

Ma et al. 2022, Ecological knowledge and value of traded species: Local perceptions of native turtles in Hainan, China

SUPPLEMENTARY MATERIAL

Table 1. Names of ten native Hainan freshwater turtle species and their conservation status and prioritization. Adapted from Shi et al. 2013 and F. Xiao, D. and Gaillard, *pers. comm.*, 2017-2020.

Scientific name	Chinese name (s)	Other Chinese local names/variations	English common name	IUCN Red List	Chinese protection level, 1988	Chinese protection level, 2021	CITES	EDGE rank	EDGE score
<i>Cuora galbinifrons</i>	黄额闭壳龟, 黄额盒龟, 草龟, 山草龟, 红旗龟, 假金钱龟	-	Indochinese box turtle	CR	Three Merits	Class II	Appendix II	-	-
<i>Cuora mouhotii</i>	锯缘龟, 八角龟	山龟, 坡龟	Keeled box turtle	EN	Three Merits	Class II	Appendix II	-	-
<i>Cuora trifasciata</i>	金钱龟	金子龟, 金龟, 金乌龟	Golden coin turtle	CR	Class II	Class II	Appendix II	-	-
<i>Geoemyda spengleri</i>	锯齿地龟, 小八角龟, 枫叶龟		Black-breasted leaf turtle	EN	Class II	Class II	Appendix III	51	5.73
<i>Mauremys mutica</i>	材棺龟, 石龟, 黄喉泥水龟, 南石龟, 石金钱	石头龟	Asian yellow pond turtle	EN	Three Merits	Class II	Appendix II	-	-
<i>Mauremys sinensis</i>	中华花龟, 海花, 海南花龟	-	Chinese golden thread turtle, Chinese striped-neck turtle	EN	Three merits	Class II	Appendix III	-	-
<i>Palea steindachneri</i>	疣颈鳖, 山瑞鳖	-	Wattle-necked softshell turtle	EN	Three Merits	Class II	Appendix III	63	5.7
<i>Pelodiscus sinensis</i>	中华鳖	甲鱼, 鳖, 水鱼, 王八	Chinese softshell turtle	VU	Not listed	Not listed	Appendix III	-	-
<i>Platysternon megacephalum</i>	大头扁龟, 鹰嘴龟, 平胸龟	大头龟	Big headed turtle	EN	Three Merits	Class II	Appendix II	19	6.40
<i>Sacalia quadriocellata</i>	四眼斑龟, 臭龟	水龟, 水乌龟, 牛屎龟	Four-eyed turtle	EN	Three Merits	Class II	Appendix III	-	-

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Table 2. Summary of demographic characteristics (predictors of GLMS) of all interview interviewees.

Demographic variables (n = 185)			
1. Age (years)	Mean	Median	Range
	44	45	19-78
2. Gender	Categories	Number	Percentage
	Female	55	29.7
	Male	130	70.2
3. Ethnicity	Li	171	92.4
	Miao	10	5.4
	Han	4	2.2
4. Level of education	No formal education	27	14.6
	Primary school	69	37.3
	Middle school	68	36.8
	High school and above	19	10.3
	NA (incomplete)	2	1.1
5. Village location	Bawang	34	18.4
	Qingsong	124	67.0
	Wangxia	27	14.6
6. Go to nearest county town at least once a month	Yes	56	30.3
	No	128	69.2
	NA	1	0.5
7. Go to forest at least once a month	Yes	137	74.1
	No	40	21.6
	NA	8	4.3
8. Distance from nearest county town (km)	Mean	Median	Range
	48.4	48.5	29.1-69.2

Table 3. A) Spearman’s rank correlation coefficients ρ for all comparisons between the ranks of species salience, recognition, being named, being thought is traded, prices provided by interviewees, and prices provided by researchers (n = 9). **B)** p-values for all comparisons.

A.

	Salience	Recognize	Name	Trade	Price, local	Price, researcher
Salience	1					
Recognize	0.64	1				
Name	0.89	0.81	1			
Trade	0.23	0.03	0.32	1		
Price, local	0.27	0.07	0.03	-0.17	1	
Price, researcher	0.21	-0.18	0.16	0.10	0.43	1

B.

	Salience	Recognize	Name	Trade	Price, local	Price, researcher
Salience						
Recognize	0.0656					
Name	0.0012	0.0082				
Trade	0.5588	0.9322	0.3980			
Price, local	0.4860	0.8647	0.9468	0.6682		
Price, researcher	0.5890	0.6368	0.6873	0.7980	0.2440	

Table 4. Negative binomial generalized linear model predictors and model outputs for four indices of local people's perceptions of native turtle species.

