ERRORS IN *ECOLOGICAL METHODOLOGY* (2ND ED.)

I include here all the errors that I have found to date in the first printing of *Ecological Methodology.* To see if you have the first printing, look on the page before the Contents in the front of the book, near the bottom there are a string of numbers 1 2 3 4 5 and the lowest number indicates the printing.

Preface page xii, line 10: should read www.zoology.ubc.ca/~krebs
line 25 should read I hope

Page 26, equation near top of page: should read 1.96 instead of 19.6

Page 67, Question 2.4 has three lines missing from the table and should read:

2.4. Dunnet (1963) sampled quokkas (small marsupials) on Rottnest Island off Western Australia over three sampling periods with these results for 1957:

	Mature animals	Immature animals
Number marked at time 1	32	35
Number marked at time 1 and never seen again	22	20
Number marked caught at times 1 and 2 only	5	1
Number marked caught at times 1 and 3 only	4	11
Number marked caught at times 1, 2 and 3	1	3
Number marked first at time 2 and never seen again	38	28
Number marked first at time 3	26	23
Number marked caught at times 2 and 3 only	4	7

Recast these data in the form of a Schnabel sample, and estimate the size of the mature population and the immature population of this marsupial. What assumptions must you make to do these calculations? Do the estimates obtained by the Schumacher – Eschmeyer model differ significantly from those of the Schnabel model? Can you test for unequal catchability in these data?

Page 68, Question 2.5. The second last line in this Method B table from Leslie et al. (1953) should read "Total Caught", not Total unmarked.

Page 88, Equation 3.15 should have a + in the numerator between the two terms in large parentheses. The correct equation is shown in the center of page 87.

Page 103, Question 3.3 This question cannot be answered without information on the sample size of the first and second samples. Assume for this exercise that they counted 69 fawns and 83 adults in the first sample, and 38 fawns and 72 adults in the second sample.

Page 103, Question 3.4 uses the same data as question 2.4 above and is missing the data shown above from the table (i.e. the last 3 rows of the table above).

Page 136, line 6: Insert:

If $n > 30$ use the normal approximation to get confidence limits (eq. 8.7, page 265). If $n < 30$ (small sample) use the following transformations:

Page 165, equation 5.9. The y_i should be x_i in this equation (perpendicular distance).

Page 277 Equation 8.22 should read:

$$\text{d.f.} \approx \frac{\left(\sum_{h=1}^{L} g_h s_h^2\right)^2}{\sum_{h=1}^{L}\left[g_h^2 s_h^4 \big/ (n_h - 1)\right]} \qquad (8.22)$$

and on line 3 from the bottom s_h should be s_h^2 (i.e. the variance).

Page 278 near the top of the page the equation should read:

$$\text{d.f.} = \frac{34{,}106{,}392^2}{8.6614 \times 10^{12}} = 134.3$$

Page 415, Equation 12.2: The last term in this equation should read:

$$\binom{N - N_i - N_j}{n}$$

The correct equation is shown on page 416.

Page 417. This variance equation should read:

$$\text{var}\left(\hat{S}_{30}\right)=\binom{42}{30}^{-1}\left\{\begin{array}{l}\binom{21}{30}\left(1-\dfrac{\binom{21}{30}}{\binom{42}{30}}\right)+\binom{26}{30}\left(1-\dfrac{\binom{26}{30}}{\binom{42}{30}}\right)+\binom{39}{30}\left(1-\dfrac{\binom{39}{30}}{\binom{42}{30}}\right)\\ +\binom{40}{30}\left(1-\dfrac{\binom{40}{30}}{\binom{42}{30}}\right)+2\left[\left(\binom{42-21-16}{30}-\dfrac{\binom{42-21}{30}\binom{42-16}{30}}{\binom{42}{30}}\right)\right.\\ +\left(\binom{42-21-3}{30}-\dfrac{\binom{42-21}{30}\binom{42-3}{30}}{\binom{42}{30}}\right)\\ +\left(\binom{42-21-2}{30}-\dfrac{\binom{42-21}{30}\binom{42-2}{30}}{\binom{42}{30}}\right)\\ +\left(\binom{42-16-3}{30}-\dfrac{\binom{42-16}{30}\binom{42-3}{30}}{\binom{42}{30}}\right)\\ +\left(\binom{42-16-2}{30}-\dfrac{\binom{42-16}{30}\binom{42-2}{30}}{\binom{42}{30}}\right)\\ \left.+\left(\binom{42-3-2}{30}-\dfrac{\binom{42-3}{30}\binom{42-2}{30}}{\binom{42}{30}}\right)\right]\end{array}\right\}$$

Page 444, Equation 12.31. There should be a minus sign on the right side of this equation. The same mistake occurs on page 448 near the top of the page.

$$H' = -\sum_{i=1}^{s}(p_i)(\log_2 p_i)$$

Page 449 Equation 12.37 Note that the original paper by Smith and Wilson (1996) has an error in the equation for their index of evenness, and it is not correct in my book. It should read:

$$E_{\text{var}} = \left(\frac{2}{\pi}\right)\left[\arctan\left\{\frac{\sum_{i=1}^{S}\left(\log_e(n_i) - \sum_{j=1}^{S}\log_e(n_j)/S\right)^2}{S}\right\}\right] \qquad (12.37)$$

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