

Appendix 4. Birds Species Recorded.

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Source: A Rapid Biological Assessment of three sites in the Mountains of Southwest China Hotspot, Ganzi Prefecture, Sichuan Province, China: 157

Published By: Conservation International

URL: <https://doi.org/10.1896/054.052.0113>

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目 Order	科 Family	物种名 Species name	全球受威胁状况 Threat status	资料来源 Data source	生境类型 Habitat type						海拔范围 (m)			居留情况 Status						个体数量 No. of individuals						
					丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	A	B	A	B	A	B	A	B	A	B
		山斑鸠 <i>Streptopelia orientalis</i>		O	A	F, V	G, I	B	F, G, V	A	B	3140 - 3145	2380			R	+++	2	4	1	6	3				
鸮形目 CUCULIFORMES																										
杜鹃科 Cuculidae																										
		大鸮 <i>Cuculus sparveroides</i>		O		F, V										S	I									
		大杜鹃 <i>Cuculus canorus</i>		O				F, G, V	I, J					3680 - 3830		S						5	2			
鸮形目 PSITTACIFORMES																										
鸮科 Psittacidae																										
		大紫胸鸮 <i>Psittacula derbiana II</i>		O		F			F	E						R	14									1
鸮形目 STRIGIFORMES																										
鸮科 Strigidae																										
		雕鸮 <i>Bubo bubo II</i>		O		F, V, G										R	I									
		纵纹腹小鸮 <i>Athene noctua II</i>		O					F, G, V							R										1
雨燕目 APODIFORMES																										
雨燕科 Apodidae																										
		白腰雨燕 <i>Apus pacificus</i>		O		F, G, V	B, H						2450 - 2920								48	113				
		白喉针尾雨燕 <i>Hirundapus caudacuta</i>		O		F, G, V															3					
戴胜目 UPUPIFORMES																										
戴胜科 Upupidae																										
		戴胜 <i>Upupa epops</i>		O	V, G	A, G	V, G	B, E, H	V, G	I		2820 - 3460	2390 - 2400			S	++	3	3	4	6	1				
鸢形目 PICIFORMES																										
啄木鸟科 Picidae																										

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					丹巴 Dangba		康定 Kangding		雅江 Yajiang		丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	A	B	A	B	A	B	A	B	A	B	A
		蚁鴛 <i>Jynx torquilla</i>		O				F, G, V	G			3640													1		
		斑姬啄木鸟 <i>Picumnus innominatus</i>		O		F											1										
		赤胸啄木鸟 <i>Picoides cathpharius</i>		O		F	H	F		2730							3	1	2								
		黄颈啄木鸟 <i>Picoides darjellensis</i>		O				F	I			3650 - 3810													4		
		棕腹啄木鸟 <i>Dendrocopos hyperythrus</i>		O	F	F		F									2	2	3								
		星头啄木鸟 <i>Dendrocopos canicapillus</i>		O	F																						
		大斑啄木鸟 <i>Dendrocopos major</i>		O	F																						
		灰头绿啄木鸟 <i>Picus canus</i>		O	F	F		F									2	1	3	4							
		黑啄木鸟 <i>Dryocopus martius</i>		O	F	F		F	I			3790													1		
雀形目 PASSERIFORMES																											
百灵科 Alaudidae																											
		小云雀 <i>Alauda gulgula</i>		O				G, V																		5	
		角百灵 <i>Eremophila alpestris</i>		O				G, V																		4	
燕科 Hirundidae																											
		烟腹毛脚燕 <i>Delichon dasypus</i>		O	F, V, G	A, B, C, F, G, H	F, V, G	H	B, E, I, J	2850 - 4100	2400 - 2940	3650 - 3855			50	132	23	101	23								
		家燕 <i>Hirundo rustica</i>		O			F, V, G	H			2500															2	
鹡鸰科 Motacillidae																											
		黄头鹡鸰 <i>Motacilla citreola</i>		O				G, V	J			3830														4	
		灰鹡鸰 <i>Motacilla cinerea</i>		O	V, G		G, V	D	D		2630 - 2850	3850 - 3900			2	5	3	7	3								
		白鹡鸰 <i>Motacilla alba</i>		O	G, V	B	G, V	B, D	B, D, G, I, J	2830	2380 - 3070	3650 - 3890			12	6	9	4	19	152							
		田鸫 <i>Anthus richardi</i>		O				G, V	J																	5	
		粉红胸鸫 <i>Anthus roseatus</i>		O	F, G, V	F				4100																1	

