

HABITAT FOR THE FUTURE

SPEAKER



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From Tanagers to Treefrogs: Complex Riparian Habitats Contribute to Diverse Avian and Anuran Communities in the Verde River Basin

Riparian areas are among the most ecologically diverse systems and offer complex structure that many species of wildlife use for foraging and breeding. We deployed acoustic recorders to capture spring breeding calls of anurans (frogs and toads) in Verde River Wilderness areas and used both acoustic recorders and human observers to quantify bird activity and abundance along the Wild and Scenic portions of the Verde River. We categorized bird species into guilds based upon types of habitat used for breeding, foraging, and nesting. Riparian obligate breeders, such as Yellow Warbler and Summer Tanager, are the most common bird guild and abundances are related to habitat structure. The most complex habitats are gallery forest dominated by tall trees. We monitored anuran communities and hydrologic flows in perennial, intermittent, and ephemeral stream reaches across five Wilderness Areas within the upper basin. Calling activity of Canyon Treefrog begins after spring flows and pauses during colder dips in air temperature. Stream-dwelling anurans may breed in response to flooding followed by prolonged periods of base flows which could be important for tadpole metamorphosis. Our findings demonstrate the value of intact riparian habitat to wildlife and highlight the importance of both vegetation structure and hydrological flow to these vertebrate communities.