

## SEXUAL SELECTION CONTROLS

Sexual selection results from violation of the Hardy–Weinberg assumption that meeting is random. EVOLVE allows you to simulate this by entering proportions or probabilities of one genotype ‘choosing’ to mate with each of the other genotypes.

For example, assume in a species like deer or antelope that the *A* & *B* alleles are incompletely dominant and the *B* allele produces large antlers or horns, which are preferred by all females. The phenotypes would then be *AA* = small, *AB* = medium, and *BB* = large. EVOLVE picks ‘females’ at random and the females then choose ‘males’. The mating preferences might look like the following:

	<i>AA</i>	<i>AB</i>	<i>BB</i>
<b><i>AA</i> Preference for:</b>	.1	.2	.7
<b><i>AB</i> Preference for:</b>	.1	.2	.7
<b><i>BB</i> Preference for:</b>	.1	.2	.7

On average, 10% of the females would choose *AA* mates, 20% would choose *AB* mates and 70% would choose *BB*s. Note that the sum of the preferences in each row must add to 1.0 (100%).