INTERNATIONAL ASSOCIATION FOR BEAR RESEARCH AND MANAGEMENT • IBA

29th IBA CONFERENCE



Bridging Science, Practice, and Community Engagement for Human–Bear Coexistence

Pescasseroli, Italy • 20–25 September 2026

Parco Nazionale d'Abruzzo Lazio e Molise

Rewilding Apennines

Rewilding Europe

Salviamo l'Orso

LIFE BEAR SMART CORRIDORS



MARCO SALVATORI

MUSE - Science Museum of Trento

MONDAY 10:30 – 10:59 · OPENING SESSION

Recovering in isolation: dynamics of the Alpine brown bear population over two decades post-reintroduction

Marco Salvatori, Natalia Bragalanti, Andrea Corradini, Luca Pedrotti, Luca Corlatti, Valentina La Morgia, Vincenzo Gervasi, Chiara Rossi, Heidi Hauffe, Barbara Crestanello, Davide Righetti, Giulia Bombieri

Large carnivores have been extirpated from much of their historical range, but targeted conservation actions have supported their recovery. The reintroduction of the brown bear in the central Alps represents a notable example, yet long-term viability of this population remains uncertain due to its small size, isolation, and increasing conflicts with humans. Using spatial capture-recapture and survival models based on genetic data and known bear deaths collected on 222 individuals over 21 years (2003– 2023), we assessed spatio-temporal trends in bear density, abundance, survival, and range expansion, accounting for sex and age-specific differences. Population size in 2023 was estimated between 92 and 122 individuals (mean = 106). Density increased at an annual rate of 8 %, with a mean in 2023 of 1.6 bears/100 km2 in the whole study area, and 2.5 within the area permanently occupied by females. Bear density was higher in proximity to the release site and on steeper slopes. Survival probability varied by sex and age, and was lower for males and younger individuals. Site fidelity was highest for females, with no permanent emigration recorded. Despite the high site fidelity, the area occupied by females expanded substantially, increasing by 140% over two decades. However, this expansion remains confined to the western side of the Adige Valley, which represents a major ecological barrier in the central Alps, hindering connectivity with the nearest Dinaric-Pindos bear population. Despite growth, the population remains small and vulnerable to stochastic events. Observed spatial patterns and dynamics seem to reflect the interplay between intrinsic biological traits, like female philopatry, and anthropogenic factors, including artificial barriers. Sustained genetic monitoring, improved connectivity, and science-based management will be crucial to ensure the long-term persistence of this population in a human-dominated landscape and increasingly hostile social context.



CÉCILE VANPÉ

French Biodiversity Agency (Office Français de la Biodiversité, OFB)

MONDAY 11:30 – 11:44 · BEAR BEHAVIOUR

A comprehensive investigation into the role of the brown bear in the dispersal of plants in the Pyrenean mountains.

Cécile VANPE, Tanguy DAUFRESNE, Mélanie ROY, Jérôme SENTILLES, Pierre-Yves QUENETTE, Christophe BALTZINGER

Species will be required to disperse rapidly through fragmented landscapes in order to keep pace with the changing climate. In this context, long-distance dispersal of diaspores is recognized as a key mechanism in plant dynamics and helps plants track their niches and migrate in altitude. Omnivorous Ursids are likely to be good vectors of long-distance dispersal of plants due to their large body size, predominantly plant-based diet, high mobility, large home ranges, large diversity of habitats and long gut retention time.We investigated the endozoochorous dispersal of plant diaspores by the brown bear (Ursus arctos) in the critically endangered Pyrenean population situated in south-western Europe. To get a comprehensive view of the full process and the different filters that affect the dispersal effectiveness, we combined faecal DNA metabarcoding, coproscopic analyses, germination experiments under greenhouse and an in natura experiment. We identified 53 different plant taxa in the diet. Among the 16 species for which we could find information on the fruiting period, three fleshy-fruited and six dry-fruited plants were consumed during their fruiting periods. Intact diaspores extracted from faeces samples belonged to 27 different taxa, including 15 herbaceous plants, six fleshy-fruits and one diaspore dry fruit. We described the dispersal of plants that produce dry or fleshy fruits, as well as ferns and mosses. We also highlighted the importance of considering the endozoochory process up to the faecal matrix, which can limit germination. We finally showed that dung beetles play a unique role in the disintegration of faeces and the secondary dispersal of diaspores. Overall, this study revealed the dispersal of a wider range of plants than previously thought in Ursids, which could influence the structure and dynamics of Pyrenean plant communities and consequently the functioning and resilience of Pyrenean ecosystems in the face of global changes.