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					丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	A	B	A	B	A	B	A	B
		树鸚 <i>Anthus hodgsoni</i>		O	F, G, V	F	F, G, V	E, I	3270	3890 - 3960			S		3					12	7
	山椒鸟科 <i>Campephagidae</i>																				
		长尾山椒鸟 <i>Pericrocotus ethologus</i>		O		F	F	F, I, J		2450 - 2620	3700		S			17	23	18	1		
	鹎科 <i>Pycnonotidae</i>																				
		黄臀鹎 <i>Pycnonotus xanthorrhous</i>		O		F, V	F, V	B, E, H		2380 - 2480						13	51				
		领雀嘴鹎 <i>Spizixos semitorques</i>		O		F, V	F, V	B, E, H									8				
	伯劳科 <i>Laniidae</i>																				
		灰背伯劳 <i>Lanius tephronotus</i>		O	F, G, V	A, B, G	F, G, V	B, H	2785 - 3400	2380 - 2450	3640 - 3890		S		5	15	7	8	9	25	
		楔尾伯劳 <i>Lanius sphenocercus</i>		O		F			4050				S			1					
	河乌科 <i>Cinclidae</i>																				
		河乌 <i>Cinclus cinclus</i>		O	S								R		5						
		褐河乌 <i>Cinclus pallasi</i>		O	S		S	D			3645 - 3850		R		6		4	1	5	3	
	鹟科 <i>Troglodytidae</i>																				
		鹟 <i>Troglodytes troglodytes</i>		O	F		F	F			3825 - 4070		R		2		3		2	5	
	岩鹟科 <i>Prunellidae</i>																				
		棕胸岩鹟 <i>Prunella strophiata</i>		O	F, G, V	F	F, G, V	B, G, I	4040		3855 - 3890		R		3	10	6		5	5	
		栗背岩鹟 <i>Prunella immaculata</i>		O	F, G, V	F			4040				R			2					
	鹟科 <i>Turdinae</i>																				
		黑胸歌鹟 <i>Luscinia rubythroa</i>		O							3890		S								1
		红胁蓝尾鹟 <i>Tarsiger cyanurus</i>		O	F		F	E			3960 - 4100		S		1				2		
		金色林鹟 <i>Tarsiger chrysaeus</i>		O	F								S		1						
		赭红尾鹟 <i>Phoenicurus ochruros</i>		O			F	B, G, J			3645 - 3840		R						3	5	