Response	R²	Predictor	X²	df	p-value
1. Number of species free-listed (n = 151)	0.131	Age	0.325	1	0.569
		Gender	0.462	1	0.497
		Village location	11.317	2	0.003 **
		Education	4.811	3	0.186
		Distance to county town	0.182	1	0.670
		County town visit \geq once/month	0.014	1	0.907
		Forest visit \geq once/month	1.643	1	0.200
2. Number of species recognized from photos (n = 151)	0.221	Age	8.845	1	0.003 **
		Gender	5.763	1	0.016 *
		Village location	14.554	2	0.001 ***
		Education	7.802	3	0.050
		Distance to county town	0.303	1	0.582
		County town visit \geq once/month	0.303	1	0.582
		Forest visit \geq once/month	0.220	1	0.639
3. Number of species named (n = 151)	0.241	Age	0.553	1	0.457
		Gender	8.991	1	0.003 **
		Village location	23.864	2	< 0.001 ***
		Education	5.354	3	0.148
		Distance to county town	0.480	1	0.488
		County town visit \geq once/month	0.262	1	0.609
		Forest visit \geq once/month	1.684	1	0.194
4. Number of species reported to be traded (n = 151)	0.131	Age	0.325	1	0.569
		Gender	0.462	1	0.497
		Village location	11.317	2	0.003 **
		Education	4.811	3	0.186
		Distance to county town	0.182	1	0.670
		County town visit \geq once/month	0.014	1	0.907
		Forest visit \geq once/month	1.643	1	0.200

5. Provided prices of at least one species (n = 161)	0.201	Age	1.83	1	0.176
		Gender	1.93	1	0.165
		Distance to county town	3.26	1	0.071
		County town visit \geq once/month	0.229	1	0.633
		Forest visit \geq once/month	2.784	1	0.095
		Number of species recognized	17.98	1	<0.0001***
		Number of species named	0.098	1	0.754

Table 5. Tukey post-hoc test results are shown for differences between village areas. For all four generalized linear models, village area and was a significant predictor for the number of species free-listed, recognized from photos, named, and thought to be traded.

Response	Comparison	Estimate	Standard error	z-value	p-value
1. Number of species free-listed (n = 151)	Qingsong vs Bawang	0.61644	0.41123	1.499	0.243
	Wangxia vs Bawang	0.09191	0.65298	0.141	0.986
	Wangxia vs Qingsong	-0.52453	0.35145	-1.492	0.246
2. Number of species recognized from photos (n = 151)	Qingsong vs Bawang	1.19209	0.34559	3.449	0.00108 **
	Wangxia vs Bawang	1.17288	0.56337	2.082	0.07337 .
	Wangxia vs Qingsong	-0.01921	0.30433	-0.063	0.99713
3. Number of species named (n = 151)	Qingsong vs Bawang	1.4176	0.4272	3.318	0.0021 **
	Wangxia vs Bawang	0.8005	0.6823	1.173	0.4150
	Wangxia vs Qingsong	-0.6171	0.3842	-1.606	0.2045
4. Number of species thought to be traded (n = 150)	Qingsong vs Bawang	0.61644	0.41123	1.499	0.243
	Wangxia vs Bawang	0.09191	0.65298	0.141	0.986
	Wangxia vs Qingsong	-0.52453	0.35145	-1.492	0.246

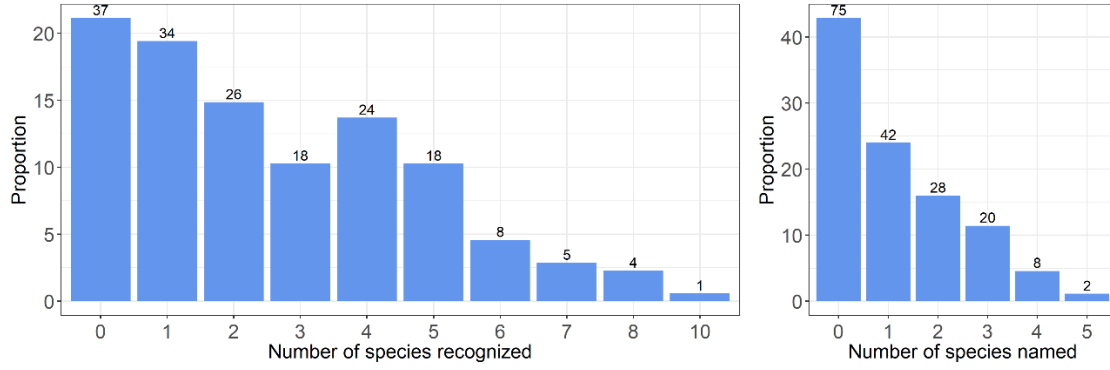


Figure 1. Frequency distribution of the number of species interviewees recognized (left) and correctly named (right) across the entire sample ($n = 175$). Proportions are shown on x-axis; numbers of people are shown above each bar.

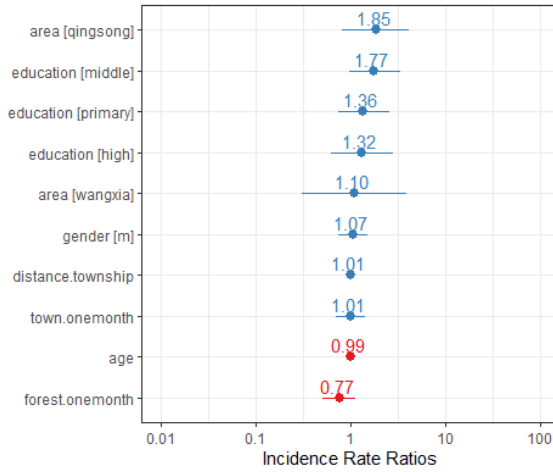
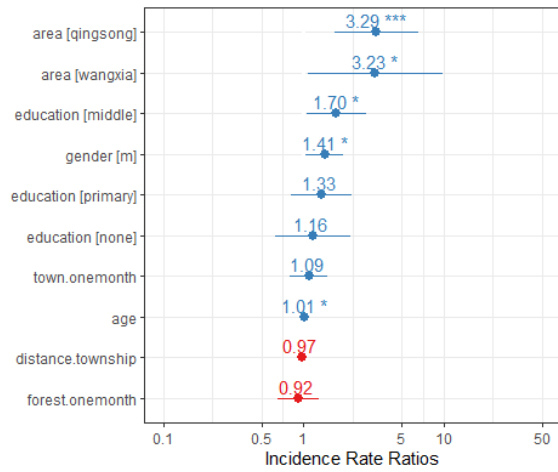
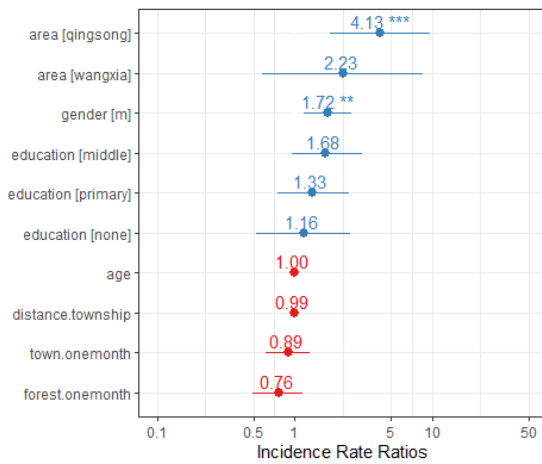
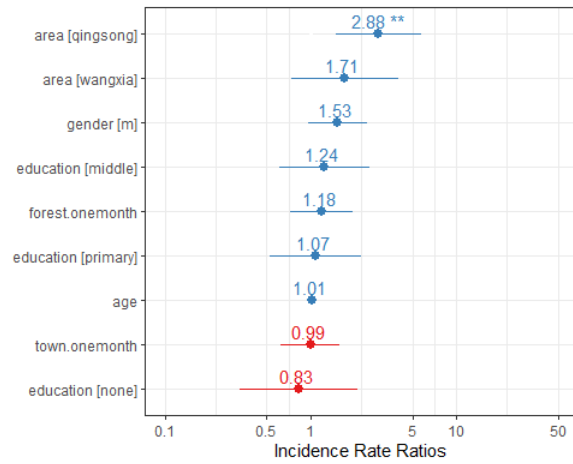
A**B****C****D**

Figure 2. Incidence rate ratios of each GLM for four indices of local people's perceptions of native turtle species (n = 151 for all models): **A)** free-listing more species; **B)** recognizing more species from photographs; **C)** naming more species; and **D)** reporting more species are traded.

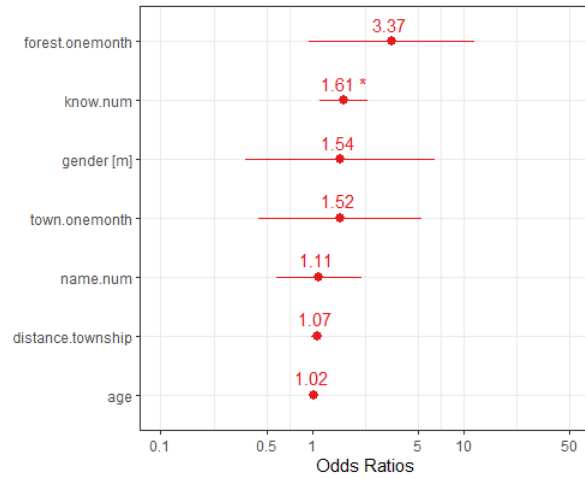


Figure 3. Odds ratios for indices of whether someone was able to voluntarily provide a price of at least one turtle species (n = 161).

