



West Branch Refugia Pond and Restoration Project

The West Branch Refugia Pond Project illustrates how adding water to the desert environment can greatly enhance habitat for amphibians and birds in the arid southwest.

Near the heart of urban Tucson, Arizona lies the West Branch of the Santa Cruz River, a watershed remarkable for its relict riparian habitat. A dense canopy of mesquite and palo verde trees lines the banks of the West Branch, providing myriad birds, lizards, frogs and toads shade from the scorching summer sun of the Sonoran Desert.

The Arizona Open Land Trust received funding from the U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program (Partners Program) to engage private landowners along the West Branch in proactively improving and preserving the migratory bird habitat afforded by the West Branch and its floodplain. Through grant funds from the Partners Program, landowners constructed backyard refugia ponds for wildlife habitat improvements. Numerous species of special concern and endangered species may be conserved using this kind of approach.



The construction of these ponds provides additional water and vegetation that attracts wildlife dependant on riparian ecosystems. Landowners' active participation and interest in restoring wildlife habitat is evident by the fact that the ponds were constructed almost entirely by the landowners themselves, with the help of a few friends and volunteers.

Results from the introduction of ponds to the West Branch floodplain were evident within a matter of days of completion. Three days after water was added to the completed ponds several species of toads appeared, including the Narrow-mouthed toad, Red spotted toad, Southern spadefoot toad, Great Plains toad Couches spadefoot toad, and Colorado River toad. This summer several Lowland Leopard Frog tadpoles were also introduced to the ponds. The tadpoles survived and have successfully grown to adult frogs.



The construction of backyard ponds and revegetating fallow land with native plant species is now becoming a high priority neighborhood restoration project for West Branch landowners. The small size of the ponds and manageability against invasion by non-natives like bullfrogs, crayfish and non-native fishes were important factors in the success of this restoration project.

The pond project is only one of a myriad of restoration projects West Branch residents have identified as priorities for their neighborhood. With the help of Arizona Open Land Trust, the neighborhood has prepared a vision for the West Branch that aims to maintain and restore a natural and cultural environment that supports riparian habitat, the bosque, biodiversity, and beauty. The implementation of the goals and objectives supported by this vision will further the efforts of the West Branch residents to preserve this relict riparian habitat.