# Effects of sex and season on ambush microhabitat selection in Stejneger's bamboo pitviper (*Viridovipera stejnegeri*)

Line 1. The word seasonal, without further specification, is ambiguous, can mean seasons of the year, hibernation or estivation season, breeding season, reproduction season.... From what is mentioned in the document, it refers to seasonal associated with the breeding of the study specie, it must be specified in the title. On the other hand, the word ambush refers to hunting behavior and the use of this word suggests that something is going to be studied in this regard. For this reason, since nothing is mentioned about hunting prey, I suggest it be removed from the title and only "microhabitat selection" is left.

Line 18. In the abstract it is necessary to briefly and concisely mention the reason for the work and the methodology.

- Line 25. Correct "Non-bree and ding season"
- Line 39. In the word "seasonal differences" specify whether seasonal refers to seasonal reproduction/breeding or seasonal differences with respect to physical characteristics of the habitat. Remove the word ambush since the article does not discuss anything about that type of foraging. See the following article for a reference to the use of the word ambush:

## "A two-level problem: habitat selection in relation to prey abundance in an ambush predator, the speckled rattlesnake (*Crotalus mitchellii*)"

- Line 43. Not be redundant, the word "habitats" could be replaced by other synonyms such as "geographical spaces" for example.
  - Line 49. In the references section the author Shenbrot has no collaborators, correct.
  - Line 61. In the Bista citation, correct the year of publication either in the reference or in the citation.
  - Line 70. The reference Fraga is not there.
- Line 71. Here, the examples mentioned refer to seasonal climatic or physical differences in different contexts, that is, in general, but not specifically, reproductive periods. Specify throughout the text if when mentioning seasonal you are going to refer to reproductive or breeding period or seasons of the year.
- Line 77. If the study focuses on the reproductive or breeding periods of the specie, it is important to talk about reproductive or breeding characteristics, mating, sexual dimorphism, births, litter size etc. etc
- Line 79. The word "our" refers to the work data, if so, this is part of the results, it should not be mentioned in the introduction. If not, use the word "previous" instead of "our" to make sense of the sentence.
- Line 90. In figure 1, two seasons are visually noted, the reproductive and the non-reproductive, this should be emphasized in the text. How much does the vegetation change from one season to another? Are there clear differences? Exist more data on this?
  - Line 92. Reference is missing

- Line 94. Change the word "division" to "Classification of variables" or "assignment of categories"
- Line 95. Are these months reproductive and non-reproductive periods? That is why it is important to anticipate the reproductive characteristics of the species.
- Line 97. The trademark and relevant characteristics of the material or equipment used must be specified, both transmitter and receiver.
  - Line 98. Explain why they chose 4x 4 m quadrants and justify it.
- Line 104. Until this line they mention the reproductive season, it is important to mention it before, where the species is talked about.
- Line 106. Here they mention the word "period" instead of season. I think "period" is more appropriate than season. Consider the change and in any case do it for everything that is related to it.
- Line 108. Do you mean that there was at least 50 m distance between each point with the presence of snakes? It's not very clear
- Line 116. This are results, they should be in the results section. Each habitat represents an individual? It is pertinent to mention how many snakes were collected, how many females, how many males, average measurements, stages of development (juvenile, adult), etc.
  - Line 118. Add the word "collected" before the word "data"
  - Line 137. Mention the name of the post hoc test.
  - Line 177. Specify what aspects you refer to? Improve the wording of this sentence.
- Line 185. Specify in the caption or heading whether the word season refers to breeding or physical characteristics. It is pertinent to mention how many snakes were collected, how many females, how many males, average measurements, stages of development (juvenile, adult), etc.
  - Line 189. Is this mean  $\pm$  SD? If so, it must be specified in the data analysis.
  - Line 190. The exact value of n must be reported, in addition to the test statistic U= or  $\chi$ 2= .specificy
  - Line 195. Add the word "analysis" after the words "multiple comparisons"
  - Line 199. Mention the preferred altitude range.
  - Line 210. Specify that the seasonality is reproduction or breeding.
- Line 215. The word "ambush" is closely associated with a feeding behavior, if you evaluated any date of this aspect is necessary to mention it, if not, leave only "microhabitat selection".
- Line 225. You analyzed the abundance of prey to strengthen their idea? That is, how do you know that under these variables there may be the strong prey requirements that these individuals need?
- Line 231. Is there any document that talks about snake-human encounters in that area? We know that in general there is not much empathy towards these animals on the part of humans, but in the study area how risky it is for them to approach urban areas, just to

complement.

Line 231. It must be justified that in places with these variables there are food requirements for them.

Line 241-242. If so, it is a factor established by nature during that season and not by choice of individuals. So. Therefore, perhaps what is being evaluated is the snakes' activity schedule rather than their own site choices due to temperature. Didn't you locate the snakes during the day? How far can a snake move during the day depending on the temperature? Argue more to clarify the idea.

Line 247. In addition, the pavement and places close to eroded areas such as a road generate an edge effect in which the temperature increases and is maintained for a long time during the night. Research a little more about it and complement.

Line 271. Corroborate the possible cause with a date.

Line 286. Specify breeding seasonal differences and eliminate the word ambush.