Questionnaire in English and Chinese versions

Questionnaire ID: _____ Date: _____ Village name: _____ Interviewer: _____

We are Hainan University students and we are conducting research on the environment. This is very important and we hope you can help us by answering the questions in this questionnaire truthfully. The interview will take about 40 minutes to complete. Your answer will be anonymous and you cannot be identified after the data is collected. You must be at least 18 years old to participate. You can choose to stop the interview at any time. You may contact the researchers at any time for more information. Heidi Ma, Royal Holloway University of London. Contact phone number: 13910971742, Wechat: heidima0825.

Are you willing to participate in this survey: Yes No

SECTION 1 DEMOGRAPHIC

1. Have you been interviewed before? Yes No
Who came to speak with you? _____
What did they ask you about? _____
2. How old are you? _____
3. What is your gender? Male Female
4. What is your ethnicity? Li Miao Han Other: _____
5. Are you literate?
Yes I am literate Yes but not many characters No I am not literate
6. Which languages can you understand?
Li language Miao language Standard Mandarin
Hainanese Other _____
7. How long have you been living in this village?
 All my life Other: _____
If their answer is other: Where are you from? _____
How long have you been living here? _____
8. How many of your children are living with you in your house? _____
How old are they? _____
Other than your children, how many people live in your house (not including yourself)? _____
What are their relationships to you? _____
9. [Multiple choices] Occupation:
 I don't have a job Farmer Husbandry practitioner Teacher
 Student Forestry worker Government worker
 Retired For how many years? _____ Other: _____
10. Total annual household income (yuan): _____
11. What is your highest education level?
 No education Elementary school Middle school High school
 College Undergraduate Graduate degree or above
 Other: _____

SECTION 2 ACCESS TO RESOURCES

1. How often do you go into the forest/reserve? _____
Do you go into the forest more than once a month? Yes No
2. What do you do when you go into the forest? (Including in the past) _____
3. What things in the forest have use value to you? _____

How often do you collect these things?
 Resource 1 _____ Daily Weekly Monthly Yearly
 Resource 2 _____ Daily Weekly Monthly Yearly
 Resource 3 _____ Daily Weekly Monthly Yearly

4. How often do you go to the nearest county town? _____
Do you go Shilu more than once a month? Yes No
5. What do you go to the county town for?
 Hospital/clinic Buying goods (describe) _____
 Taking children to school Banking Post office Other _____
6. How much does it cost you per return trip to Shilu town? _____yuan
7. How to you get to the county town? _____
8. Where do you go for these things/services if it's not available in the county town?

SECTION 3 WILDLIFE KNOWLEDGE

1. a. Has the *overall abundance of wildlife* changed in the time you have lived here?
 Increased Decreased No change Don't know
 [If answered "Increased" or "Decreased", ask the following questions. If answered "No change" or "Don't know", skip to next Q2.]
- b. When did the overall abundance of wildlife change? _____years ago Don't know
- c. In what areas have you noticed changes in wildlife abundance? _____ Don't know
- d. How do you know there is this change? _____ Don't know
- e. Does your knowledge about the change in overall abundance of wildlife come from your elders such as your parents? _____ Don't know

2. Are there any species of wildlife that have *declined* in abundance in the time you have lived here? Yes No Don't know
Free-list and provide details for each species listed:

Species	When declined

3. Are there any species of wildlife that have completely disappeared from around here in the time you have lived here? Yes No Don't know

Free-list and provide details for each species:

Species	When disappeared

4. a. Do you think it is possible that animals could disappear and never appear again?
 Yes No Don't know
- b. What is "extinction"? OR What does "extinction" mean to you? Don't know
- c. What do you know about "extinction" from elders/your parents? Don't know
- d. What do you know about "extinction" from the media (TV, internet, Wechat)? Don't know
- e. What do you know about "extinction" from other visitors to your village? Don't know
- f. Do you know about extinction from any other sources?

