

A

NATIONAL WETLANDS INVENTORY

NOTES TO USERS

BELLEVILLE SW

1:100,000 SCALE MAP

NATIONAL WETLANDS INVENTORY
BELLEVILLE SW

Map Preparation

The wetland classifications that appear on the Belleville SW National Wetlands Inventory (NWI) map are in accordance with Cowardin et. al. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared aerial photographs taken during 4/82, 4/84, and 11/81. Initial ground truthing of the photography was completed between 5/27/85 and 5/29/85.

The user of the map is cautioned that, due to the limitation of mapping primarily through aerial photointerpretation, a small percentage of wetlands may have gone unidentified. Changes in the landscape could have occurred since the time of photography, therefore, some discrepancies between the map and current field conditions may exist. Any discrepancies that are encountered in the use of this map should be brought to the attention of Ron Erickson, Regional Wetlands Coordinator; U.S. Fish & Wildlife Service, Region 3, Federal Building, Ft. Snelling, Twin Cities, MN. 55111

Geography

The Belleville SW 1:100,000 map is located in southwest Illinois, just east of St. Louis. Bailey's Ecoregion Classification (1978) divides the area into two divisions, the Humid Warm-Summer Continental Division to the south and the Subhumid Prairie Division to the north.

The Humid Warm-Summer Continental Division is further classified as the Eastern Deciduous Forest Province, Oak-Hickory Section. Natural vegetation is dominated by tall broadleaved forest generating an even dense canopy in the summer. This dense canopy keeps growth of small trees and shrubs to a minimum. Herbaceous growth is lush early in the growing season but drops off drastically after the forests flush and shades the understory. Soils are primarily Inceptisols, Ultisols and Alfisols.

The northern portion of this map (Subhumid Prairie Division) is further classified by Bailey as the Prairie Parkland Province, Oak-Hickory-Bluestem Parkland Section. Though there is a break in ecoregions by divisions according to Bailey, the actual change is gradual and not in a crisp line as depicted on his maps. The natural prairie vegetation is tall grasses associated with subdominant plants of broadleaved herbs. Trees and shrubs are seldom seen but will be located along streams and other depressions. As there is less organic material in a prairie than a forest, transpiration is less and subsequently rainfall is lower.

The topography is gently rolling with steep bluffs along streams and rivers.

Major lakes and rivers in the Belleville map include Rend Lake Reservoir, Centraillia Reservoir, Lake Duquoin, Muddy River, Kaskaskia River and Beaucoup Creek.

Climate

To the south, where forests and woodland dominate the natural vegetation, precipitation is adequate in all months. Average annual precipitation is between 35 and 60 inches. Due to high evapotranspiration, a surplus of water occurs in spring and a slight deficit is seen in summer. This happens in spite of higher precipitation during summer months. Average annual temperatures are between 40° and 60°F.

To the north, and more indicative of true prairie, evapotranspiration and precipitation almost balance. Average annual precipitation is between 23 and 40 inches. The majority of this falls as rain during the growing season. Average annual temperatures range from 55° to 70°F.

Wetland Communities

The majority of wetland communities are found in the forms of rivers and streams and their floodplains, pothole-like depressions and as large reservoirs. The main reservoir is Rend Lake. Its backwaters contain expansive areas of dead trees, generating prime habitat for some water fowl and predatory birds.

Emergent areas are most often seen in pothole-like depressions and less often as cleared areas within river floodplains. Common seasonal and semipermanently wet emergent habitats include cattail (Typha latifolia), reed grass (Phragmites sp.), sedges (Carex sp.), bulrush (Scirpus), rush (Juncus sp.), sweetflag (Acorus sp.), arrow arum (Peltandra sp.), loosestrife (Lythrum sp.), and spikerush (Eleocharis sp.). Temporary areas supported a wide variety of grasses along with dock (Rumex sp.) smartweed (Polygonum sp.), and cut grass (Leersia sp.).

Semipermanently wet emergent basins and farm ponds often supported a variety of aquatic vegetation. The only floating vascular plants observed in the field was duckweed (Lemna sp.). Rooted vascular species include water lily (Nymphaea sp.) pondweed (Potamogeton sp.) and creeping willow primrose (Ludwigia sp.).

Much artificial drainage has taken place to utilize floodplains and potholes for crop production. Many of these areas do hold water early in the year and are utilized by waterfowl. By late spring they can be planted to crops. These areas are therefore mapped as temporary or seasonal emergent wetlands and will also carry the farmed modifier (e.g. PEMAf or PEMCf).

