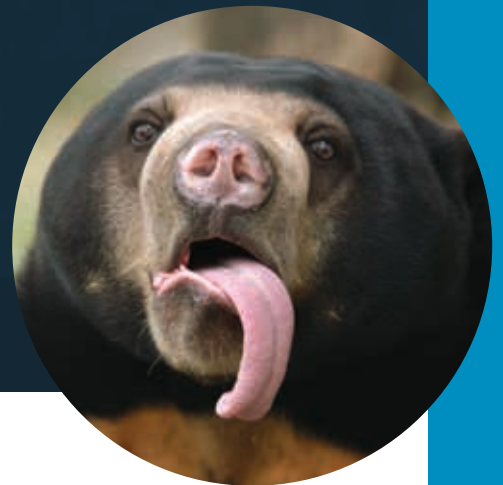


28TH IBA CONFERENCE

Co-existing with Bears on Dynamic Landscapes



IBA 2024

INTERNATIONAL ASSOCIATION FOR
BEAR RESEARCH AND MANAGEMENT

EDMONTON, ALBERTA, CANADA SEPTEMBER 2024

researchgate, google scholar etc. Overall, we found that sloth bears are prolific seed dispersers. Their diverse diets allow them to consume large volumes of over a twenty families of fruit and disperse large quantities of seeds across landscapes. We examined the prevalence of observed and potential endozoochoric seed dispersal by them. The wide-ranging habitat capabilities of sloth bears contribute to the colonization of new habitats and the establishment of diverse plant species. Selective feeding preferences further aid in the distribution of specific plant species, enhancing the heterogeneity of forest ecosystems. We found that several tree species benefit from the seed dispersal activities of sloth bears in different regions of India. *Ficus* spp., *Cassia fistula*, *Diospyros melanoxylon* etc. are widely dispersed by sloth bears in central India aiding in its distribution across different forest regions of Marwahi, Satpura, Bandhavgarh. *Ziziphus* spp., *Aegle marmelos*, etc in eastern India and *Syzizium cumini*, *Diospyros melanoxylon*, *Madhuca indica* etc in western India are dispersed by sloth bears, ensuring its presence in various forest ecosystems.

Day: Thursday **Time:** 17:00 – 21:00 **Room:** Salon 8/9

Theme: Human-Bear Conflict & Coexistence

Abstract Number: 257

Presentation Type: Poster Presentation

Presentation Title: Coexistence at the top of the food chain: anthropogenic risk primarily drives brown bear space use and resource selection in the Italian Alps

Presenter Name: Francesca Cagnacci

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Primary Author Occupation: Professional



Abstract:

The Italian Alps are among the most anthropized mountain areas in the world. In a multi-use landscape where a variety of activities such as farming, livestock herding, hunting, and outdoor recreation take place, large mammals must adjust their behavior to carry out their daily activities. The brown bear, the largest carnivore in the Alps, was recently rescued from near extinction and must now find its place in a complex, human-dominated landscape. In this study, we use individual-based movement, activity and trait information (spanning from 2006 to 2019) to assess multi-scale behavioral decisions related to the perception of risk, the availability of habitat, and the proximity of food resources. Perceived risk from human activities was found to influence spatial and temporal patterns of selection across scales more than other attributes. Spatially, brown bears reduced risk exposure when selecting for home ranges and resources within those ranges by avoiding humans, at the cost of limiting their selection of high-quality habitats and high-calorie food sources. Temporally, intraspecific competition was identified as the main determinant of activity patterns and daily movement length over the years, while human disturbance had a major effect on movement behavior on a daily (day vs. night) scale. Brown bears in the Alps are slowly recovering, but competition for space with humans, lack of habitat connectivity, and human-caused mortality are hindering their recovery and the formation of a viable metapopulation throughout the Alps. In the increasingly crowded Alps, sustainable long-term coexistence can be achieved only if both bears and humans adjust their behaviors.

Day: Thursday **Time:** 17:00 – 21:00 **Room:** Salon 8/9

Theme: Population Estimation

Abstract Number: 265

Presentation Type: Poster Presentation

Presentation Title: Invitation to Participate: An experimental comparison of expert elicitation data and empirical data of American black bears

Presenter Name: Darcy Doran-Myers

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Primary Author Occupation: Student



Abstract:

Expert elicitation is increasingly used in ecology to fill data gaps. The reliability of expert elicitation as a source of data is seldom verified, but it is pivotal for credible research results. This presentation is an invitation to participate in a USFWS-backed study designed to test the accuracy and precision of expert judgments in ecology. The goal is to externally validate the reliability of expert judgments and to investigate the factors affecting data accuracy. The American black bear and its species experts is an ideal study system for this purpose because of the bear's extensive range, decades of empirical research using consistent methods, and the availability of numerous knowledgeable experts (you all!).

Invitation #1: I am compiling a large dataset of existing black bear genetic mark-recapture datasets. I ask willing conference attendees to contribute data to this effort. By aggregating existing datasets, I aim to generate comprehensive estimates of key parameters, such as population abundance and survival rates, informed by various environmental factors. These estimates will serve as a benchmark to evaluate the performance of expert judgments.

Invitation #2: I am recruiting black bear experts across the species range to serve on expert panels. The call for participation extends to the broad spectrum of black bear specialists, at all career levels, to ensure a diverse and representative sample. Experts will be asked to share their expertise and provide estimates of local, regional, and range-wide parameters through an initial survey, two rounds of online elicitation, and one round of online discussion.

Your participation will help to enhance our understanding of expert elicitation data in ecology, thereby influencing the future of ecological research methods. You may personally benefit through data acknowledgement, co-authorship where appropriate, and a better understanding of black bear populations at large scales and your own species knowledge.