

Habitat Harmony Sponsors the First Assessment of Flagstaff Habitats

In 2009, Habitat Harmony sponsored Dr. Lawrence Stevens of Stevens Ecological Consulting, LLC to compile the first-ever coarse-scale assessment of vegetation types in the City of Flagstaff. The resulting section-based habitat database is an important first step in determining vegetation cover and wildlife habitat, which will help inform City of Flagstaff urban planning efforts during the current ongoing revisions of both the Regional Plan and the Land Development Code.

Working with GIS (Geographic Information Systems) data layers and 2007 aerial overflight photography provided by the City of Flagstaff, and after consulting with Northern Arizona University professors Dr. Tina Ayers (Biological Sciences) and Dr. Paul Beier (Forestry), Dr. Stevens identified eight important coarse-level vegetation types and habitats within city limits. These include:

- * Native mixed conifer - oak forest & woodland
- * Non-native deciduous and mixed conifer shrub, woodland, and forest
- * Native hillslope (chaparral shrub and woodland plants)
- * Native grassland meadow
- * Disclimax meadows (usually dominated by non-native weeds and often sparsely vegetated)
- * Lawn and yard groundcovers
- * Riparian meadow
- * Open water

The team mapped existing land zoning data onto the photographic imagery, and determined the acreage of different zoning designations (building, industrial, roads and roadsides, rural, suburban, urban, unknown, non-City lands, and unclassified lands) on each section of City land. They also estimated the percent of area covered by the eight habitat types on each section, as well as the area occupied by impermeable anthropogenic activities and features. Lastly, they visited several sections to qualitatively evaluate vegetation patterns, and refined a list of invasive species found in Buffalo Park (developed by Dr. Ayers).

In addition to providing the first City-wide habitat information, Dr. Stevens is compiling a list of animals that occur within City limits, in cooperation with other members of Habitat Harmony's Study Group for Wildlife and Open Spaces. We hope that both the vegetation communities and the fauna compilations will be mapped on Dr. Stevens'

general zoning map to provide an integrated picture of the distribution of the vegetation and fauna occurring in Flagstaff. These layers could then be built on and revised by City and County urban planners, interested citizens, and conservation groups.

To view or download a copy of Dr. Stevens' database and draft report, please visit the Habitat Harmony website at: www.habitaharmony.org. For more technical information about the zoning map and data layers, please contact Dr. Lawrence Stevens at farvana@aol.com.