

NATIONAL WETLANDS INVENTORY

MAP REPORT

NORTHERN ALABAMA/GEORGIA

1:100,000 Scale Maps

Gadsden SE, Rome SW

DRAFT

I. INTRODUCTION

The United States Fish and Wildlife Service's National Wetlands Inventory (NWI) is producing maps showing the location and classification of wetlands and deepwater habitats of the United States. The Classification of Wetlands and Deepwater Habitats of the United States by Cowardin et al. is the classification system used to define and classify wetlands. Photo interpretation conventions, hydric soils lists, and wetland plant lists are also available to enhance the use and application of the classification system.

The purpose of the report to users is threefold: (1) to provide localized information regarding the production of NWI maps, including field reconnaissance with a discussion of imagery and interpretation; (2) to provide a descriptive crosswalk from wetland codes on the map to common names and representative plant species; and (3) to explain local geography, climate, and wetland communities.

II. FIELD RECONNAISSANCE

Field reconnaissance of the work area is an integral part of the accurate interpretation of aerial photography. Photographic signatures are compared to the wetland's appearance in the field by observing vegetation, soil, and topography. This information is weighted for seasonality and conditions existing at the time of photography and at ground truthing.

Field Trip Dates

May 17 - 21, 1992

Field Personnel

Norman Mangrum - U.S. Fish and Wildlife Service
National Quality Control
St. Petersburg, Florida
(May 17-21, 1992)

Charlie Storrs - U.S. Fish and Wildlife Service
Region IV - Atlanta, Georgia
(May 18, 1992)

Deborah Manz - Geonex North American Operations, Inc.
St. Petersburg, Florida
(May 17-21, 1992)

Michael Woods - Geonex North American Operations, Inc.
St. Petersburg, Florida
(May 17-21, 1992)

Phillip Still - Geonex North American Operations, Inc.
St. Petersburg, Florida
(May 17-21, 1992)

Aerial Photography

Type: Color Infrared Transparencies
Scale: 1:58,000 NHAP

Dates: Gadsden SE February 21, 1980
February 24, 1981
March 9, 1981
March 14, 1981
March 17, 1981
February 21, 1982

Rome SW February 3, 1981
February 20, 1981
March 9, 1981
March 14, 1981
March 11, 1982
March 18, 1982
March 23, 1982

Collateral Data

United States Geological Survey 7'5" Topographic Quadrangles

United States Geological Survey 1:250,000 Topographic Maps

Bailey, Robert G., (1980). Description of the Ecoregions of the United States, United States Department of Agriculture.

Hydric Soils Lists of the States of Georgia and Alabama

Wetland Plant List of the States of Georgia and Alabama

Soil Conservation Service Soil Surveys

III. PHYSICAL DESCRIPTION OF PROJECT AREA

Project Area

The Northern Alabama/Georgia project consists of two adjacent 100,000 maps, Gadsden SE and Rome SW, which are found in northeastern Alabama and northwestern Georgia. (Appendix A, Locator Map)

Elevations range from 400 to 1,500 feet above sea level. Bodies of water include Gunterville Lake, Weiss Lake, The Cuosa River, the Tennessee River and the Little River.

Climate

The climate of the work areas is consistent throughout the area. Moderately cold winters and hot humid summers are brought to the region by a strong annual temperature cycle. The average annual temperature ranges from 40°F to 70°F. Precipitation falls predominantly in the summer months when minor water deficits occur due to high evapotranspiration. A surplus of water develops in spring. The average annual precipitation ranges in the region from 40 to 60 inches. Winter frost is common and while there is snow occasionally, it normally melts immediately.

Geography

The work areas consist of rolling plains to rolling hills in Rome SW which grade into higher relief hills and mountains in Gadsden SE.

Vegetation

The vegetation of the Northern Alabama/Georgia includes the Eastern Deciduous Forest sometimes called Temperate Deciduous Forest.