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					丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	丹巴 Dangba	康定 Kangding	雅江 Yajiang	A	B	A	B	A
		蓝额红尾鸲 <i>Phoenicurus frontalis</i>		O	F,G,V	A, F	F, G, V	E, F, G, I	3590 - 4160		3580 - 4290	R	7	10	4	9	12	
		黑喉红尾鸲 <i>Phoenicurus hodgsoni</i>		O	F,G,V		F, G			2470 - 2500		R	3		2	1	7	
		白喉红尾鸲 <i>Phoenicurus schisticeps</i>		O			F	E, H, I			3660 - 3960	R			3		9	25
		北红尾鸲 <i>Phoenicurus atroreus</i>		O	F,G,V	E, G, H	F, G, V	E, G, H, I	3030 - 3060	2400 - 2620	3580 - 3890	S	5	7	5	8	9	26
		红尾水鸲 <i>Rhyacornis fuliginosus</i>		O	S		S	D		2380 - 3050	3580 - 3800	R	23		9	60	13	11
		白顶溪鸲 <i>Chaimarrornis leucocephalus</i>		O	S	D	S	D, E		2380 - 3090	3570 - 3930	R	18	4	6	16	15	24
		小燕尾 <i>Enicurus scouleri</i>		O			S	D		2490		R				1		
		斑背燕尾 <i>Enicurus maculatus</i>		O			S	D,H		2780		R			1	1		
		黑喉石鸲 <i>Saxicola torquata</i>		O							3680	R						2
		灰林鸲 <i>Saxicola ferrea</i>		O	F,G,V	A	F, G, V					R						
		乌鸲 <i>Turdus merula</i>		O	F,G,V				3280 - 3550			R			4			
		灰头鸲 <i>Turdus rubrocannus</i>		O	F,G	E, I	F, G	G	3050 - 3145		3650	R	5	2	5			2
		蓝矶鸲 <i>Monticola solitarius</i>		O			G,V	B			3680	R			1			2
		紫啸鸲 <i>Myiophonus caeruleus</i>		O			S	B,D,H		2380 - 2600		R			7	13		
画眉科 Timaliinae																		
		锈脸钩嘴鹛 <i>Pomatorhinus erythrocnemis</i>		O	F		F, G	F, G				R	7		8		12	
		棕颈钩嘴鹛 <i>Pomatorhinus ruficollis</i>		O			F, G								5			
		大鳞胸鹧鸪 <i>pnoepyga albiventer</i>		O			F	H		2420						1		
		小鳞胸鹧鸪 <i>pnoepyga pusilla</i>		O			F									2		
		宝兴鹧鸪 <i>Chrysomma poecilotis</i>		O	F	G	F	E		2390		R				4		
		矛纹草鹧鸪 <i>Babax lanceolatus</i>		O	F,G,V	G, H	F, G	H		2830 - 3380	3820 - 3850	R	3	4	7	3		4

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					A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
		沼泽山雀 <i>Parus palustris</i>		O	F		F	E,H					2450 - 2710		3645 - 4050			R	10		5	4		16	
		褐头山雀 <i>Parus songarus</i>		O	F	F			F			4050						R	11	1				5	
		黄眉林雀 <i>Sylviparus modestus</i>		O	F	F						4050						R	1	1					
		鹎科 Sittidae																							
		普通鹎 <i>Sitta europaea</i>		O	F		F											R	3		5	1			
		黑头鹎 <i>Sitta villosa</i>		O	F	A						3410 - 3440						R			5				
		旋木雀科 Certhiidae																							
		旋木雀 <i>Certhia familiaris</i>		O	F	F	F	I	F			4040	2690					R		1		1	3		
		高山旋木雀 <i>Certhia himalayana</i>		O					F	I								R						4	
		啄花鸟科 Dicaeidae																							
		红胸啄花鸟 <i>Dicaeum ignipectus</i>		O			F	H					2420									1	4		
		黄腹啄花鸟 <i>Dicaeum melanoxanthum</i>		O			F	E, H					2450 - 2600									4	3		
		绣眼鸟科 Zosteropidae																							
		红胸绣眼鸟 <i>Zosterops erythropleura</i>		O			F															5			
		鹎科 Emberizidae																							
		灰眉岩鹀 <i>Emberiza sia</i>		O	V				F, G, V									R						5	
		戈氏岩鹀 <i>Emberiza godlewskii</i>		O		G						3100 - 3280						R		10				10	
		黄喉鹀 <i>Emberiza elegans</i>		O				F, G, V										R				2			
		燕雀科 Fringillidae																							
		藏黄雀 <i>Carduelis thibetana</i>		O	F,G,V	H						3200						R		1					
		高山岭雀 <i>Leucosticte brandii</i>		O					G, V, R									R						8	
		长尾雀 <i>Uragus sibiricus</i>		O	F,G	F			F, G			4040						R	5	1				3	

