Errata and Explanations: Hooten, M.B. and T.J. Hefley (2019). Bringing Bayesian Models to Life. Chapman and Hall / CRC.

May 14, 2025

- The random number generator that R uses by default changed in R version 3.6. The code in this book was developed using R versions < 3.6, which means that results based on stochastic algorithms may vary in newer versions of R (even when `set.seed` is used). The results involving the R function `sample` seem to change most significantly and those are noted below in chapters 5, 14, 15, and 25.

- Page 41, Box 5.2: line 1: insert line:
  `RNGkind(sample.kind = "Rounding")`
  to revert random number generator to R version < 3.6 to achieve same exact results as reported in Figure 5.1.

- Page 71, line 4 of text: phrase should read "... occur at lines 13 and 17" instead of "... occur at lines 15 and 17".

- Page 100, Box 11.3: line 5 should read: `x.mean.0[2]=1`. This correction changes line 14 to `35.53121 38.00679` and the associated text in the following line to: "... for male deer and $(35.5, 38.0)$ kg for female deer."

- Page 124, Box 14.2: `solve` and `chol` may produce errors depending on version of R and type of BLAS installed. Also, timing results will vary across systems.

- Page 125, Box 14.3: line 1: insert line:
  `RNGkind(sample.kind = "Rounding")`
  to revert random number generator to R version < 3.6 to achieve same exact results as reported in Figure 14.1.

- Page 136, Box 15.2: line 1: insert line:
  `RNGkind(sample.kind = "Rounding")`
  to revert random number generator to R version < 3.6 to achieve same exact results as reported in Table 15.1.

- Page 146, Box 16.2: For clarity, line 3 is only useful to prepare the data for use with the MCMC algorithm in Box 16.4. Also, line 6 overlays a horizontal line at `y=0`, but that is not visible in Figure 16.2, so that line of code can be safely omitted.

- Page 152, equation 16.22: This prior specification should read: $\theta \sim \mathrm{N}(\mu_\theta, \sigma_\theta^2)$.

- Page 157, first and third sentence of section 16.3: Chapter 12 should be referenced instead of Chapter 11.

- Page 213, line 1 of text, beneath Figure 18.1 caption: "skewness parameters provide better predictive performance than others."

- Page 275, Box 21.4: line 1–2 should read:
  `cpr.mcmc <- function(y,X,step.idx,beta.mn,beta.var,beta.tune,n.mcmc){`

- Page 281, Box 21.6: line 7 should read:
  `mcmc.out=cpr.mcmc(y=y,X=X.cpr,step.idx=idx,`

- Page 414, Box 25.2: line 1: insert line:
  `RNGkind(sample.kind = "Rounding")`
  to revert random number generator to R version < 3.6 to achieve same exact results as reported in Figure 25.1 and Table 25.1.

- Page 492, Box 28.1: lines 15-16 are redundant and can be omitted.

- Page 494, Box 28.1: line 90 should read:
  `tmp.chol=chol(t(K)%*%K/s2y+Im/s2z)`

- Page 567, Binomial: The PMF for the binomial distribution should be: $[\theta|N,p] = \binom{N}{\theta}p^{\theta}(1-p)^{N-\theta}$. The "$N-\theta$" should appear in the exponent of $(1-p)$ instead of "$1-\theta$".