	11	66	14
							1♂	39	0	10	11	61	13.1
<i>Cynopterus brachyotis</i>	LR/lc		●	●	●	●	12♀	56-63	7-13	11-16	14-18	79-103	24-37
							6♂	57-79	5-12	10-20	15-22	80-115	23.8-66.9

<i>C. horsefieldii</i>	LR/lc	●			6♀	72-78	9-16	16-20	18-24	99-115 <sup>(5)</sup>	46.7-56.4 <sup>(4)</sup>	
					3♂	74-76 <sup>(2)</sup>	10-14 <sup>(2)</sup>	15-17 <sup>(2)</sup>	21 <sup>(2)</sup>	108-109 <sup>(2)</sup>	55-57.2 <sup>(2)</sup>	
<i>Eonycteris major</i>	LR/lc			●	●	2♀	81-83	16-22	20-22	20	143-145	83.7-93.3
						2♂	84-86	26-28	18-22	17-21	143-145	81.4-95
<i>E. spelaea</i>	LR/lc	●	●		●	3♀	63-65	11-17	14-16	14-19	105-109	37-46.3
						4♂	60-68	11-20	16-19	16-19	103-112	32.6-47.4
<i>Macroglossus minimus</i>	LR/lc				●	5♀	40-43	0-2	1-12	13-16	70-96	14.9-16.5 <sup>(3)</sup>
						6♂	31-44	0-4	8-14	13-16	68-78	15-17.5
<i>M. sobrinus</i>	LR/lc	●				2♀	46-48	0	9-12	14-16	71-80	14.8 <sup>(1)</sup>
						2♂	47 <sup>(1)</sup>	0	9-12	15-16	76-79	19-20.6
<i>Megaerops ecaudatus</i>	LR/lc				●	4♀	46-59	0	11-12	13-16	73-86	13.5-24.4
<i>Penthetor lucasii</i>	LR/lc		●	●	●	10♀	41-65	4-15	11-18	12-16	80-104	16.1-44.5
RHINOLOPHIDAE												
<i>Rhinolophus affinis</i>	LR/lc					3♀	48-50 <sup>(2)</sup>	24-27	8-12	20-23	78-84	9.1-10.1
						1♂	50	24	10	24	80	10.2
<i>R. borneensis</i>	LR/lc	●	●		○	2♀	45-46	24-28	9	20	74-77	7.5-9
						3♂	43-46	22-31	8-10	16-19	76-82	7.1-8

<i>R. luctus</i>	LR/lc	●	○	3♀	68-70 <sup>(2)</sup>	34-48	15-17	31-33	125-136	31.9-38.6		
				3♂	65-67	31-49	15-19	35-37	113-126	27-32.2		
<i>R. philippinensis</i>	LR/nt		○	2♀	47 <sup>(1)</sup>	31-32	7-10	24-28	68-78	7.2-7.9		
<i>R. robinsoni</i>	None	●		1♀	45	21	9	20	74	7		
<i>R. sedulus</i>	LR/lc	●	○	1♀	44	25	11	23	77	8.7		
				4♂	43-44 <sup>(3)</sup>	20-23	9-12	23-25	73-78	8-9.5		
<i>R. stheno</i>	LR/lc	●		2♂	45 <sup>(1)</sup>	16-17	18	17-18	64-69	7.9 <sup>(1)</sup>		
<i>R. trifoliatus</i>	LR/lc	●	●	●	●	1♀	52	31	14	27	95	13.5
				8♂	50-53	27-39	9-14	25-28	88-102	11.5-12.9		
HIPPOSIDERIDAE												
<i>Hipposideros ater</i>	LR/lc		○	2♂	42	24-26	8	16-17	70-74	6-6.2		
<i>H. bicolor</i>	LR/lc	●	●	11♀	45-47	27-32	6-10	18-21	82-87	5.5-8.4		
				9♂	42-45 <sup>(6)</sup>	23-32	7-10	16-20	74-82	5.9-9.9		
<i>H. cervinus</i>	LR/lc	●	●	●	●	14♀	44-51	20-28	6-12	11-18	71-85	6-9
				14♂	37.5-50 <sup>(13)</sup>	20-29	7-10	13-17	66-85	4.4-10.5		
<i>H. cineraceus</i>	LR/lc	●		1♀	37	29	7	18	69	4		
<i>H. coxi</i>	VU		●	●	1♀	56	31	9	27	99	11.8	