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					丹巴 Dangba		康定 Kangding		雅江 Yajiang		丹巴 Dangba	康定 Kangding	雅江 Yajiang		丹巴 Dangba	康定 Kangding	雅江 Yajiang	A	B	A
		红眉朱雀 <i>Carpodacus pulcherrimus</i>		O	F,G,V	A, B, F, G		F, G	B, E, G, H, I	3260 - 4070		3500 - 4190	R		26				35	
		暗胸朱雀 <i>Carpodacus nipalensis</i>		O	F,G,V	F	F, G, V			4040			R		6	1	5			
		普通朱雀 <i>Carpodacus erythrinus</i>		O	F,G,V	B	F, G, V	B	F, G, V	3100 - 3280	2380	3645 - 3890	S		17	5	10	23	14	
		酒红朱雀 <i>Carpodacus vinaceus</i>		O			F, G, V	H			2740		R				3			
		斑翅朱雀 <i>Carpodacus trifasciatus</i>		O	F, G								R							
		白眉朱雀 <i>Carpodacus thura</i>		O	F,G,V	F	F, G, V	E	F, G, V	4020 - 4080	3100	3580 - 4190	R		5	4	2	1	5	14
		红胸朱雀 <i>Carpodacus puniceus</i>		O	F,G	F, J				4080 - 4300			R		4					
		黄颈拟蜡嘴雀 <i>Mycerobas affinis</i>		O	F					4050			R			1				
		白翅拟蜡嘴雀 <i>Mycerobas carmipes</i>		O	F	E, F			F	4040 - 4080			R		12					
		灰头灰雀 <i>Pyrrhula erythaca</i>		O	F	E, F				3900 - 4040					5					
		雀科 Passeridae																		
		树麻雀 <i>Passer montanus</i>		O					V			3700 - 3740	R					163	42	
		鸦科 Corvidae																		
		松鸦 <i>Garrulus glandarius</i>		O	F	I	F		F	3145			R		2	2	5		4	
		黑头噪鸦 <i>Perisoreus internigrans</i>	VU	O	F	F				4100			R		1	1				
		红嘴蓝鹊 <i>Urocissa erythrorhyncha</i>		O			F	H			2620 - 2630		R				7	10		
		喜鹊 <i>Pica pica</i>		O					F, G, V	J			R						8	1
		星鸦 <i>Nucifraga caryocatactes</i>		O	F		F	E, H, I			2380 - 2900		R				15	36		
		红嘴山鸦 <i>Pyrrhocorax pyrrhocorax</i>		O	G, V	B			G, V, R	B, J	3145 - 3350	3600 - 3830	R			83			328	6
		大嘴乌鸦 <i>Corvus macrobrynchos</i>		O	F,G,V	H	F	B, E, H	F, G, V	B, J, J	2880 - 3650	2450 - 2880	R		12	6	23	16	34	64
		小嘴乌鸦 <i>Corvus corone</i>		O	F,G,V		F, G, V		F, G, V	I		3790 - 3930	R		15		31		39	8
		渡鸦 <i>Corvus corax</i>		O					G, V				R							

表注说明

1. 资料来源

- 1.1 0-通过路线调查和网捕调查获得;
- 1.2 V-通过访谈获得;

2. 生境类型 (A组)

- 2.1 森林, 表中用“林”表示。
- 2.2 草甸牧场, 表中用“草”表示。
- 2.3 溪流, 表中用“溪”表示。
- 2.4 村寨田园耕地, 表中用“田”表示。
- 2.5 高山流石滩, 表中用“流”表示

3. 生境类型 (B组)

- 3.1 A-次生温性硬叶林
- 3.2 B-村寨田园耕地
- 3.3 C-原始温性硬叶林
- 3.4 D-溪流和池塘
- 3.5 E-温性针阔混交林
- 3.6 F-亚高山灌木林
- 3.7 G-温性草甸和灌丛
- 3.8 H-次生温性阔叶林
- 3.9 I-温性针叶林
- 3.10 J-亚高山草甸和高山草甸

4. 居留情况

- 4.1 留鸟: (Resident birds)。表中用“R”表示。
- 4.2 夏候鸟: (Summer visitors)。表中用“S”表示。
- 4.3 冬候鸟: (Winter visitors)。表中用“W”表示。
- 4.4 过境鸟: (passage migrant)。表中用“PM”表示。