This deciduous Forest is dominated by tall broadleaf trees that provide a dense canopy in summer, but completely lose their leaves in winter. The dense canopy keeps the understory from developing fully, which achieves greatest growth in spring before the canopy leafs out. The deciduous forest common wetland trees include oaks, birch, maple, tulip, gums, elm, willow, alder and ash.

Soils

The project area contains both Alfisols in the higher latitudes and Ultisols further southeast. In the deciduous forest, the ground is often covered by leaves and humus.

IV. DESCRIPTION OF WETLAND HABITATS IN PROJECT AREA

A comprehensive wetland plant list and a table of wetland classification codes and water regimes are included in this section for reference.

Lacustrine

Water bodies greater than 20 acres are included in this system with both limnetic and littoral subsystems represented. Major bodies of water include Gunterville Lake and Weiss Lake.

The nonvegetated water bodies are labeled limnetic or littoral unconsolidated bottom (L1UB or L2UB respectively), depending on the water depth. The impounded modifier (h) will be utilized on bodies of water impounded by locks or any artificial means. The (b) beaver modifier will be used for beaver impoundments.

Riverine

Three riverine subsystems are found within the work area; Lower Perennial (R2), Upper Perennial (R3), and Intermittent (R4). Major drainages within the study area are the Tennessee and Cousa and Rivers.

Palustrine

Palustrine areas include; unconsolidated bottom, unconsolidated shore, aquatic bed, emergent, scrub-shrub and forested. Naturally occurring ponds are identified as unconsolidated bottom permanently or semipermanently flooded (PUBH or PUBF). Excavated or beaver impounded ponds and artificially impounded ponds are labeled with their respective modifier (PUBHx, PUBHb, or PUBHh).

Aquatic bed vegetation was represented by Myriophyllum laxum, Nymphaea odorata and Lemna valdiviana (PAB3H, PAB4H). Emergent growth ranged from temporarily to semipermanently flooded (PEM1A, PEM1C, and PEM1F). The species included Juncus effusus, Panicum hemitomon, Typha latifolia and Carex sp.

The temporarily flooded (PSS1A) scrub-shrub wetlands observed supported an assortment of hardwoods. Sambucus canadensis, Alnus serrulata and Acer rubrum were among species observed. The seasonal (PSS1C) and semipermanently (PSS1F) flooded scrub-shrub wetlands were generally dominated by Salix nigra and Cephalanthus occidentalis.

Forested areas temporarily flooded (PF01A) were represented by Quercus nigra, Liriodendron tulipifera, Liquidambar styraciflua, Platanus occidentalis and Fraxinus pennsylvanica. Seasonally flooded forest contained Salix nigra, Betula nigra, Acer rubrum and Quercus nigra. Semi-permanently flooded areas were often impounded by beaver activity (PFO1Fb). These wetlands were dominated by Nyssa sylvatica and Nyssa aquatica. There were a few temporarily flooded and saturated wetlands containing needle-leaved evergreens (PFO4A/PFO4B) represented by Pinus taeda.

OBSERVED WETLAND VEGETATION

AQUATIC BED

Lemna valdiviana
Myriophyllum laxum
Nymphaea odorata

EMERGENT

Carex sp.
Juncus effusus
Juncus roemerianus
Panicum hemitomon
Polygonum punctatum
Sagittaria lancifolia
Scirpus cyperinus
Spartina bakeri
Typha latifolia

FORESTED

Acer rubrum
Betula nigra
Celtis occidentalis
Fraxinus pennsylvanica
Juglans nigra
Liquidambar styraciflua
Liriodendron tulipifera
Nyssa aquatica
Nyssa sylvatica
Pinus taeda
Platanus occidentalis
Populus deltoides
Quercus bicolor
Quercus nigra
Quercus phellos
Ulmus rubra

SCRUB-SHRUB

Acer negundo
Acer rubrum
Alnus serrulata
Cephalanthus occidentalis
Liqustrum sinense
Ostrya virginiana
Salix nigra
Sambucus canadensis
Toxicodendron radicans
Vitis sp.

WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table 1 - Cowardin Classification Codes and Descriptions

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
R2UB (H)	Riverine, lower perennial, unconsolidated bottom	Rivers	Unconsolidated bottom
R3UB (H)	Riverine, upper perennial, unconsolidated bottom	Rivers	Unconsolidated bottom
R4SB (C,F)	Riverine, intermittent stream bed	Streams, creeks	Streams, creeks
L1UB (H)	Lacustrine, limnetic, unconsolidated bottom	Lakes	Unconsolidated bottom
L2UB (H)	Lacustrine, littoral, unconsolidated bottom	Lakes	Unconsolidated bottom
PUB (H)	Palustrine, unconsolidated bottom	Ponds, borrow pits or impoundments	Unconsolidated bottom
PAB (F,H)	Palustrine, aquatic bed	Ponds or deep marshes	<u>Myriophyllum laxum</u> <u>Nymphaea odorata</u>
PEM (A,B,C,F)	Palustrine, emergent	Meadows, marshes, depressions, or drainage areas	<u>Juncus effusus</u> <u>Sagittaria lancifolia</u> <u>Typha latifolia</u>
PSS (A,B,C,F)	Palustrine, scrub-shrub	Willow thicket, river banks	<u>Salix nigra</u> <u>Cephalanthus occidentalis</u>
PFO (A,B,C,F)	Palustrine, forested	Floodplains, depressions, or meadow rims	<u>Liquidambar styraciflua</u> <u>Taxodium distichum</u> <u>Quercus nigra</u> <u>Nyssa sylvatica</u>

V. WATER REGIME DESCRIPTION

Non-Tidal

- (A) Temporarily Flooded -- Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Plants that grow both in uplands and wetlands are characteristic of this water regime.
- (B) Saturated -- The substance is saturated to surface for extended periods during the growing season, but surface water is seldom present.
- (C) Seasonally Flooded -- Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is extremely variable, extending from saturated to a water table well below the ground surface.
- (F) Semipermanently Flooded -- Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land's surface.
- (G) Intermittently Exposed -- Surface water is present throughout the year except in years of extreme drought.
- (H) Permanently Flooded -- Water covers land surface throughout the year in all years.
- (K) Artificially Flooded -- The amount and duration of flooding is controlled by means of pumps or siphons in combination with dikes or dams.

VI. MAP PREPARATION

The wetland classification that appears on the National Wetlands Inventory (NWI) Base Map is in accordance with Cowardin et al. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography. The majority of the photography was taken during the winters of 1980-1982.

Field checks of areas found within the Northern Alabama/Georgia project were made prior to the actual delineation of wetlands. Field check sites were selected to clarify varying signatures found on the photography. These photographic signatures were then identified in the field using vegetation types and soil types, as well as additional input from field personnel.

Collateral data included USGS topographic maps, SCS soil surveys, climate, vegetation, and ecoregional information.

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. Since the photography was taken during a particular time and season, there may be discrepancies between the map and current field conditions. Changes in landscape which occurred after the photography was taken would result in such discrepancies.

Aerial photointerpretation and drafting were completed by Geonex St. Petersburg Operations.

VII. MAP ACQUISITION

To discuss any questions concerning these maps or to place a map order, please contact:

John Hefner
Regional Wetland Coordinator
U.S. Fish and Wildlife Service - Region IV
R.B. Russell Federal Building
75 Spring Street S.W.
Atlanta, GA 30303

To order maps only, contact:

National Cartographic Information Center
U.S. Geological Survey
National Center
Reston, VA 22092

Maps are identified by the name of the corresponding USGS 1:24,000 scale topographic quadrangle name. Topographic map indices are available from the U.S. Geological Survey.

APPENDIX A
LOCATOR MAP
1:250,000 SCALE

