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AN OVERVIEW ON INTEGRATED POPULATION DYNAMICS MODELS

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ABSTRACT

Integrated population dynamics models has become popularly used during the last decades [1]. These are models that jointly analyse data on population size and data on demographic parameters. Due to difficulties of incorporating data for parameter estimation in conventional population projection matrix-type models (i.e. Leslie and Lefkovitch), an integrated analyses with a state-space formulation has proven to be very useful [2]. This approach allows inferences about population dynamics accounting for parameter estimates and model uncertainties due to process variation, such as demographic and environmental stochasticity, and observational error. I will highlight some of the main features of these models and review some of the existing applications to wildlife species.

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