

FIELD SUMMARY REPORT
for
BALTIMORE NW and SW

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The two work areas (Baltimore NW and SW) are located in the north western and north central portions of Maryland, the southern portion of Pennsylvania, parts of eastern West Virginia, and portions of Virginia. Major drainages include the Potomac and the Shenandoah rivers, Monacacy creek, South Branch, and Little Pipe Creek.

Bailey (1978) considers the study area in the Appalachian Oak Forest Section of the Eastern Deciduous Forest Province, transitional to the Southeastern Mixed Forest Province in the south. The area is characterized by medium to tall forests of predominately deciduous trees. Common associates include oak, hickory, maple, and beech. The climate is continental temperate to uniform in the south.

The work area is completely covered by 1:58,000 color-infrared (CIR) photography of four dates (3-27-80, 4-2-81, 4-2-82 and 4-14-82). The April 1981 and 1982 photography are of comparable quality. All have good to excellent contrast, resolution, and clarity. The tone is generally even across the photos. The 3-27-80 photography is fair. The blue emulsion is uneven across the photos, being dark to very dark at the edge fading to nearly bleached out conditions near the center. Resolution is adequate but pales in comparison to the April imagery. In addition, water levels are higher in this May photography, possibly leading to some difficulty in consistently delineating water regimes. This is not considered a serious problem and can be remedied by careful evaluation of the photography and the use of collateral data such as soil surveys and USGS topographic maps.

Classification follows the Mapping Conventions of December 1981 except for the persistent emergent subclass. To maintain consistency with wetland maps for the rest of the region the "1" subclass is only used to refer to *Phragmites australis*, while the old "5" subclass for narrow-leaved persistent emergents is still being used. No *Phragmites* was found during this field trip.

The objective of this trip was to relate photographic characteristics, i.e. tone, texture, pattern, color, etc. to actual wetland conditions, including class, subclass, and water regime. In addition, wetland changes attributable to man's activities were noted. In many regions, especially those near the Baltimore and Washington D.C. metropolitan areas, or near accesses (especially Interstate highways) to these areas, many wetlands are

beings lost or severely altered to accomodate urbanization.

IN-FIELD and PHOTO OBSERVATIONS

WOODBINE

SITE 1. PEM5B--This site is dominated by *Juncus effusus* with a good mix of *Carex* spp., *Eupatorium* sp., *Solidago* sp., and *Achillea* sp. The soil is Hatboro silt loam on a gentle slope, justifying the "B" water regime. The species list is incomplete due to problems with access.

SITE 2. PFD1A--*Acer nesundo* is the dominant overstory species with a strong *Fraxinus americana* component. The understory consists of a variety of emergents and shrubs including *Oxalis* sp., *Ambrosia* sp., and *Robinia pseudoacacia*.

PFD1/EM5E-- *Acer rubrum* and *Salix nigra* are common in the overstory with a mix of *Juncus effusus*, *Eleocharis* sp., and several species of *Carex*. The soil is Hatboro silt loam.

SITE 3. PFD1E--*Fraxinus americana* is the dominant tree with *Salix nigra* common in the overstory. A good indicator for the "E" water regime is the presence of *Symplocarpus foetidus* in the understory along with *Impatiens capensis* and *Cornus amomum* being quite common.

PFD1A--South of the railroad tracks is dryer with *Acer nesundo*, *Lindera benzoin*, and *Glechoma hederacea* as common.

SITE 4. PFD1C--*Acer rubrum* is dominant with *Viburnum dentatum*, *Glechoma hederacea*, *Parthenocissus quinquefolia*, *Ilex* sp., and *Impatiens capensis* as common understory vegetation.

SITE 9. PSS1A--*Alnus rugosa*, saplings *Acer saccharinum*, and saplings *Acer rubrum* are common on this site. The soil is Codorus and Hatboro silt loam.

WINFIELD

SITE 5. PEM5E--This site is representative of many of the seasonal saturated emergent wetlands field checked. The dominant *Juncus effusus* is characteristically taller than that found in dryer sites. Commonly found in small pure stands is *Leersia oryzoides*. Also present are *Polygonum arifolium*, *Solidago* spp., and *Acorus calamus*. There was some hayings being done in the dry portions of the field. The soil is Codorus silt loam.