Most natural floodplains support seasonally and temporarily wet forests. Common species include silver maple (Acer saccharinum), red maple (A. rubrum), box elder (A. negundo), eastern cottonwood (Populus deltoides), locust (Gleditsia sp.), slippery and american elm (Ulmus sp.), ash (Fraxinus sp.), pin, white, burr, and water oak (Quercus sp.), hackberry (Celtis sp.) willow (Salix sp.) and dogwood (Cornus sp.). Typical shrubs in seasonal and semipermanent areas include buttonwood (Cephalanthus occidentalis) and willow. Temporarily wet scrub shrub communities are often tree saplings occurring within or on the edges of forests.

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
R4SB	Riverine, Intermittent, Streambed	Creek, Streambed	Unvegetated. Sand to Cobble-Gravel
R2UB	Riverine, Lower Perennial Unconsolidated Bottom	River Unconsolidated Bottom	Unvegetated. Mus to Sand, Cobble-Gravel
R2RB1	Riverine, Lower Perennial. Rocky Bottom	River Rock Bottom	Unvegetated. Rock Bottom. Bedrock
R2US	Riverine Lower Perennial. Unconsolidated shore	River Flat	Unvegetated. sand to Cobble-Gravel
L1UB	Lacustrine Limnetic Unconsolidated Bottom	Open Water Lake	Unvegetated. Sand to Mud
L2UB	Lacustrine Littoral Unconsolidated Bottom	Open Water Shallow Lake	Unvegetated Sand to Mud
L2US	Lacustrine Littoral Unconsolidated Shore	Lake Shore	Unvegetated. Sand to Cobble-Gravel
L1AB	Lacustrine Limnetic Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (<u>Lemna sp.</u>)
PUB	Palustrine Unconsolidated Bottom	Open water, Pond	Unvegetated Sand to Mud
PAB	Palustrine Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (<u>Lemna sp.</u>) Water Lily (<u>Nymphaea sp.</u>) Creeping willow primrose (<u>Ludwigia sp.</u>)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PEM	Palustrine Persistent Emergents	Marsh or Meadow	Cattail (<u>Typha latifolia</u>) Reedgrass (<u>Phragmites sp.</u>) Sedges (<u>Carex sp.</u>) Bulrush (<u>Scirpus sp.</u>) Rush (<u>Juncus sp.</u>) Sweetflag (<u>Acorus sp.</u>) Loosestrife (<u>Lythrum sp.</u>) Spikerush (<u>Eleocharis sp.</u>) Dock (<u>Rumex sp.</u>) Smartweed (<u>Polygonum sp.</u>) Cutgrass (<u>Leersia sp.</u>) Water Willow (<u>Decodon sp.</u>)
PSS	Palustrine Scrub Shrub	Shrub Wetland	Buttonbush (<u>Cephalanthus occidentalis</u>) Willow (<u>Salix sp.</u>) Dogwood (<u>Cornus sp.</u>)
PF01	Palustrine Forested Broadleaved Deciduous	Forested Wetland	Silver Maple (<u>Acer saccharinum</u>) Red Maple (<u>Acer rubrum</u>) Box elder (<u>Acer regundo</u>) Cottonwood (<u>Populus deltoides</u>) Locust (<u>Gleditsia sp.</u>) Slippery elm (<u>Ulmus rubra</u>)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PF01	Palustrine Forested Broadleaved Deciduous	Forested Wetland	American elm (<u>Ulmus americana</u>) Ash (<u>Fraxinus sp.</u>) Pin, White, Burr and Water oaks (<u>Quercus sp.</u>) Hackberry (<u>Cetis sp.</u>) Willow (<u>Salix sp.</u>)
PF05	Forested Wetland Dead Trees	Dead Trees in Standing Water	Dead Trees

BIBLIOGRAPHY

The purpose of this report is to provide general information about wetland classifications found within the area covered by the Base Map. There has been no attempt to describe all wetlands occurring in the area nor provide complete faunal and floral lists of those wetlands discussed. The references listed below refer to literature cited in the text of this report.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1977. Classification of wetlands and deepwater habitats of the United States (an operational draft). USDI. Fish and wildl. Serv. Wash., D.C. 100 p.

Bailey, R.G. 1978. Description of the ecoregions of the United States. USDA For. Serv., Intermt. Reg., Ogden, UT. 77 p.