## ***Field and Forest Trail***

Field and Forest Trail Habitat Theme – The Field and Forest Trail takes you through remnants of farm fields and into young oak hickory forests, and along the edge of a wetland area. The young oak hickory forest contains typically slow growing species adapted for the dryer lands. The overall theme of this hike is to look at the habitats of the Field and Forest Trail, and the changes within the diverse regions of this hike. Each description below is in order of how they are found on the trail, with general information that ties to the field and forest habitat theme. The descriptions are based as if you were taking the trail counterclockwise, left to right.

**Snag** – A snag is any dead or dying standing tree. Snags may develop cavities which either occur naturally or are excavated by birds and mammals. Over 85 species of North American birds use cavities in dead or deteriorating trees. Snags also provide essential habitat requirements for cavity-using amphibians, reptiles and mammals. Snags are used for nesting, shelter and feeding sites. In our area, common snag users are pileated woodpeckers, raccoons, etc.

**Bird Habitats** – Over 140 species of birds have been reported on the nature center property. This trail provides a nice variety of habitat for these birds, including indigo buntings that nest low in shrubby trees, or pewees and woodpeckers that nest high.

**Deadfall/Brush Pile** – Brush piles or dead logs like these provide great habitat for a variety of animals. They benefit many species of wildlife, including bobwhite quail, cottontail rabbits, wild turkeys, skunks, raccoons, opossums, woodchucks, chipmunks, mockingbirds, white-throated sparrows and juncos. Predators such as foxes, bobcats, hawks, owls and coyotes benefit from the small mammal and bird populations found in or around brush piles.

**Vines Overtaking Tree** – Honeysuckle (a non native species) and greenbrier (a native species) are commonly seen overtaking young trees

or dead snags. Greenbrier is a great source of wildlife food for a variety of birds, including quail, turkeys, raccoons, and deer. Even beaver eat greenbrier! It's noticeable because of its heart shaped leaves and small thorns. The plant has been documented as growing up to thirty feet tall if it has a tree to grow on, but typically it's seen as a lower shrubby plant. Greenbrier is also important to wildlife because the thickets provide great cover or protection for species, such as rabbits. Greenbrier blooms in May and June, having a bad smelling blossom that is pollinated by blue bottle flies.

**Honey Locust** – This is a deciduous tree native to eastern North America. It is mostly found in the moist soil of river valleys, such as the Arkansas River Valley. It can reach a height of 66–100 feet, with fast growth. They are relatively short-lived, however, living about 120 years. The fruit is a flat legume (pod) that matures between September and October. The pods are generally between 15–20 cm long. The pulp on the insides of the pods is edible and sweet; it should not be confused with Black locust, which is toxic. The seeds are dispersed by grazing herbivores, which eat the pod pulp and then excrete the seeds in their droppings; the animal's digestive system assists in breaking down the hard seed coat, making germination easier. Honey locusts commonly have thorns 10–20 cm long growing out of the branches; these may be single, or branched into several points, and commonly form into dense clusters. It has been suggested that these thorns evolved to protect the trees from now-extinct large animals (which may also have been involved in seed dispersal).. Despite its name, Honey locust is not a significant honey plant, while Black locust honey is prized. The name derives instead from the sweet taste of the legume pulp.

**Prickly Pear** – Prickly pears typically grow with flat, rounded segments that are armed with two kinds of spines; large, smooth, fixed spines and small, almost hairlike spines called glochids that easily penetrate skin and detach from the plant. Prickly pears species are found in abundance in the Southwest and Western United States, and also throughout much of Mexico. Prickly pears are also the only types of cactus normally found in the eastern United States. They are the most cold-tolerant of the

cacti, extending north into southern Canada. The fruit called *tuna*, is edible, although it has to be peeled carefully to remove the small spines on the outer skin before consumption. It is often used to make candies and jelly. The young stem segments, called nopales, are also edible.

**Lespedeza** – this is a non-native, invasive species of grass that has, in some cases, nearly overtaken native grasses and plants. It was named after the Spanish governor of Florida who aided the French Botanist Andre Michaux. Michaux lived in America for 10 years and wrote much about American plants. Lespedeza was discovered in Monticello Georgia in 1846, but thought to have originated in Japan. Called Japan Clover and later just "Lespedeza", it spread throughout the southern states in late 1800's. Often it has been planted and used for hay and forage and for soil improvements (helps prevent erosion). Lespedeza is very beneficial in preventing erosion, but is also negative, because it is an invasive species. An invasive species is a species defined as introduced species or non-indigenous species. Invasive species can alter ecological relationships among native species and can affect ecosystem function, economic value of ecosystems, and human health. A species is regarded as *invasive* if it has been introduced by human action to a location, area, or region where it did not previously occur naturally (i.e., is not native), becomes capable of establishing a breeding population in the new location without further intervention by humans, and spreads widely throughout the new location.