SITE 6. PEM5A--This site is representative of many of the temporarily flooded emergent areas. The dominant *Juncus effusus* and another species of *Juncus* are not as tall as in Site 5. Also common are *Eriogonum annuus*, and *Eupatorium* spp. The soil is Hatboro silt loam.

SITE 7. PEM5A--This marginal emergent wetland consists of a good mix of *Solidago* spp., *Bromus* sp., *Thalictrum polygamum*, and other emergents. The soil is mostly Hatboro silt loam.

SITE 8. PFD1E--*Acer rubrum* and *Quercus palustris* are dominant in the overstory. The understory consists mostly of *Symplocarpus foetidus*, *Impatiens capensis*, and *Lindera benzoin*. The soil is Codorus and Hatboro silt loam.

SANDY SPRING

SITE 10. PEM5/UBFh--*Juncus effusus*, *Typha latifolia*, and *Carex* spp. are common in this impounded lacustrine wetlands margin (classified as palustrine due to the presence of persistent emergents). The emergents are mixed with unconsolidated bottom due to the fluctuation in water level characteristic of larger reservoirs.

L2UBFh--This area was covered with water during the field trip. It is shallow enough to be exposed during low water, but deep enough to inhibit the development of wetland vegetation.

SENECA

SITE 11. PSS1/AB5Zh--This impounded area is a wildlife management area. *Hibiscus militaris*, *Lemna* sp. and *Cephalanthus occidentalis* are present. Nearby, in the abandoned Ohio and Chesapeake Canal, *Justica americana* is growing along the edge. This nonpersistent emergent is not visible on the photography; therefore it was not delineated.

SITE 12. PFD1A--*Fraxinus americana* is dominant with an understory of *Lindera benzoin*, *Lonicera Japonica*, *Vitis* spp., and *Campsis radicans*.

PFD1A--On an island in the Potomac river are *Acer saccharinum*, *Betula nigra* and *Platanus occidentalis* with an understory of *Lindera benzoin* and unidentified grasses. *Justica americana* is growing in the water but is not visible on the photography.

STERLING

SITE 13. PFD1A--*Fraxinus* sp., and *Acer nesundo* dominate the overstory with *Glechoma hederacea*, *Lindera benzoin*, and *Geum canadense* common in the understory.

SITE 14. PSS1/EMSE to F--The upper edge of this wildlife management area impoundment ranges from a seasonal-saturated water regime to semipermanently flooded. The cover consists of *Salix nigra*, *Peltandra virginica*, and *Rumex verticillatus*.

L2EM /DWFh--*Peltandra*, *Rumex*, and *Lemna* sp., are found in the deeper parts of this impoundment.

SITE 15. PFD5/EM2F--Dead trees and dying *Fraxinus* sp. make up the

overstory with *Saururus cernuus* common in the understory.

POOLESVILLE

SITE 16. PEM5E--*Juncus effusus*, *Impatiens capensis*, *Carex* spp., and *Leersia oryzoides* are common in this seasonal-saturated site. PSS1/EM5A--*Rosa palustris*, saplings *Acer rubrum*, *Impatiens capensis*, and a mixture of other shrubs and emergents occupy the higher areas to the east.

SITE 28. PFD1A--*Quercus palustris*, *Fraxinus americana*, *Lonicera Japonica* and a variety of trees, shrubs and emergents are growing on Melvin and Captina silt loam. Depressions and drainage ways are PFD1E.

SITE 29. PFD1A, and PFD1C--Both areas have a good mix of *Acer rubrum*, *Quercus palustris*, and other trees and shrubs. The seasonally flooded site has a less dense understory. The site is probably underlined by a fraspine, common to the usually well drained Readinton soil, that will pond water.

GERMANTOWN

SITE 17. PEM5C--This site, consisting of *Eleocharis* sp. and other grasses along with *Impatiens capensis* and other emergents has been cleared since the photo had been taken, possibly to accommodate a highway that is under construction in the area.