				1♂	53	31	10	25	98	10
<i>H. doriae</i>	LR/lc		○	1♀	37	23	6	14	64	3.9
				1♂	36	25	6	14	66	4.1
<i>H. dyacorum</i>	LR/lc	●	○	1♀	43	22	7	16	71	5.7
				2♂	40-41	19-21	7-13	14-16	64-66	5-5.6
<i>H. galeritus</i>	LR/lc	●	○	6♀	48-51	32-40	6-10	13-17	85-92	6-7.6
				3♂	46-51	32-34 <sup>(2)</sup>	5-6 <sup>(2)</sup>	12-14 <sup>(2)</sup>	82-87 <sup>(2)</sup>	5.5-8.6
<i>H. larvatus</i>	LR/lc	●		2♀	57-58	31-36	8-12	21-24	95-98	14.5-15
				2♀	56-60	32-33	8-10	22-23	92-98	10.7-14.4
<i>H. ridleyi</i>	VU		○	1♀	45	29	7	20	83	7
				2♂	48-49	21-28	9-11	21-27	85-87	7.5-7.9
MEGADERMATIDAE										
<i>Megaderma spasma</i>	LR/lc	●	●	1♀	62	0	12	40	129	23.5
				1♂	58	0	17	43	77	23.1
EMBALLONURIDAE										
Taphozoinae										
<i>Saccolaimus saccolaimus</i>	LR/lc	●		2♂	73-75	29-27	16-18	219-20	125-127	44.2-45.3

Emballonurinae

<i>Emballonura alecto</i>	LR/lc	●	○	3♀	45-49	11-13	5-9	7-15	61-77	5.1-6
				1♂	49	11	8	12	84	5

NYCTERIDAE

<i>Nycteris tragata</i>	LR/lc	●		1♂	51	72	12	31	138	18
-------------------------	-------	---	--	----	----	----	----	----	-----	----

VESPERTILIONIDAE

Vespertilioninae

<i>Arielulus cuprosus</i>	VU		○	2♂	37 <sup>(1)</sup>	35-42	7-9	11-12	83-86	6.5-5.8
<i>Hesperoptenus tomesi</i>	LR/lc		○	1♀	N/A	50	14	13	133	33.3
<i>Glischropus tylopus</i>	LR/lc	●	●	10♀	26-33 <sup>(9)</sup>	30-39	6-9	9-12	74-83	3.2-3.9
				4♂	29-32	28-35	6-7	10-12	80-96	3.5-4.3
<i>Pipistrellus stenopterus</i>		●		1♀	42	44	10	15	106	14.7
				1♂	42	45	11	13	109	20.1
<i>Tylonycteris robustula</i>	LR/lc	●	○	1♀	33	26	6	8	73	4
				2♂	25 <sup>(1)</sup>	23-35	6-7	9-11	68-80	5.1-7

Myotinae

<i>Myotis adversus</i>	LR/lc		○	1♀	42	42	12	17	101	9.5
------------------------	-------	--	---	----	----	----	----	----	-----	-----

				2♂	39	40-41	11-12	16-17	98-100	8.4-9.1
<i>M. muricola</i>	LR/lc	●	○	1♀	36	41	7	13	88	3.7
				4♂	33-36	29-40	7-8	12-13	78-86	4-4.7
<i>M. ridleyi</i>	LR/nt	●		5♀	30 <sup>(2)</sup>	23-31	6-8	10-12	69-79	4-5.2
				3♂	29-30	28-31	6-7	11	70-77	3.9-4
Murininae										
<i>Murina rozendaali</i>	LR/nt	●	●	1♀	N/A	27	6	12	66	3.8
				1♂	33	36	10	14	82	4.3
Kerivoulinae										
<i>Kerivoula hardwickii</i>	LR/lc	●	●	2♀	33-34	44-45	7-8	13-15	84-89	3.7-3.8
				2♂	30-31	39-46	6.5-8	12-13	78-82	2.9-3.2
<i>K. intermedia</i>	LR/lc	●		3♀	29.5-30.0	34-42	6-7	11-12	74-78	3.1-3.5
<i>K. lenis</i>		○		2♀	38.7-38.9	47-53	9-10	16	96-101	6.7-6.9
<i>K. minuta</i>	LR/lc	○	●	4♀	28-46	39-42	7-12	11-12	71-78	2.4-3.5
				2♂	26.6-27	35-37	6-7	10-11	66	2.2-3
<i>K. papillosa</i>	LR/lc	●		1♀	42	53	10	12	106	9.1
				3♂	41	49-50	10	14-15	99-104	7.9-8.5

<i>K. pellucida</i>	LR/lc	●				1♂	29	50	7	15	86	4
---------------------	-------	---	--	--	--	----	----	----	---	----	----	---

MINIOPTERIDAE

<i>Miniopterus magnater</i>	LR/lc	●				1♀	50	60	10	13	118	11.8
-----------------------------	-------	---	--	--	--	----	----	----	----	----	-----	------

---

Total individuals			67	41	40	41	70	259				
-------------------	--	--	----	----	----	----	----	-----	--	--	--	--

Total species			18	13	13	18	27	50				
---------------	--	--	----	----	----	----	----	----	--	--	--	--

New locality records			2	0	1	4	16					
----------------------	--	--	---	---	---	---	----	--	--	--	--	--

---