5. 鸟类数量等级在表中填写方式如下:

- 5.1 罕见种: 个体数量在2只以下, “+”。
- 5.2 稀有种: 个体数量在3只-5只, “++”。
- 5.3 常见种: 个体数量在5-10只, “+++”。
- 5.4 优势种: 个体数量在10只以上, “++++”。

6. 保护级别

- 6.1 中国I级重点保护野生动物: I
- 6.2 中国II级重点保护野生动物: II

7. 全球受威胁状况 (参考国际鸟盟)

- 7.1 VU-全球性脆弱物种
- 7.2 NT-近危

* 由其他研究者建议修改分类的物种

黄腰柳莺 *Phylloscopus proregulus*

Martens *et al.* (2004) 建议将其分为4个种, 其中 *P. forresti* 在中国西部包括四川有分布。

Martens, J. Tietze, D. T., Eck, S. and Veith, M. 2004. Radiation and species limits in the Asian Pallas' s warbler complex (*Phylloscopus proregulus* s.l.). *J. Ornithol.* 145:206-222.

冠纹柳莺 *Phylloscopus reguloides*

Olsson *et al.* (2005) 建议将其分为3个种, 其中 *P. claudiae* (在郑作新 (1987) 的分类系统里被视为亚种, 见郑作新, 1987, 《中国鸟类区系纲要》, 科学出版社) 在四川有分布。

Martens, J. Tietze, D. T., Eck, S. and Veith, M. 2004. Radiation and species limits in the Asian Pallas' s warbler complex (*Phylloscopus proregulus* s.l.). *J. Ornithol.* 145:206-222.

白斑尾柳莺 *Phylloscopus davisoni*

Olsson *et al.* (2005) 建议将其分为2个种, *P. ogilviewgranti* (在郑作新 (1987) 的分类系统里被视为亚种, 见郑作新, 1987, 《中国鸟类区系纲要》, 科学出版社) 在四川有分布。
Olsson, U., Alstrom, P., Ericson, P. G. P. and Sundberg, P. 2005. Non-monophyletic taxa and cryptic species - Evidence from a molecular phylogeny of leaf-warblers (*Phylloscopus*, Aves) *Molecular Phylogenetics and Evolution* 36:261-276. Available online at www.sciencedirect.com

另外

金眶鹟莺 *Seicercus burkii* 被 P. Alstrom 和 U. Olsson, 以及 J. Martens, S. Eck, M. Packert 和 Y.-H. Sun, 认为是由多个种组成的集合。

根据他们的调查, 其中被分列出来的4个种在四川都可能分布: 灰冠鹟莺 *S. tetrocephalus*、淡尾鹟莺 *S. soror*、比氏鹟莺 *S. valentini* 和峨眉鹟莺 *S. omeiensis*。其中峨眉鹟莺最近在四川4个地点被记录到, 有可能是我们在四川调查点的迁徙过境鸟。我们的观察不足以对此进行区分。

Alstrom, P. and Olsson, U. 1999. The Golden-spectacled Warbler: a complex of sibling species, including a previously undescribed species. *Ibis* 141:545-568.

Alstrom, P. 2002. Species limits and systematics in some passerine birds. *Comprehensive Summaries of Uppsala Dissertations from the Faculty of Science and Technology* 726. Acta Universitatis Upsaliensis, Uppsala, Sweden, 31pp.

Martens, J., Eck, S., Packert, M. and Sun, Y.-H. 1999. The Golden-spectacled Warbler *Seicercus burkii* - a species swarm (Aves: Passeriformes: Sylviidae) Part I. *Zool. Abhandl. Dresden.* 50(18):281-327.

Martens, J., Eck, S., Packert, M. and Sun, Y.-H. 2003. Methods of systematic and taxonomic research on passerine birds: the timely example of the *Seicercus burkii* complex (Sylviidae). *Bonner zoologische Beitrage* 51(2/3):109-118.

