The build up of genetic variation

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How do populations evolve novel phenotypes that may help them survive in the face of environmental stresses, such as those due to invasive species? In the past couple decades, there has been empirical evidence in a variety of taxonomic groups to support the capacitance hypothesis: that populations have mechanisms to build up and store genetic variation under "normal" environments, which can then be released in response to stresses. Here, we study a model of how such a process affects the distribution of phenotypes and ultimately extinction probabilities.

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