Understanding the distribution of large carnivores in an agro-pastoral system of western Maharashtra

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The story behind...

• Growing body of knowledge about wildlife outside protected areas and human-wildlife interactions
• Agro-pastoral landscape in western Maharashtra hosting high human population and high diversity of large carnivores
• Human use spaces are resource rich because of high abundance of domestic prey, water and cover availability, etc. and large carnivores with large home ranges can survive in these areas
• Wildlife management forms an integral part of Forest Dept. responsibility and in turn influences interactions between local people and wildlife

What are we trying to understand?

Where leopards, wolves and hyenas occur across human-use spaces in 7 districts?

What determines their presence? Eg., wild or domestic prey presence, terrain type, land use, etc.

Our work in the last 1 year...

• Conducted 1576 interviews in 94 ranges of ground staff of the Forest Department
• Used an occupancy framework to assess presence of 3 large carnivores

Leopard (0.21) Wolf (0.41) Hyena (0.31)

Conclusions

• Extensive use of human-use landscapes by all three large carnivores and determine hotspots of higher occurrence

• Stresses on the fact that animals do not understand protected area boundaries and that this should inform policy decisions

• Highlights the value of some of these landscapes which are often considered unproductive and opened up for plantations

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