



## Summary

This image shows a hypothetical floodplain cross section to illustrate the different habitat types likely to have occurred on the Illinois River prior to large scale human development. The river's main channel is in the center, slightly sloping uphill on both sides through floodplains. Each floodplain meets a bluff.

Depicted within each floodplain and bluff are a variety of habitat types. There is a selection of prominent vegetation types listed. The flood plain habitats have two water level lines. One indicates the water level at a low river stage, the other shows the high river stage. Info-graphic Source: John C. Nelson, Illinois Natural History Survey, Great Rivers Field Station, Alton, Illinois.

## Left-Side Floodplain Habitats

Extending out of the Illinois River's main channel to the left-side floodplain is an island then a river side channel. Both are within a floodplain forest habitat type. A flood plain forest would largely consist of the following tree species: silver maple, willows, cottonwood, elm, ash, hackberry, pin oaks, bur oak, persimmon, and pecan. The island would be above the water at a low river stage, the side channel would also contain water. At a high river stage, the entire island would be inundated.

Continuing through the left-side floodplain, the next habitat type is shrub carr found within a natural levee. The main vegetation are willows, silver maple and cotton wood trees. At a low river stage, the natural levee and vegetation are about the water line. This habitat is flooded during a high river stage.

Beyond the natural levee, but still in the floodplain, is an isolated backwater lake. Within this backwater lake is a shallow marsh and wet meadow. The marsh consists of cattails, bulrush, water plantain, arrowhead and sedges. The meadow contains cord grass, big bluestem and sedges. During periods of low water levels in the river, the marsh contains low levels of water that reach the edge of the wet meadow. During period of high water, the marsh and its vegetation are completely submerged, and the flood waters enter the wet meadow.

#### Left-Side Bluff Habitats

The wet meadow slopes upward, continuing into the bluff type habitats and exiting the floodplain habitats. The first bluff habitat type is mesic prairie. Mesic prairies contain big bluestem, Indian grass, and cord grass. Waters from the river during high river stages do not reach the mesic prairie habitat.

The prairie edges into a more dramatically sloped upland forest habitat at the top of the bluff. Upland forests contain white oak, northern red oak, black oak and hickories.

#### Right-Side Floodplain Habitats

Returning to the main channel of the Illinois river, the right side of the graphic depicts another set of hypothetical habitat types extending from the channel through a floodplain to a bluff, each with its list of vegetation types

The floodplain on the right side of the channel is a continuous backwater lake featuring three habitat types. First, there is shallow, open water with pondweeds, coontail, wild celery, watermilfoil, lotus, water primrose and duckweeds. The floodplain then dips into a deep marsh habitat type within the backwater lake. The vegetation here includes cattails, bulrush, lotus, pondweeds, coontail, watermilfoil, and duckweeds. During low river stages, the water submerges vegetation in the shallow open water habitat and much of the deep marsh habitat. Vegetation on upward sloping areas of the deep marsh reach above the low water line. Both habitat types are completely inundated during high river stages. The floodplain begins to gradually slope up into a wet meadow habitat with cord grass, big bluestem and sedges. The wet meadow habitat is above the water line at low river stages, however at high river stages the vegetation is just submerged

#### Right-Side Bluff Habitats

The wet meadow ends at a more dramatically sloped upland forest habitat. The upland forest is within the bluff zone and above the high river stage. Upland forest trees are white oak, northern red oak, black oak and hickories.

On this side of the river, the upland forest habitat contains an abrupt upward elevations change, like a plateau. On top of this plateau area is hill prairie habitat that contains little bluestem, side oats grama, post oak, blackjack oak, and eastern red cedar.