5. Which turtle species are found around Bawangling? [Free-list turtles, record in order they listed the species].

[For all species in Q6-Q16, show photos one by one]

6. [Sacalia quadriocellata, 四眼斑龟, 臭龟, Four-eyed Turtle]
- a. Do you recognize this species? Yes No Don't know
 [If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
 Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____ (place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None

- Don't know
- h. Where does this species live? In water In the forest Don't know
Other/details _____
- i. Is this species sold? Yes No Don't know
7. [Cuora mouhotii 锯缘龟, 八角龟 Keeled Box Turtle]
- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
Other/details _____
- i. Is this species sold? Yes No Don't know
8. [Geoemyda spengleri 锯齿地龟, 小八角龟, 枫叶龟 Black-breasted Leaf Forest Turtle]
- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
Other/details _____
- i. Is this species sold? Yes No Don't know
9. [Mauremys mutica 材棺龟, 石龟, 黄喉泥水龟, 南石龟, 石金钱 Yellow Pond turtle]
- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)

- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None Don't know
- h. Where does this species live? In water In the forest Don't know Other/details _____
- i. Is this species sold? Yes No Don't know

10. [Pelodiscus sinensis 中华鳖 Chinese Softshell Turtle]

- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None Don't know
- h. Where does this species live? In water In the forest Don't know Other/details _____
- i. Is this species sold? Yes No Don't know

11. [Mauremys sinensis 中华花龟, 海花, 海南花龟 Chinese Golden Thread Turtle]

- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None Don't know
- h. Where does this species live? In water In the forest Don't know Other/details _____
- i. Is this species sold? Yes No Don't know

12. [Cuora trifasciata 金钱龟 Golden Coin Turtle]

- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)

- In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
 Other/details _____
- i. Is this species sold? Yes No Don't know

13. [Clemmys guttata 黄斑水龟 Spotted Turtle]

- a. Do you recognize this species? Yes No Don't know
 [If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
 Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
 Other/details _____
- i. Is this species sold? Yes No Don't know

14. [Cuora galbinifrons 黄额闭壳龟, 黄额盒龟, 草龟, 山草龟, 红旗龟, 假金钱龟
 Indochinese Box Turtle]

- a. Do you recognize this species? Yes No Don't know
 [If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
 Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____(place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
 Other/details _____
- i. Is this species sold? Yes No Don't know

15. [Palea steindachneri 疣颈龟, 山瑞鳖 Wattle-necked Softshell Turtle]

- a. Do you recognize this species? Yes No Don't know
 [If answer is Don't Know, skip following questions about this species.]

- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____ (place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
Other/details _____
- i. Is this species sold? Yes No Don't know

16. [Platysternon megacephalum 大头扁龟, 硬嘴龟, 平胸龟 Big Headed Turtle]

- a. Do you recognize this species? Yes No Don't know
[If answer is Don't Know, skip following questions about this species.]
- b. What is its name? _____ Don't know
Have you seen this species before? Yes No Don't know
- c. Where did you last see it physically? _____ (place)
 In the forest In the village In the market In someone else's house
 In a zoo Other _____
- d. When did you last see it? _____ (time)
- e. Is this species still found in the wild in this area? Yes No Don't know
- f. If no, did it used to be found here? Yes No Don't know
- g. Is this species rare or common? Many Not many Rare None
 Don't know
- h. Where does this species live? In water In the forest Don't know
Other/details _____
- i. Is this species sold? Yes No Don't know

17. Are there other turtle species that live around here that are not in these photos?

18. [For all turtles, with picture cards]

Order these species from what you think is the most economically valuable to least valuable species.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____
7 _____ 8 _____ 9 _____ 10 _____ 11 _____

[For all species in Q19-Q24, show photos one by one]

19. [Black bear]

- a. Do you know this animal?
 Yes, name _____ Don't know
- b. Is this animal found around here? Yes No Don't know
- c. Was this animal around here in the past? Yes No Don't know
[If answer is found here before but not now:]
- d. When did it disappear from around here? _____ Don't know
- e. What do you think caused it to disappear from around here? _____ Don't know

f. Does this animal have any use value? Yes No Don't know
What is it? _____

20. [Clouded leopard]

- a. Do you know this animal? Yes, name _____ Don't know
b. Is this animal found around here? Yes No Don't know
c. Was this animal around here in the past? Yes No Don't know
[If answer is found here before but not now:]
d. When did it disappear from around here? _____ Don't know
e. What do you think caused it to disappear from around here? _____ Don't know
f. Does this animal have any use value? Yes No Don't know
What is it? _____

21. [Sambar]

- a. Do you know this animal? Yes, name _____ Don't know
b. Is this animal found around here? Yes No Don't know
c. Was this animal around here in the past? Yes No Don't know
[If answer is found here before but not now:]
d. When did it disappear from around here? _____ Don't know
e. What do you think caused it to disappear from around here? _____ Don't know
f. Does this animal have any use value? Yes No Don't know
What is it? _____

22. [Hainan gymnure]

Do you know what this animal is? Know Don't know
Know the name _____ size / diet / appearance

