POSTSCRIPT

One last capture-recapture example was prepared for this primer—to estimate the number of typographical errors in the text. Each of the four authors plus the editor proofread the manuscript, thus generating five "capture occasions." An X matrix was constructed from the results. The values of n_j were 26, 47, 59, 60, and 79, and f_j values were 68, 43, 18, 7, and 7, and M_{t+1} equaled 143.

Each of the five occasions was independent; that is, none of the five reviewers worked together, so there cannot be behavioral response. However, some errors are more difficult to spot than others, so there is heterogeneity of "capture" (typographical error detection) probabilities. Also the reviewers spent different amounts of time proofreading, and one author's spouse assisted in the process, so there reasonably should be variation of capture probabilities by occasion. Thus, the appropriate model is M_{th}, for which there is no estimator. We do not believe that Model M_b or Model M_{bh} is at all appropriate for this case because no behavioral response is involved, and because the estimators for these models are dependent on the ordering of the capture occasions. For these data, no logical ordering of capture occasions can be made. Note that the other three estimators are not dependent on the ordering of the capture occasions. Study of the simulation results in Table N.5.b of *Otis et al. (1978:129)* suggests the jackknife estimator associated with Model M_h is more appropriate for the analysis than Darroch's estimator for Model M_t. The estimate of N_h was 217 with the 95% confidence interval (189, 246). Thus, substracting the 143 errors located in the manuscript, there are still 217 – 143 = 74 typographical errors remaining, with the 95% confidence interval (46, 103). Good luck in finding them.