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Modeling the population dynamics and community impacts of
Ambystoma tigrinum; a case study of phenotype plasticity

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Highlights

- *Ambystoma tigrinum* exhibits phenotypic plasticity with metamorph and pædomorph adults
- Nonlinear ODEs model food sources, young of the year, juveniles and both adult forms
- Morphological choice is critical to the overall composition of the *Ambystoma* population
- Population fitness measures indicate variability in optimal population distributions, consistent with polyphenic adaptation

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