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### Breeding and Recruitment Phenology of Amphibians in Missouri Oak-Hickory Forests

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**Poster Abstract:** We examined the phenology of pond-breeding amphibians in central Missouri oak-hickory forests. We monitored seven ponds between 2000-2004 using drift fences with pitfall traps. We found 15 total pond-breeding amphibian species, nine of which we captured in sufficient abundance to evaluate breeding phenology. Among the nine species, breeding migrations occur from February to November, while subsequent metamorph emigration occurred primarily from May to October. Fall breeding gives larval ringed salamanders a potential size advantage over spring breeders. However, the fall breeding strategy requires ponds that hold water from August through May. Green frogs and central newts also required long hydroperiods for their larval stage (>160 days). American toads however, only required ponds to hold water for as little as 60 days. Our ponds were nearly permanent with salamander dominated communities. Management and conservation for diversity of pond-breeding amphibians will likely benefit from landscapes with an increased diversity of hydroperiods. Understanding phenologies in a region helps guide management and conservation activities in breeding ponds and surrounding terrestrial habitats.