Letters used in the table represent as following:

1. Data source

O species recorded by route survey and mist netting;

V species recorded by interviewing;

2. Habitat types Group A

F forests

G grasslands and rangelands

S streams and rivers

V villages and farmlands

R rocks

3. Habitat types Group B

A secondary temperate sclerophyllus forest

B Around villages, cultivation

C primary temperate sclerophyllus forest

D River, stream, pool

E temperate mixed coniferous/broadleaved forest

F subalpine shrubberies

G temperate grassland and bushes

H secondary temperate broadleaved forest

I temperate coniferous forest

J subalpine and alpine grassland

4. Residential information

R resident birds

S summer visitors

W winter visitors

PM passage migrant

5. Categories of relative abundance

Rare “+” number of individual is less than 2

Uncommon “++” number of individual is more than 3 and less than 5

Common “+++” number of individual is more than 5 and less than 10

Abundant “++++” number of individual is more than 10

6. Protection categories

I class-one nationally protected

II class-two nationally protected

7. Globally threatened status (as defined by BirdLife International)

VU Globally vulnerable

NT Near-threatened

*** indicates species where recommendations for taxonomic changes have been made by other authors.**

Phylloscopus proregulus Martens et al. (2004) recommend this is split into four species, that in western China including Sichuan is *P. forresti*.

Martens, J. Tietze, D. T., Eck, S. and Veith, M. 2004. Radiation and species limits in the Asian Pallas's warbler complex (*Phylloscopus proregulus* s.l.). *J. Ornithol.* 145:206-222.

Phylloscopus reguloides Olsson et al. (2005) recommend this is split into three species, that in Sichuan is *P. claudiae* (recognised as subspecies in Cheng Tso-hsin 1987. A synopsis of the avifauna of China. Science Press, Beijing, China).

Martens, J. Tietze, D. T., Eck, S. and Veith, M. 2004. Radiation and species limits in the Asian Pallas's warbler complex (*Phylloscopus proregulus* s.l.). *J. Ornithol.* 145:206-222.

Phylloscopus davisoni Olsson et al. (2005) recommend this is split into two species that in Sichuan is *P. ogilviewgranti* (recognised as subspecies in Cheng Tso-hsin 1987. A synopsis of the avifauna of China. Science Press, Beijing, China).

Olsson, U., Alstrom, P., Ericson, P. G. P. and Sundberg, P. 2005. Non-monophyletic taxa and cryptic species – Evidence from a molecular phylogeny of leaf-warblers (*Phylloscopus*, Aves) *Molecular Phylogenetics and Evolution* 36:261-276. Available online at www.sciencedirect.com

Please also note

Seicercus burkii is recognised as a species swarm by two groups of investigators: P. Alstrom and U. Olsson and also J. Martens, S. Eck, M. Packert and Y.-H. Sun. According to these investigators four species are possible in Sichuan: *S. tetrocephalus*, *S. soror*, *S. valentini* and *S. omeiensis*. The latter species has just been found at four sites in Sichuan, but could possibly be a migrant to the sites we surveyed in Sichuan. Separating these four species is very difficult and it is not possible to do so from our observations.

Alstrom, P. and Olsson, U. 1999. The Golden-spectacled Warbler: a complex of sibling species, including a previously undescribed species. *Ibis* 141:545-568.

Alstrom, P. 2002. Species limits and systematics in some passerine birds. *Comprehensive Summaries of Uppsala Dissertations from the Faculty of Science and Technology* 726. Acta Universitatis Upsaliensis, Uppsala, Sweden, 31pp.

Martens, J., Eck, S., Packert, M. and Sun, Y.-H. 1999. The Golden-spectacled Warbler *Seicercus burkii* – a species swarm (Aves: Passeriformes: Sylviidae) Part I. *Zool. Abhandl. Dresden.* 50(18):281-327.

Martens, J., Eck, S., Packert, M. and Sun, Y.-H. 2003. Methods of systematic and taxonomic research on passerine birds: the timely example of the *Seicercus burkii* complex (Sylviidae). *Bonner zoologische Beitrage* 51(2/3):109-118.