



THE EVOLUTION OF REPRODUCTIVE MODES AS DRIVERS OF DIVERSIFICATION IN AMPHIBIANS



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/INTRODUCTION

Amphibians, with just over 8000 species, have diversified globally and have evolved an **extensive array of life history strategies**. Most amphibians have maintained an ancestral life cycles, laying aquatic eggs that hatch into aquatic larvae that metamorphose into (usually) terrestrial adult forms. However, many lineages have deviated from this, showing varying degrees of 'terrestriality'. Many groups have independently evolved **direct development**, where the larval stage is absent or severely reduced so that terrestrial juveniles hatch directly from eggs. Some of the most species-rich frog (Craugastoridae, 838 species) and salamander (Plethodontidae, 477 species) clades are such direct developers, which spurred the hypothesis:

Ho: The evolution of terrestrial reproduction has created 'Ecological Opportunity' prompting an increase in lineage diversification

