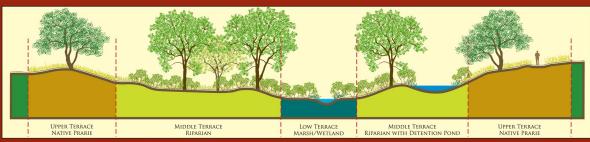
THE TERRACES OF MOUNTAIN HOUSE CREEK

Creeks and rivers naturally build terraces. Terraces are a reflection of changes in a stream's course and level of water across the seasons and years. These changes over time create terraces with distinct plant and animal communities that have adopted to the different water and soil conditions that occur along each terrace. Under natural conditions the terraces would form over time; however, the process was accelerated for the unique conditions found at Mountain House Creek. When the restoration of the Creek was begun, the landscape architects, biologists, hydrologists and engineers worked to build a mature creek ecosystem from the start. The terraces were built with future water and flooding inputs calculated. Unlike a truly natural system, the inputs to the Creek are known, and to a certain degree, controlled.

Below are explanations of the different terraces, how they are formed and the plant communities found within them.



The Mountain House Creek has three general terraces which are determined by the amount of flooding they receive over a hundred year cycle.

LOWER TERRACE - MARSH/WETLAND

The bottom of the Creek is the lowest terrace. This area is always wet and the plants and animals that live here depend on that water to grow. Some plants live literally in the water and if the Creek were to dry out, they would quickly go dormant or die out. Other plants in the lowest terrace always have their roots



wet and will tolerate being completely flooded for much of the winter and early spring. Amphibians such as frogs and turtles as well as many bird species thrive on the interface between water and land, while others, like small fish, depend on the nutrient rich waters at the creeks edge.

MIDDLE TERRACE - RIPARIAN

Of the three terraces the Riparian zone has the most variation. The lowest areas might be continually muddy and wet throughout the year while the higher areas of this zone dry out considerably in the summer. The top of the Riparian zone is indicated by the 100-year flood line. This line is the highest the river level will get during a once in a



100-year rainstorm. The Riparian zone is dominated by fast growing plants like willows that can tolerate a winter of flooding and use all the water just below the surface to help accelerate growth. Migratory birds are common visitors to the riparian zone and will often lay their eggs here in the spring as the winter water levels recede and the new buds emerge from the fertile soil.

UPPER TERRACE - PRAIRIE/SAVANNAH

In the area above the 100-year flood line, the upper terrace is an area with very little water and often less nutritionally rich soils. Plants that live in the upper terrace must be drought tolerant and some, like the native grasses that dominate the landscape, go dormant during the hot and harsh summer. This is the opposite



of lower terrace plants that often go dormant in the cold and wet winters. Other plants like the large trees found on this terrace level survive by sending down deep roots that find buried water sources. Birds such as hawks enjoy roosting in the tall trees of the prairie waiting to pounce on the small mammals that can be found moving through the grasses.

