

Title: Pavement to Pond: A Review of Management Strategies for Amphibians in Urban Environments

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Wildlife management is essential for mitigating the loss of diversity due to anthropogenic effects. However, wildlife management often focuses on game species, neglecting vulnerable non-game species. Non-game species, such as amphibians, face significant challenges due to urbanization and human encroachment. The alteration of natural areas via urbanization often results in habitat fragmentation, isolated populations, exposure-related mortality from runoff pollutants and toxins, and high mortality rates from vehicular collisions during critical migration periods. These combined pressures contribute to population declines and the loss of biodiversity among amphibians in urban environments. Therefore, it is crucial to incorporate the management of non-game species into urban planning to promote biodiversity and help conserve vulnerable wildlife species. We conducted a literature review to assess the effects of urban wildlife management practices on amphibians. To conduct our review, we used Google Scholar to locate papers detailing the effects of urban wildlife management strategies, or lack thereof, on amphibians in urban environments. We used the terms “urban wildlife management” and “amphibians” to conduct our review and filtered out articles that did not fit the criteria of our review. We then categorized how various methods positively or negatively influenced amphibian diversity and used this information to provide suggestions on what managers in urban areas can do to increase amphibian biodiversity. Our review will allow urban planners and those concerned about conservation to gain more insight into the effects of urban wildlife management on amphibians.