The refrence **Shenbrot G. 2014**. Population and community dynamics and habitat selection of rodents in complex desert landscapes. *Mammalia* **78(1)**:1-18 DIO 10.1515/mammalia-2013-0066 not mentioned in the text

The People's Government of Anhui Province. 2023. Physical geography. Available at

 $\underline{https://www.huangshan.gov.cn/zjhs/hssq/zrdl/?eqid=dbeb50350037680e0000000464844d90}. \ not \ mentioned \ in \ the \ text.$ 

#### **Figures**

In figure 1, the ideal is to have the comparison of a study site, but taken from the same perspective, that is, exactly the same place in different seasons. It is appreciated that the difference between seasons is possibly humidity, but this should be emphasized within the text. There are levends that must be specified for the axes in the figures that do not have it.

Figure 4. correct the name of the variable "sites" instead of "rites"

#### **Tables**

In table 1, in addition to writing the probability value, also report the value of U or X2 and the degrees of freedom or n.

### Appendix 1.

Regarding the description and division of habitat factors and predation parameters, there are several observations that are important to attend. This is extremely important for the development of the research and there are several details that must be justified. See the observations in the appendix.

#### Appendix 2.

In the table description, what type of season, breeding, reproductive, rainy season, be more specific.

Appendix 1 Description and division of habitat factors and predation parameters

Variable	Description	Division
Altitude (m)	Altitude in quadrat was directly measured by	1. < 200 m; 2. 200–300 m; 3. > 300
	GPS.	m <mark>.</mark>

Comentado [11]: Categories

**Comentado [12]:** Why this classification? Why not all 200 m at a time? What is the maximum height of the studio area?

Temperature (°C)	Ambient temperature in quadrat was measured using a portable hand-held electronic temperature and hygrometer. During	1. < 20 °C; 2. 20–30 °C; 3. > 30 °C.
	measurement, thermohygrometer was placed at	
	the snake location. Once values stabilized,	
	readings were recorded. Procedure was	
	repeated three times consecutively, and average	
	value was calculated.	
Humidity (%)	Ambient humidity in quadrat was measured	1. < 40%; 2. 40%–70%; 3. > 70%.
	using a portable hand-held electronic	
	temperature and hygrometer. Measurement	
	was analogous to temperature measurement.	
Landscape habitat	Habitat types within 300 m of quadrat were	1. Stream; 2. Forest; 3.
	assessed.	Agricultural.
Vegetation type	Main vegetation types in quadrat were assessed.	1. Grass; 2. Shrub; 3. Tree.
Vegetation height (m)	Vegetation height of herbs and shrubs was	1. 0–2 m; 2 <mark>. 2–</mark> 5 m; 3. > 5 m.
	measured by tape measure, arbor height was	
	calculated by trigonometric function.	
Vegetation coverage	When sun shone directly at noon during the day,	1. < 20%; 2. 20%–70%; 3. > 70%.
(%)	long (a) and short diameters (b) of shadows	
	were measured with a tape measure, then	
Cl (0)	calculated using the formula 1/4πab.	4 00 450 2 450 400 2 . 400
Slope (°)	Average slope of quadrat was measured using a	1. 0°–15°; 2. 15°–40°; 3. > 40°.
Claus us sistinu	handheld GPS.	4. Davin alana nasikiani 2. Mid
Slope position	Slope position of quadrat was estimated.	1. Down-slope position; 2. Mid-
		slope position; 3. Up-slope position.
Aspect (°)	Quadrat aspect was recorded with GPS.	1. Sunny slope (135° half-shaded
Aspect ( )	Quadrat aspect was recorded with GP3.	and half-sunny slope (45°–135°,
		225°–315°).
Distance from roads	Distance of quadrat from the road (m) was	1. 0–10 m; 2. 10–30 m; 3. > 30 m.
(m)	measured using a tape measure.	1. 0–10 III, 2. 10–30 III, 3. > 30 III.
Distance from water	Distance of quadrat from water was measured	1. < 5 m; 2. 5–20 m; 3. > 20 m.
(m)	using a tape measure.	1. \ 3 111, 2. 3-20 111, 3. > 20 111.
Distance from	Distance of quadrat from residential sites was	1. < 100 m; 2. 100–500 m; 3. > 500
residential sites (m)	measured using the ArcGIS v10.8 Mapping tool.	m.

**Comentado [13]:** You must specify trademark and any other relevant characteristics of the instruments and materials.

**Comentado [14]:** At ground level or at what height? This may influence the recorded data.

Comentado [15]: Why this 3m interval? Why not two meters like category 1? How tall was the largest tree? Are these categories based on the total length? Justify in the text.

Comentado [16]: I suggest changing the word noon to "midday" and eliminating the word "shone" and in any case writing "when the sun was positioned highest above the horizon" or "zenith."

**Comentado [17]:** The orientation of the slope seems to me to be an important factor to consider, north, south, east, west.

**Comentado** [18]: Was this variable estimated according to the average and the categories established in the previous variable?

**Comentado [19]:** The sunny slope can depend on several factors, the time of day, vegetation cover, cloud cover, climate, etc. etc specify what you considered for it, otherwise it may vary.

**Comentado [I10]:** Justify why they established those categories.

**Comentado [I11]:** The same as in the previous point.

**Comentado [112]:** How did they establish or determine places of residence? It must be mentioned in the text.