[If do not know, ask whether they have heard of this species and its features, and if they know the characteristics of this species, then continue to ask the following question]

Have you seen these animals in the forest? Yes No
If yes, the last time seen _____ and the place _____
If seen, the total number of sightings _____ and frequency of sightings _____
If no, then how do you know about this animal? _____
Do you think this animal is now: None Rare Not many Many

Do you know what a "gymnure" is? Yes No

23. [Silver pheasant]

Do you know what this animal is? Know Don't know
Know the name _____ size / diet / appearance

[If do not know, ask whether they have heard of this species and its features, and if they know the characteristics of this species, then continue to ask the following question]

Have you seen these animals in the forest? Yes No
If yes, the last time seen _____ and the place _____
If seen, the total number of sightings _____ and frequency of sightings _____
If no, then how do you know about this animal? _____
Do you think this animal is now: None Rare Not many Many

24. [Hainan peacock pheasant]

Do you know what this animal is? Know Don't know
Know the name _____ size / diet / appearance

[If do not know, ask whether they have heard of this species and its features, and if they know the characteristics of this species, then continue to ask the following question]

Have you seen these animals in the forest? Yes No
 If yes, the last time seen _____ and the place _____
 If seen, the total number of sightings _____ and frequency of sightings _____
 If no, then how do you know about this animal? _____
 Do you think this animal is now: None Rare Not many Many

SECTION 4 PERCEPTIONS, ATTITUDES, AND BEHAVIOUR

1. a. What do you think is the cause for species' decline in abundance around Bawangling?
 _____ Don't know
 b. What do you think is the cause for species' disappearance?
 _____ Don't know
2. a. Are there any activities that cause wildlife to disappear? Yes No Don't know
 b. What activities? _____
 c. Are these behaviours still going on? Yes No Don't know
 d. Who does these activities? _____ Don't know
3. a. Do people from this village caused wildlife to decline? Yes No Don't know
 b. Do people from other places cause wildlife to decline? Yes No Don't know
4. Do you think endangered wildlife species should be protected?
 Yes No Don't know
 Why or why not? _____

5. Who do you think should be responsible for protecting endangered species/'wildlife'?"
 Don't know

Who	Why responsible

6. Currently, what is your main source of livelihood?

7. What would you most like do as your main source of livelihood?

8. If you were to adopt the preferred source of livelihood mentioned above, what kind of extra help or training would you need?

9. To what extent do you agree with the following statements?
 - a) The nature reserve is doing a good job at conserving wildlife species.
 Agree Neither agree nor disagree Disagree
 - b) Local people should use natural resources from inside the nature reserve.
 Agree Neither agree nor disagree Disagree
 - c) The establishment of the nature reserve near here is a good thing for me.
 Agree Neither agree nor disagree Disagree
 - d) Local people should continue to hunt wild animals.
 Agree Neither agree nor disagree Disagree
 - e) It is ok to collect firewood from inside the nature reserve for our own use at home.
 Agree Neither agree nor disagree Disagree

问卷号: _____ 日期: _____ 村名: _____ 采访者: _____

采访说明

我们是海南大学的学生, 在研究环境科学。本次采访对我们了解环境生态非常重要, 希望您能尽可能如实地回答问卷里所有的问题。本次采访大约需要 40 分钟。采访是匿名的, 您的身份不能核实。受访者需年满 18 岁。您可以随时停止采访。如果您以后有问题, 或者想补充更多信息, 可以记下我的联系方式: 马天骄, 手机 13910971742, 微信 heidima0825。

您是否愿意接受采访: 是 否

第一部分 基本信息

1. 您是否已经接受过采访? 是 否
谁来采访的? _____ 什么内容? _____
2. 您多大年龄? _____
3. 您的性别? 男 女
4. 您是哪个民族? 黎族 苗 汉 其他: _____
5. 您识字吗? 识字 识字, 但不多 不识字
6. 您能懂哪些语言? 黎话 苗话 普通话 海南话 其他 _____
7. 您在这个村子生活了多少年? 一辈子 其他: _____ 年
[如回答其他]您来自哪里? _____ 以前在哪里生活? _____
在这里住了多少年? _____ 年
8. 您有几个小孩和您一起居住? _____ 多大年龄? _____
除了孩子, 还有几口人和您一起居住? _____
他们和您都是什么关系? _____
9. 您从事什么职业? 没有工作 农民 养殖业 教师 学生 林业工人
政府工作人员 退休 退休了多少年? _____ 年 其他

10. 您的总家庭年收入是多少? _____ 元
11. 您的最高教育程度是多少? 从未接受教育 小学 初中 高中 大学
大专 研究生或更高 其他: _____

第二部分 森林资源利用

1. 您现在多久上一次山? _____ 您一个月内是否至少上一次山? 是 否
2. 您上山时会做些什么 (包括以前)?

