

Article

# What Factors Predispose Households in Trans-Himalaya (Central Nepal) to Livestock Predation by Snow Leopards?

Mahesh P. Tiwari, Bishnu P. Devkota, Rodney M. Jackson, Bir Bahadur Khanal Chhetri and Sistata Bagale

## Supplementary Materials:

**Table S1.** Full results from GLMMs for livestock loss due to snow leopard. TL = total number of livestock owned, LS = number of large stocks owned, DP = days livestock housed in pasture, CN = number of corrals, FS = family size and EDU = education status of the households.

Model	df	logLik	AICc	delta	weight
TL × LS	6	-140.04	293.52	0.00	0.32
TL × LS + FS	7	-139.59	295.15	1.63	0.14
TL × LS + EDU	7	-139.97	295.90	2.37	0.10
TL × LS + CN	7	-140.04	296.04	2.51	0.09
TL × LS + DP	7	-140.04	296.04	2.51	0.09
TL	4	-143.82	296.32	2.79	0.08
TL + FS	5	-142.91	296.84	3.32	0.06
TL + LS	5	-143.31	297.63	4.11	0.04
TL + EDU	5	-143.77	298.57	5.04	0.03
TL × LS + DP	8	-140.03	298.64	5.12	0.02
TL + LS + DP	6	-142.75	298.95	5.43	0.02
TL + LS + DP + FS	7	-141.95	299.87	6.34	0.01
CN	4	-146.70	302.07	8.54	0.00
LS	4	-147.95	304.57	11.04	0.00
DP	4	-149.25	307.18	13.65	0.00
FS	4	-151.22	311.11	17.59	0.00
Intercept only	3	-154.66	315.71	22.19	0.00
EDU	4	-154.62	317.91	24.39	0.00

## File S1

### Questionnaire form for recording livestock loss and people's attitude towards snow leopard conservation

#### A. General information of respondents

- Respondent Name: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: [ ] Male [ ] Female
- Family size: [Male: \_\_\_\_\_ Female: \_\_\_\_\_]
- Education stauts of respondent in years: .....

- Family member's education status in years:

--	--	--	--	--	--	--	--	--	--

- Major income sources:

- Animal husbandry
- Yarshagumba/NTF
- Remittance
- Agriculture



--	--	--	--	--	--	--	--

15. Why do you think snow leopard attack/kill livestock?  
 16. What is the trend of depredation due to snow leopards in last two years?  
 a. Increasing                      b. Decreasing                      c. Stable                      d. Don't know  
 If, increasing/decreasing, why?

17. What can be done to prevent livestock predation due to snow leopard?  
 a. Graze in groups                      c. Avoid predation risk zone  
 b. Careful herding practice                      d. Remove snow leopard

18. What are the measures adopted by you to prevent the livestock predation by snow leopard?

19. Where do you keep your livestock in house/pasture?  
 a. Traditional corral                      b. Predator proof corral                      c. Free grazing in pasture  
 Also, mention the number of corrals that you own. Among them how many are predator proof?

20. Have you ever heard of trapping/poisoning or killing or snow leopard in your area to reduce livestock predation due to snow leopards?    a. Yes                      b. No

**D. Compensation and insurance scheme**

21. Have you heard about Government Wildlife Damage Compensation/Relief guideline for your lost livestock?                      a. Yes                      b. No

22. Are you satisfied with the above-mentioned scheme or its process or compensation amount? If No, what should be done to make it more effective?

23. Does your village have any community managed livestock insurance scheme? Who manages the scheme? Are you satisfied? How can it be improved?

24. Please give the details of compensation that you have received over past two years for your lost livestock.

Year	Livestock type	No of death/killed	Amount received	Compensation received from

**E. Attitude towards snow leopard conservation**

1. Do you always want to see snow leopard in Narphu valley?  
 a. Yes (+1)                      b. Not sure (0)                      c. No (-1)
2. Do you think snow leopard should be conserved?  
 a. Yes (+1)                      b. Not sure (0)                      c. No (-1)
3. Do the presence of snow leopard benefit environment of Narphu valley?  
 a. Yes (+1)                      b. Not sure (0)                      c. No (-1)
4. Is it good to teach community about snow leopard?  
 a. Yes (+1)                      b. Not sure (0)                      c. No (-1)
5. Where should snow leopard be protected?  
 a. Inside and outside protected area (+2)                      d. Zoo (-1)  
 b. Only in protected area (+1)                      e. Nowhere (-2)  
 c. Don't know (0)
6. Will you support ACAP in conserving snow leopard?  
 a. Yes (+1)                      b. Not sure (0)                      c. No (-1)
7. How will you react if snow leopard kills your livestock?

- a. Take it as normal (+2)
- b. Ask ACAP for compensation (+1)
- c. Nothing (0)
- d. Chase it away (-1)
- e. Poison/kill it to prevent future predation (-2)

Any other information: