

DRAFT

NATIONAL WETLANDS INVENTORY

NOTES TO USERS

PADUCAH NE

1:100,000 SCALE MAP

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Map Preparation

The wetland classifications that appear on the Paducah NE 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 4/23/82, 3/25/83, 11/21/83, 11/25/83, and 4/6/84. Initial ground truthing of the photography was completed between 5/25/85 and 5/27/85.

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 project area of the Paducah NE 1:100K lies in southern Illinois, with its eastern edge falling in Kentucky and Indiana. Bailey's Ecoregion Classification (1978) divides the area into two physical divisions. The northern two thirds of the map is classified as Interior, Middle Western Irregular Upland Plain with 54% - 75% of gentle slope in lowland. The southern one third of the map is classified as Eastern Highland, Interior Uplands and Basins with open hills and mountains. These hills and mountains are part of the Ozark mountain range.

This break in physical divisions marks the southernmost extent of the Illinoian stage of Pleistocene glaciation.

Cutting through the eastern edge of the map and generating the state borders for Illinois, Indiana and Kentucky are the Wabash and Ohio Rivers. Natural floodplains are expansive though most have been cleared for agriculture. Remaining wetlands consist of oxbos, meander scars and some woodland surrounding them. Other major river systems include the Saline and its tributaries, the Muddy River and Crab Orchard Creek.

Gas and oil rigs are numerous in the northern portion of the map. It was noted during field work that leaks from these rigs do occur as oil deposits were found on tree trunks, sometimes 8 feet above the ground, marking high water.

Climate

As seen by the extensive forests and woodland in the area (especially to the south) 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 occurs in summer. This happens in spite of higher precipitation during summer months. Average annual temperatures are between 40° - 60°F.

Wetland Communities

The broad floodplains of the Ohio and Wabash Rivers support some of the most productive farm lands in the U.S. Much artificial drainage has taken place to utilize these areas. Though many wet depressions and meander scars remain within the farmed land, they are often void of natural vegetation due to agricultural practices. Since these areas do hold water early in the year and are utilized by waterfowl, they are mapped as temporary or seasonal emergent wetlands (PEMA or PEMC). When they are also farmed in late spring, the farmed modifier will be used at the end of the label (eg. PEMAf).

Common emergents attempting to grow in these disturbed basins and in well established pothole type depressions throughout the work area include dock (Rumex sp.), smartweed (Polygonum sp.), and cut grass (Leersia sp.).

Common seasonal and semipermanently wet emergents include cattail (Typha latifolia), reed grass (Phragmites sp.), sedges (Carex sp.), bulrush (Scirpus sp.), rush (Juncus sp.), sweetflag (Acorus sp.), arrow arum (Peltandra sp.), loosestrife (Lythrum sp.), water willow (Decodon sp.) and spikerush (Eleocharis sp.).

Semipermanently wet basins and farm ponds often support a variety of aquatic vegetation. The only floating vascular plant 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.).

The majority of forested wetlands occur along creek and river systems. Characteristic 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.), dogwood (Cornus sp.) and river birch (Betula nigra). Cottonwood, willow and river birch are good indicators of seasonally wet areas, especially along the Ohio and Wabash Rivers. Hackberry and oaks are more prevalent along temporarily wet streams and creeks.

Seasonal and semipermanently wet scrub shrub habitats are primarily willow, buttonbush (Cephalanthus occidentalis) and dogwood (Cornus sp.). Temporarily wet communities are most often tree saplings and occur 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 Cobble-Gravel
R2UB	Riverine, Lower Perennial Unconsolidated Bottom	River	Unvegetated. Mud 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	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>) Reed grass (<u>Phragmites</u> sp.) Sedges (<u>Carex</u> sp.) Bulrush (<u>Scirpus</u> sp.) Rush (<u>Juncus</u> sp.) Sweetflag (<u>Acorus</u> sp.) Loosestrife (<u>Lythrum</u> sp.) Spikerush (<u>Eleocharis</u> sp.) Dock (<u>Rumex</u> sp.) Smartweed (<u>Polygonum</u> sp.) Cutgrass (<u>Leersia</u> sp.) Water Willow (<u>Decodon</u> sp.)
PF01	Palustrine Forested Broadleaved Deciduous	Forested Wetland	Silver Maple (<u>Acer saccharinum</u>) Red Maple (<u>Acer rubrum</u>) Box elder (<u>Acer negundo</u>) Cottonwood (<u>Populus deltoides</u>) Locust (<u>Gleditsia</u> sp.) Slippery elm (<u>Ulmus rubra</u>) American elm (<u>Ulmus americana</u>) Ash (<u>Fraxinus</u> sp.) Pin, White, Burr and Water oaks (<u>Quercus</u> sp.) Hackberry (<u>Cetis</u> sp.) Willow (<u>Salix</u> sp.) River Birch (<u>Betula nigra</u>)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PSS	Palustrine Scrub Shrub	Shrub Wetland	Buttonbush (<u>Cephalanthus</u> <u>occidentalis</u>) Willow (<u>Salix</u> <u>sp.</u>) Dogwood (<u>Cornus</u> <u>sp.</u>)

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 as well as sources of additional information.

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.

NWI#26