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# 50-Year Anniversary of Papers by Cormack, Jolly and Seber

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This issue celebrates 50 years since the appearance of three keystone papers of capture–recapture: Cormack (1964), Jolly (1965) and Seber (1965). The influence of these papers is indicated by their record in citations databases; for example, the Web of Science lists 643, 1507 and 957 citations, respectively. The Cormack–Jolly–Seber and Jolly–Seber models form the basis for almost all open-population capture–recapture modelling.

The issue features transcribed interviews with Richard Cormack and George Seber. (An obituary of George Jolly was given by Cormack, 2000.) The interviews are complemented by eight papers, which provide historical detail (Schofield and Barker) and modern developments. Applications considered in these papers span ecology (estimating abundance of fish stocks, Bravington, Skaug and Anderson; camera-trap surveys of ship rats, Fewster, Stevenson and Borchers; estimating sea lion vital rates, Johnson, Laake, Melin and DeLong), social science (estimating the size of drug-using populations, Hay and Richardson; estimating the homeless population of a city, the extent of domestic violence, and the size of the forced labour market, Böhning) and medical science (bowel cancer screening, Böhning).

The methodology papers of this issue illustrate that capture–recapture research is still thriving, with innovative advances often driven by new technology. Recent developments described in this issue include: spatial capture–recapture methods (Borchers and Fewster), modelling zero-truncated count distributions (Böhning), kinship models utilizing genetic data (Bravington, Skaug and Anderson), trace-contrast models without capture histories for analysing natural markings data with imperfect matching (Fewster, Stevenson and Borchers), theory for multivariate state hidden Markov models (Johnson, Laake, Melin and DeLong) and time reversal (Nichols).

Reflecting many of the developments in capture–recapture of the past 50 years, the methods presented in this issue are largely from a classical frequentist perspective. The power of Bayesian methods can be seen from the books by Kéry and Schaub (2012) and King et al. (2010) and the reviews by King (2012) and Dorazio (2016).

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