Statistical ecology, hidden Markov models and the management of large carnivores in Europe

Large carnivores (bears, wolves, lynx and wolverines) are difficult to monitor in the field: they are elusive and live at low densities over wide areas. With their recent recovery in Europe, large carnivores are having increasing interactions with human activities. In this talk, I will illustrate how our team (https://human-animal-interactions.github.io/) and collaborators contribute with statistical ecology to the management of large carnivores in Europe. I will showcase inference about large carnivores' abundance, demography and distribution by applying and developing hidden Markov models that make relevant use of available and noisy data. I will also talk about how model outcomes can be used in making scenarios and decisions about large carnivores' management