Corrigendum

In the article by Max Shpak (*GENETICS* **177**: 2181–2194) entitled "Selection Against Demographic Stochasticity in Age-Structured Populations," Equation 6 should read:

$$\begin{aligned}\sigma_\lambda^2 &= \sum_i \frac{1}{\nu_i}\left[\left(\frac{\partial\lambda}{\partial F_i}\right)^2 \mathrm{var}[F_i] + \left(\frac{\partial\lambda}{\partial b_i}\right)^2 b_i(1-b_i)\right] \\ &= \sum_i \frac{1}{\nu_i}\left[\left(\frac{\lambda^{-i+1}l_i}{\tau}\right)^2 \mathrm{var}[F_i] + \left(\frac{\lambda^{-i}V_{i+1}l_i}{\tau}\right)^2 b_i(1-b_i)\right],\end{aligned} \tag{6}$$

where $1/\nu_i$ should appear as a factor for both the first and second term in the brackets, reflecting the fact that each term should be weighted by its contribution relative to the equilibrium frequency for age class i. In the equations for N_e following Equation 11 on page 2187, the final term should read:

$$N_e = \frac{N}{1 + \sum_i (1/\nu_i)\left[\left(\lambda^{-i+1}l_i/\tau\right)^2 \mathrm{var}[F_i] + \left(\lambda^{-i}V_{i+1}l_i/\tau\right)^2 b_i(1-b_i)\right]}$$

The numerical examples in the diffusion analysis in the sections on pages 2187–2190 considered only variance due to survivorship $\mathrm{var}(b_i) = b_i(1 - b_i)$, so the demographic variances computed for Figures 2 and 3, etc., remain unchanged.

In Equation 12, the indices 1 and 2 were switched in the denominator terms, so the final term in Equation 12 should read:

$$U(p) = \frac{p\sigma_2^2}{p\sigma_2^2 + (1-p)\sigma_1^2} \tag{12}$$

In the context of the corrections to Equation 6, the sensitivity analysis in Appendix Equations A2, A3, and A5 should appear (assuming F_i independent of b_i and vice versa) as follows:

$$\begin{aligned}\frac{\partial\sigma_\lambda^2}{\partial b_i} &= \frac{\partial}{\partial b_i}\sum_i \frac{1}{\nu_i}\left[\left(\frac{\partial\lambda}{\partial F_i}\right)^2 \mathrm{var}[F_i] + \left(\frac{\partial\lambda}{\partial b_i}\right)^2 b_i(1-b_i)\right] \\ &= \frac{\partial}{\partial b_i}\sum_i \frac{1}{\nu_i}\left[\left(\frac{\lambda^{-i+1}l_i}{\tau}\right)^2 \mathrm{var}[F_i] + \left(\frac{\lambda^{-i}V_{i+1}l_i}{\tau}\right)^2 b_i(1-b_i)\right]\end{aligned} \tag{A2}$$

$$\begin{aligned}\frac{\partial\sigma_\lambda^2}{\partial b_i} = &-\sum_i \nu_i^{-2}\frac{\partial\nu_i}{\partial b_i}\left[\left(\frac{\partial\lambda}{\partial F_i}\right)^2 \mathrm{var}[F_i] + \left(\frac{\partial\lambda}{\partial b_i}\right)^2 b_i(1-b_i)\right] \\ &+ \sum_i \frac{1}{\nu_i}\left[2\left(\frac{\partial\lambda}{\partial F_i}\right)\left(\frac{\partial^2\lambda}{\partial b_i \partial F_i}\right)\mathrm{var}[F_i] + \left(\frac{\partial\lambda}{\partial b_i}\right)^2 (1-2b_i)\right. \\ &\left. + 2\left(\frac{\partial\lambda}{\partial b_i}\right)\left(\frac{\partial^2\lambda}{\partial b_i^2}\right) b_i(1-b_i)\right]\end{aligned} \tag{A3}$$

$$\begin{aligned}\frac{\partial\sigma_\lambda^2}{\partial F_i} = &-\sum_i \nu_i^{-2}\frac{\partial\nu_i}{\partial F_i}\left[\left(\frac{\partial\lambda}{\partial F_i}\right)^2 \mathrm{var}[F_i] + \left(\frac{\partial\lambda}{\partial b_i}\right)^2 b_i(1-b_i)\right] \\ &+ \sum_i \frac{1}{\nu_i}\left[2\left(\frac{\partial\lambda}{\partial F_i}\right)\left(\frac{\partial^2\lambda}{\partial F_i^2}\right)\mathrm{var}[F_i] + \left(\frac{\partial\lambda}{\partial F_i}\right)^2 \frac{\partial\,\mathrm{var}[F_i]}{\partial F_i}\right. \\ &\left. + 2\left(\frac{\partial\lambda}{\partial F_i}\right)\left(\frac{\partial^2\lambda}{\partial b_i \partial F_i}\right) b_i(1-b_i)\right]\end{aligned} \tag{A5}$$

Thanks go to Stefano Giaimo for bringing the errors in Equations 6 and 12 to the author's attention.