3. 山上有什么东西对您是有利用价值的?

- 您平均多久会采集这些东西?
资源 1 _____ 每天 一星期一次 一个月一次 一年一次
资源 2 _____ 每天 一星期一次 一个月一次 一年一次
资源 3 _____ 每天 一星期一次 一个月一次 一年一次
4. 您多经常去县城? _____
您一个月内是否至少去一次县城? 是 否

28. a. 您野生动物有可能从一个地方完全消失, 再也没有了吗? 可能 不可能 不知道
 b. “灭绝”对您来说是什么意思? _____ 不知道
 c. 您有没有听老者说过动物“灭绝”? 有 没有
 d. 您有没有从媒体上(电视, 微信, 网络)听说过动物“灭绝”? 有 没有
 e. 您有没有听外来人(来过本村的人)讲过“灭绝”? 有 没有 哪里来的人?
 f. 您还从哪些地方听到过“灭绝”? _____
29. 在霸王岭周边有哪些乌龟种类? [接受访者列出来的顺序记录]
-
-

[问下列问题 6-16 时请逐个出示龟类图片]

30. [Sacalia quadriocellata 四眼斑龟, 臭龟 Four-eyed Turtle]
- a. 认识这种龟吗? 认识 不认识 不知道
 [如回答不认识, 跳过针对这个物种的下列问题]
- b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否
不知道
- c. 最后一次在哪儿见到的? _____
森林里 村子里 市场上 别人家 动物园 其他 _____
- d. 最后一次是什么时候见到的? _____
- e. 这种龟现在在这里还有野生的吗? 是 否 不知道
- f. 如现在没有, 以前这里有吗? 是 否 不知道
- g. 这种龟的多少? 很多 多 很少 没有 不知道
- h. 这种龟在哪里能找到? 水里 森林里 不知道 其他
- i. 这种龟有买卖吗? 有 没有 不知道
31. [Cuora mouhotii 锯缘龟, 八角龟 Keeled Box Turtle]
- a. 认识这种龟吗? 认识 不认识 不知道
 [如回答不认识, 跳过针对这个物种的下列问题]
- b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否
不知道
- c. 最后一次在哪儿见到的? _____
森林里 村子里 市场上 别人家 动物园 其他 _____
- d. 最后一次是什么时候见到的? _____
- e. 这种龟现在在这里还有野生的吗? 是 否 不知道
- f. 如现在没有, 以前这里有吗? 是 否 不知道
- g. 这种龟的多少? 很多 多 很少 没有 不知道
- h. 这种龟在哪里能找到? 水里 森林里 不知道 其他
- i. 这种龟有买卖吗? 有 没有 不知道

32. [*Geoemyda spengleri* 锯齿地龟, 小八角龟, 枫叶龟 Black-breasted Leaf Forest Turtle]

a. 认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

33. [*Mauremys mutica* 材棺龟, 石龟, 黄喉泥水龟, 南石龟, 石金钱 Yellow Pond turtle]

a. 认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

34. [*Pelodiscus sinensis* 中华鳖 Chinese Softshell Turtle]

a. 认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

35. [*Mauremys sinensis* 中华花龟, 海花, 海南花龟 Chinese Golden Thread Turtle]

a.认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

36. [Cuora trifasciata 金钱龟 Golden Coin Turtle]

a.认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

37. [Clemmys guttata 黄斑水龟 Spotted Turtle]

a.认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

38. [Cuora galbinifrons 黄额闭壳龟, 黄额盒龟, 草龟, 山草龟, 红旗龟, 假金钱龟 Indochinese Box Turtle]

a.认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

39. [Palea steindachneri 疣颈龟, 山瑞鳖 Wattle-necked Softshell Turtle]

a. 认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

40. [Platysternon megacephalum 大头扁龟, 硬嘴龟, 平胸龟 Big Headed Turtle]

a. 认识这种龟吗? 认识 不认识 不知道

[如回答不认识, 跳过针对这个物种的下列问题]

b. 叫什么名字? _____ 不知道 你见过这种龟吗? 是 否 不知道

c. 最后一次在哪儿见到的? _____

森林里 村子里 市场上 别人家 动物园 其他 _____

d. 最后一次是什么时候见到的? _____

e. 这种龟现在在这里还有野生的吗? 是 否 不知道

f. 如现在没有, 以前这里有吗? 是 否 不知道

g. 这种龟的多少? 很多 多 很少 没有 不知道

h. 这种龟在哪里能找到? 水里 森林里 不知道 其他

i. 这种龟有买卖吗? 有 没有 不知道

41. 您还知道霸王岭附近有哪些龟类是以上图片中没有的?