GAITHERSBURG

SITE 18. PEM5C--An unidentified grass (possibly *Poa palustris*), *Asrostis alba*, and *Phalaris arundinacea* are common.

SITE 19. PEM5E--*Phalaris arundinacea* is dominant with a mixture of less common emergents.

PEM5C--*Poa palustris* is dominant in this slightly dryer site further away from the stream.

LIBERTYTOWN

SITE 20. PEM5E--A well mixed stand of *Leersia oryzoides*, *Juncus effusus*, *Carex* spp. and other emergents on Wehadkee silt loam.

BLUE RIDGE SUMMIT

SITE 21. PEM5E--*Carex* spp. and *Leersia oryzoides* are codominant with *Onoclea sensibilis* and *Scirpus cyperinus* as common.

PSS1/EM5C--Common to this site are *Lonicera Japonica*, *Cornus amomum*, and *Onoclea sensibilis* with *Solidago* spp. being dominant. There is evidence of 6 to 12 inches of flooding.

SITE 22. PFD1E--*Acer rubrum* and *Quercus palustris* are codominant

in the overstory with *Parthenocissus quinquefolia*, *Viburnum dentatum*, and *Impatiens capensis* common in the understory.

SITE 23. PFO1A--*Acer rubrum* is dominant with an understory of *Lindera benzoin*, *Toxicodendron radicans*, *Berberis thunbergii*, and *Impatiens capensis*.

FAIRFIELD

SITE 24. PFO1A--*Ulmus americana*, and *U. rubra* make up the overstory with an understory of *Lindera benzoin*, *Agrimonia striata* and *Carex* sp. in the understory. There is also a great variety of other shrubs and emergents growing on Wehadkee silt loam.

SITE 25. PFO1E--*Carpinus caroliniana* (just over 3 meters) and *Quercus palustris* dominate the overstory with an understory of *Symplocarpus foetidus*, *Viola* sp., and *Carex intumescens*.

ARENDSVILLE

SITE 26. PFO4/1A--*Tsusa canadensis*, *Acer rubrum*, and *Impatiens capensis* could be identified from the road. Access was prohibited. PFO4A--The same species are present but *Tsusa canadensis* occupies more than 70% of the aerial coverage.

CHARLESTOWN

SITE 27. PFO1A--*Acer saccharinum*, *Platanus occidentalis*, and an unidentified grass (possibly *Leersia oryzoides*) are present on this island in the Shenandoah river.

PARTIAL SPECIES LIST

WOODBINE

SITE 1. PEM5B--*Juncus effusus*, *Carex* spp., *Eupatorium* sp.,
Solidago sp., *Achillea* sp.

SITE 2. PFD1A--*Acer nesundo*, *Fraxinus americana*, *Oxalis* sp.,
Ambrosia sp. *Robinia pseudoacacia*.
PFD1/EM5E-- *Acer rubrum*, *Salix nigra*, *Juncus effusus*, *Eleocharis*
sp. *Carex* spp., *Ludwisia palustris*.

SITE 3. PFD1E--*Fraxinus americana*, *Salix nigra*, *Symplocarpus*
foetidus, *Impatiens capensis* *Cornus amomum*, *Glyceria canadensis*
PFD1A--*Acer nesundo*, *Lindera benzoin*, *Glechoma hederacea*, *Rosa*
multiflora. *Arisaema* sp.

SITE 4. PFD1C--*Acer rubrum*, *Viburnum dentatum*, *Glechoma*
hederacea, *Parthenocissus quinquefolia*, *Ilex* sp., *Impatiens*
capensis

SITE 9. PSS1A--*Alus rososa*, *Acer saccharinum*, *Acer rubrum*,
Impatiens capensis, *Polygonum arifolium*.

WINFIELD

SITE 5. PEM5E--*Juncus effusus*, *Leersia oryzoides*, *Polygonum*
arifolium, *Solidago* spp., *Acorus calamus*

SITE 6. PEM5A--*Juncus effusus*, *Juncus* sp., *Erigeron annuus*,
Eupatorium spp. *Eupatorium perfoliatum*.

