Erratum

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ERRATUM

In *Condor* 109(4), November 2007, equations in the paper "Approximating variance of demographic parameters using the delta method: a reference for avian biologists" by Larkin Powell contained errors by the author.

Table 1 contained an error in the example given for the variance of the function $\theta^{1/7}$. The corrected formula for the variance is

$$\frac{1}{49 \cdot \sqrt[7]{\theta^{12}}} \cdot \mathrm{var}(\theta).$$

Table 3, as corrected, is:

TABLE 3. Approximations for sampling variance of survival estimates, by the delta method, when changing the scale of temporal units.

Survival temporal rescaling		Relationship	Variance approximation
From	To		
Daily	Weekly	$\hat{S}_w = (\hat{S}_D)^7$	$\mathrm{v\hat{a}r}(\hat{S}_w) = 49 \cdot \mathrm{v\hat{a}r}(\hat{S}_D) \cdot \hat{S}_D^{12}$
Daily	Monthly (30 days)	$\hat{S}_M = (\hat{S}_D)^{30}$	$\mathrm{v\hat{a}r}(\hat{S}_M) = 900 \cdot \mathrm{v\hat{a}r}(\hat{S}_D) \cdot \hat{S}_D^{58}$
Daily	Annual	$\hat{S}_A = (\hat{S}_D)^{365}$	$\mathrm{v\hat{a}r}(\hat{S}_A) = 133225 \cdot \mathrm{v\hat{a}r}(\hat{S}_D) \cdot \hat{S}_D^{728}$
Weekly[a]	Daily	$\hat{S}_D = \sqrt[7]{\hat{S}_W}$	$\mathrm{v\hat{a}r}(\hat{S}_D) = \dfrac{1}{49 \cdot \sqrt[7]{\hat{S}_W^{12}}} \cdot \mathrm{v\hat{a}r}(\hat{S}_W)$
Weekly	Monthly (4 weeks)	$\hat{S}_M = (\hat{S}_W)^4$	$\mathrm{v\hat{a}r}(\hat{S}_M) = 16 \cdot \mathrm{v\hat{a}r}(\hat{S}_W) \cdot \hat{S}_W^6$
Weekly	Annual (52 weeks)	$\hat{S}_A = (\hat{S}_W)^{52}$	$\mathrm{v\hat{a}r}(\hat{S}_A) = 2704 \cdot \mathrm{v\hat{a}r}(\hat{S}_W) \cdot \hat{S}_W^{102}$
Monthly (30 days)[a]	Daily	$\hat{S}_D = \sqrt[30]{\hat{S}_M}$	$\mathrm{v\hat{a}r}(\hat{S}_D) = \dfrac{1}{900 \cdot \sqrt[30]{\hat{S}_M^{58}}} \cdot \mathrm{v\hat{a}r}(\hat{S}_M)$
Monthly (4 weeks)[a]	Weekly	$\hat{S}_W = \sqrt[4]{\hat{S}_M}$	$\mathrm{v\hat{a}r}(\hat{S}_D) = \dfrac{1}{900 \cdot \sqrt[30]{\hat{S}_M^{58}}} \cdot \mathrm{v\hat{a}r}(\hat{S}_M)$
Monthly	Annual	$\hat{S}_A = (\hat{S}_M)^{12}$	$\mathrm{v\hat{a}r}(\hat{S}_A) = 144 \cdot \mathrm{v\hat{a}r}(\hat{S}_M) \cdot \hat{S}_M^{22}$
Annual[a]	Daily	$\hat{S}_D = \sqrt[365]{\hat{S}_A}$	$\mathrm{v\hat{a}r}(\hat{S}_D) = \dfrac{1}{133225 \cdot \sqrt[365]{\hat{S}_A^{728}}} \cdot \mathrm{v\hat{a}r}(\hat{S}_A)$
Annual[a] (52 weeks)	Weekly	$\hat{S}_W = \sqrt[52]{\hat{S}_A}$	$\mathrm{v\hat{a}r}(\hat{S}_W) = \dfrac{1}{2704 \cdot \sqrt[52]{\hat{S}_A^{102}}} \cdot \mathrm{v\hat{a}r}(\hat{S}_A)$
Annual[a]	Monthly	$\hat{S}_M = \sqrt[12]{\hat{S}_A}$	$\mathrm{v\hat{a}r}(\hat{S}_M) = \dfrac{1}{144 \cdot \sqrt[12]{\hat{S}_A^{22}}} \cdot \mathrm{v\hat{a}r}(\hat{S}_A)$

[a] Error in variance formula in paper as originally published. The corrections have been included in the on-line variance calculator available at http://snr.unl.edu/powell/research/research.htm. The author regrets this error and is grateful to K. Pearson and C. Jennelle for their helpful suggestions and review of the corrections.