42. [用所有的图片请受访者排序, 记录图片背后的代码]

请将这些龟类按照经济价值排序，从最有价值的到最没价值的。

1_____2_____3_____4_____5_____6_____

7_____8_____9_____10_____11_____

43. [黑熊照片]

a. 您认识这种动物吗? 认识, 名字_____ 不认识 不知道名字

b. 这种动物在这里有吗? 有 没有 不知道

c. 这种动物以前在这里有吗? 有 没有 不知道

[如果回答这里现在没有, 但以前有:]

e. 什么时候从这里没有了? _____年前 不知道

f. 您认为为什么从这里没有了? _____ 不知道

g. 这种动物有利用价值吗? 有 没有 不知道 什么价值? _____

44. [云豹照片]

a. 您认识这种动物吗? 认识, 名字_____ 不认识 不知道名字

b. 这种动物在这里有吗? 有 没有 不知道

c. 这种动物以前在这里有吗? 有 没有 不知道

[如果回答这里现在没有, 但以前有:]

e. 什么时候从这里没有了? _____年前 不知道

f. 您认为为什么从这里没有了? _____ 不知道

g. 这种动物有利用价值吗? 有 没有 不知道 什么价值? _____

45. [水鹿照片]

a. 您认识这种动物吗? 认识, 名字_____ 不认识 不知道名字

b. 这种动物在这里有吗? 有 没有 不知道

c. 这种动物以前在这里有吗? 有 没有 不知道

[如果回答这里现在没有, 但以前有:]

e. 什么时候从这里没有了? _____年前 不知道

f. 您认为为什么从这里没有了? _____ 不知道

g. 这种动物有利用价值吗? 有 没有 不知道 什么价值? _____

46. [毛猴照片]

你知道这是什么动物吗? 知道 不知道

知道, 名称_____大小/食性/外貌_____

不知道, 问是否有听说过这物种以及它的特征, 如果知道物种特征, 继续问以下问题

你在山上见过这动物吗? 有 没有

有, 上次看见的时间_____地点_____

看见总次数_____如果常见, 频率是_____

你觉得这个动物现在是 没有 很少 不多 很多

您知道“毛猴”是什么吗? 知道 不知道 如何知道的? _____

47. [白鹇照片]

你知道这是什么动物吗? 知道 不知道

知道, 名称_____大小/食性/外貌_____

不知道，问是否有听说过这物种以及它的特征，如果知道物种特征，继续问以下问题

你在山上见过这动物吗？ 有 没有

有，上次看见的时间_____地点_____

看见总次数_____如果常见，频率是_____

没有，你是如何知道这动物的？_____

你觉得这个动物现在是 没有 很少 不多 很多

48. [孔雀雉照片]

你知道这是什么动物吗？ 知道 不知道

知道，名称_____大小/食性/外貌_____

不知道，问是否有听说过这物种以及它的特征，如果知道物种特征，继续问以下问题

你在山上见过这动物吗？ 有 没有

有，上次看见的时间_____地点_____

看见总次数_____如果常见，频率是_____

没有，你是如何知道这动物的？_____

你觉得这个动物现在是 没有 很少 不多 很多

第四部分 认知、态度、人类行为

1. a. 您认为霸王岭附近野生动物减少的原因是什么？ 不知道

b. 您认为野生动物完全消失的原因是什么？ 不知道

2. a. 有哪些人为活动会造成野生动物减少？ 不知道

b. 什么行为？ 不知道

c. 这些认为行为还存在吗？ 有 没有 不知道

d. 什么人做这些行为？_____

3. a. 您认为是本村人造成野生动物减少吗？ 是 否 不知道

b. 您认为是外来人造成野生动物减少吗？ 是 否 不知道

4. 您认为野生动物是否因该被保护？ 是 否 不知道

为什么？_____ 不知道

5. 您认为谁应该承担保护野生动物的责任？为什么？

[按受访者列出来的顺序记录]

谁	为什么有责任

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[所有人都问以下问题]

6. 您目前的收入来源是什么？

您最希望靠什么做工作获得收入来源？

7. 如果您想采取上述的收入来源，需要哪些培训或帮助？

8. 您对以下的话什么态度？

- a) 目前自然保护区对野生动物保护的力度足够了。 同意 不知道 不同意
- b) 人们应当利用自然保护区里的自然资源。 同意 不知道 不同意
- c) 自然保护区的设立对我来说是好事。 同意 不知道 不同意
- d) 当地人应该继续打猎或捕捉野生动物。 同意 不知道 不同意
- e) 从林子里采集木材柴火在家里用没有什么问题。 同意 不知道 不同意