**Oats** – a native grass in our region. It is found primarily in upland drier regions, and provides food for deer and birds.

**Massard Expansion** – Massard Road is being expanded from where it previously ended at Zero street. Eventually the expansion will lead out to Hwy 71 south of Fort Smith. For now, it will just connect Zero street to Wells Lake Road, just beside our nature center.

**Transition to Forest from the Fields** – The habitat has changed rather dramatically in only a short time. Previously we were in open fields,

leftover from previous days when parts of this area served as farmland. Now we are in a more typical mixed hardwood conifer forest. (A mixture of deciduous or hardwood trees and conifers such as pines) In particular, an oak hickory forest. Previously, in the fields, the open grasses were prevalent, as well as tress, like the eastern cedar, that need direct sunlight to survive. In the forest, we see a whole new set of species, such as very limited grasses, but instead leaf litter on the ground, and abundant trees. The shade from the trees prevents grasses, like those in the field, from thriving.

**Brushpile/Deadfall** – see information above

**Streambed** – A seasonal streambed is located to the left of the trail. Often the streambed is damp, or shows evidence of having been wet. However, in dry periods, the evidence is left only in the pattern of the streambed. What's interesting to note is that no major erosional evidence is seen here. No major paths of rain washing downhill into the streambed or areas where the soil is being carried away are seen. Nature, and the forests themselves, have a way of providing the needs to keep it's own environment safe.

**Wetland Area** – The Janet Huckabee Arkansas River Valley Nature Center property really has a huge variety of habitats for less than 200 acres of land. Already we've hiked through an open field, into an oak hickory forest, and now we are on the edge of a wetland area. The Beaver Creek Trail, which leads off this path, can take you around this wetland environment more closely. Wetlands are vital to wildlife because they provide a reservoir of water.

**Storybook Oak** – This is an ancient oak tree, probably one of the oldest in the Fort Smith area. Can you imagine the stories this oak could tell, the histories it has witnessed, in it's life. Fort Smith itself was established On Christmas day, 1817. We're talking less than 200 years ago, and it's been estimated that this tree could be just as old. This tree could have been here when soldiers of the U.S. Army formally

established the first Fort Smith! Isolated on the edge of the American Frontier, these men, under the command of Major William Bradford, were charged with keeping the peace between the Cherokee and Osage tribes. Officially it was operational for only seven years. In 1838 the Fort was re-occupied and expanded. In 1871 the Fort was again abandoned. However, the town continued to thrive despite the absence of the Fort. This portion of Fort Smith/Barling was also a part of Fort Chaffee prior to becoming the Nature Center. Fort Chaffee was established in western Arkansas in September 1941. Originally designated as Camp Chaffee, the site included 76,075 acres of predominantly farmland. Combat training was initiated at Camp Chaffee in 1941 and most of the major buildings on the site were completed in 1943. From 1942 to 1946, Camp Chaffee was also used as a German prisoner of war facility. For several years after World War II, Camp Chaffee was placed on inactive standby status until the advent of the Korean War in 1950, which resulted in its reactivation as the Headquarters for the 4th Armored Division. In 1956, the site was chosen as the U.S. Army Training Center for Field Artillery and the name of the Facility was changed to Fort Chaffee. Between 1961 and 1974, Fort Chaffee was declared inactive and placed under caretaker status, and then reactivated on several different occasions. In 1975, Fort Chaffee was used as a relocation center for the Vietnamese refugee program and then for Cuban refugees from 1980 to 1982. Fort Chaffee also served as the temporary home, between 1987 and 1993, for the Joint Readiness Training Center. In 1995, the defense Base Realignment and Closure (BRAC) Commission recommended the permanent closure of Fort Chaffee. The federal government turned over 66,000 acres to the Arkansas Army National Guard to be used for training. The remaining 7,000+ acres were turned over to local communities for redevelopment. The Fort Chaffee Redevelopment Authority was formed in 1997. Then 170 or so acres were eventually donated to build the Janet Huckabee Arkansas River Valley Nature Center.