

SOME RECENT INNOVATIONS IN CAPTURE-RECAPTURE MODELLING

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In recent years capture-recapture sampling models have been applied to many non-standard situations. In this talk I will focus first on the special modelling difficulties when one is considering so called natural tags such as an animals "dna fingerprint" or body stripe patterns. A second problem I will consider is where animals' individual detection histories are developed for animals not physically captured. For example, we have considered individual birds detected or not in different periods of a point count. A key issue for these models is that an animal's capture history may contain errors and these errors are quite challenging to model. Some authors in the current literature have not handled these complex models correctly and have suggested minor adaptations of current approaches.