

Study on the Distribution and Damage Assessment Caused by Wild Boar in District Haripur

Kamal Ahmed Khan^{1,2,*}, Sajida Noureen¹

¹Department of Forestry and Wildlife Management, University of Haripur, Haripur, Pakistan

²College of Life Sciences, Shandong Normal University, Jinan 250014, China

*E-mail: khan_kamal98@yahoo.com

INTRODUCTION

The wild boar (*Sus scrofa*) are rapidly increasing their distribution across the globe and becoming responsible for socio-economic impacts. The wild boar population in the District Haripur is increasing with time, which is directly, and indirectly affecting crops, livestock, and other resources of the local community.

OBJECTIVES

The current study was conducted to find out the distribution and estimate the damage caused by wild boar. The second objective of the study was to find the control methods used by local farmers in the study area. The third objective was the wildlife department is aligned with the local community?

METHODOLOGY

After some preliminary surveys were conducted and core disturbed areas were selected for field visits and questionnaire filling. The brief questionnaire was developed before moving towards the community.

RESULTS

A total of five cases of the wild boar infestation were seen in the study area including Sahabary (1), Ghaaran (2), Gharm Thoon (1), and Mang (1). The fields were damaged badly and according to the farmers of that field estimated numbers of wild boars are 10-12 in number. The questionnaire response estimated economic losses of US\$ 18181. Damage events mostly related to pea, wheat and maize fields, highly damaged crops were maize (53 %), wheat (34 %) and pea (13 %) by the wild boars in affected fields, which were characterized by a peak incidence in summer and early autumn, and a minimum in spring. The wild boar damages were recorded in the different recourses of the local community. This study introduced categorization of damages including crops (70 %), livestock (15 %), fodders (8 %), pastures (4 %), personal injuries (2 %), and wildlife resources (1 %). Damaged fields were characterized by increased cultivation of crops throughout the year, a decrease of woodlands, maquis, and urban areas, and a reduced distance from shelter areas (forests and shrublands). Currently, different management practices are being used by farmers and the local community including, hunting, chemicals, sound, electricity, and the use of catch dogs. Local people mostly use catch dogs 47 % because it is a cheap method while 22 % of the locals use nothing to control the wild boars and 21 % use sound production in different ways including cracker blasts, personal loud calls, and drum beats. The wild boar hunting was observed in open areas, and people used this type of hunting for recreational purposes. Electric wires were used by 7 % of locals during night-time only in low human interference areas while 5% of people suggested that the use of different types of chemicals can help to avoid wild boars. The wildlife department and the local community were not found properly aligned.

CONCLUSION

A questionnaire-based survey was conducted in district Haripur to check distribution and assess the damage assessment caused by wild boar during different crop cultivation in a year. In this approach, a questionnaire was developed for official people working in the wildlife department. After discussing the damage and issues another questionnaire was developed for community surveys. There will be a strong connection between the damage of wild boar to maize crop. That's why people don't want to cultivate maize crops or they need to stay in the field all night to protect their crops. However, we assumed that the rate of population size is larger than the carrying capacity of the area. The two main reasons behind this are; the absence of top predators and secondly the litter size of wild boar is greater than other mammals. Direct observations were also recorded during fieldwork. The pug marks and damage sites were recorded. According to farmer's once the wild boar visit and the field then livestock don't want to eat so we need to fire them. Our distribution map shows the distribution of wild boar in the rural side of district Haripur. there was a great loss was recorded in summer as because of the shortage of food move the ungulates move towards crops as a secondary food source (Abaigar 1993, Sáenz de Buruaga 1995, Herrero *et al.* 2006). There is a need for the wildlife department allows foreigners to hunt the wild boars as a part of their management strategies because wild boar is least concern according to IUCN (2019). The analysis of spatiotemporal variation of wild boar-induced damage and the identification of factors that augment the risk of damage provides essential information for contributing to the development of a more effective plan for managing wild boar populations.

REFERENCES

1. Abaigar, T. "(Food habits of the wild boar (*Sus scrofa* L. 1758) in Southeastern Spain)." Donana. Acta Vertebrata (Espana) (1993).
2. Sáenz de Buruaga, M. 1995: Feeding the boar (*Sus scrofa castilianus*) in northern Spain. Ecology 9: 367-386.
3. Herrero, Juan, *et al.* "Diet of wild boar *Sus scrofa* L. and crop damage in an intensive agroecosystem." European Journal of Wildlife Research 52.4 (2006): 245-250.
4. Keuling, O., and K. Leus. "*Sus scrofa*." (2019): 2019-3.