SITE 7. PEM5A--*Solidago* spp., *Bromus* sp., *Thalictrum polyanum*,
Rubus sp., *Asclepias incarnata*.

SITE 8. PFD1E--*Acer rubrum*, *Quercus palustris* *Symplocarpus*
foetidus, *Impatiens capensis*, *Lindera benzoin*, *Viburnum*
dentatum.

SANDY SPRING

SITE 10. PEM5/UBFh--*Juncus effusus*, *Typha latifolia*, *Carex*
spp.
L2UBFh--Unvesetated.

SENECA

SITE 11. PSS1/AB5Zh--*Hybiscus militaris*, *Lemna* sp.,
Cephalanthus occidentalis, *Justica americana*

SITE 12. PFD1A--*Fraxinus americana*, *Lindera benzoin*, *Lonicera*
Japonica, *Vitis* spp., *Campsis radicans*.
PFD1A--*Acer saccharinum*, *Betula nigra*, *Platanus*
occidentalis, *Lindera benzoin*, *Justica americana*

STERLING

SITE 13. PFO1A--*Fraxinus* sp., *Acer nesundo*, *Glechoma hederacea*, *Lindera benzoin*, *Geum canadense* .

SITE 14. PSS1/EM5E to F--*Salix nigra*, *Peltandra virginica*, *Rumex verticillatus*.
LZEM /OWFh--*Peltandra virginica*, *Rumex verticillatus*, *Lemna* sp.

SITE 15. PFO5/EM2F--*Fraxinus* sp. *Saururus cernuus*

POOLESVILLE

SITE 16. PEM5E--*Juncus effusus*, *Impatiens capensis*, *Carex* spp.,
Leersia oryzoides, *Typha latifolia*.
PSS1/EM5A--*Rosa palustris*, *Acer rubrum*, *Impatiens capensis*,
Rubus sp., *Juncus* spp.

SITE 28. PFO1A--*Quercus palustris*, *Fraxinus americana*,
Lonicera japonica, *Ulmus americana*, *Lindera benzoin*.

SITE 29. PFO1A, PFO1C--*Acer rubrum*, *Quercus palustris*, *Ulmus americana*, *Fraxinus americana*

GERMANTOWN

SITE 17. PEM5C--*Eleocharis* sp. *Impatiens capensis*, *Eupatorium* sp., *Veronica scutellata*

GAITHERSBURG

SITE 18. PEM5C--Unidentified grass (possibly *Poa palustris*),
Asrostis alba, *Phalaris arundinacea*

SITE 19. PEM5E--*Phalaris arundinacea*
PEM5C--*Poa palustris*

LIBERTYTOWN

SITE 20. PEM5E--*Leersia oryzoides*, *Juncus effusus*, *Carex* spp.,
Panicum sp., *Phalaris arundinacea*

BLUE RIDGE SUMMIT

SITE 21. PEM5E--*Carex* spp. , *Leersia oryzoides* *Onoclea sensibilis* *Scirpus cyperinus*
PSS1/EM5C--*Lonicera japonica*, *Cornus amomum* , *Onoclea sensibilis*
Solidago spp.

SITE 22. PFO1E--*Acer rubrum* , *Quercus palustris*
Parthenocissus quinquefolia, *Viburnum dentatum*, *Impatiens capensis*

SITE 23. PFO1A--*Acer rubrum*, *Lindera benzoin*, *Toxicodendron*

radicans, Berberis thunbergii, Impatiens capensis.

FAIRFIELD

SITE 24. PF01A--Ulmus americana, U. rubra, Lindera benzoin, Agrimonia striata Carex sp., Cercis canadensis.

SITE 25. PF01E--Carpinus caroliniana, Quercus palustris, Symplocarpus foetidus, Viola sp., Carex intumescens.

ARENDSVILLE

SITE 26. PF04/1A--Tsuga canadensis, Acer rubrum, Impatiens capensis
PF04A--Tsuga canadensis

CHARLESTOWN

SITE 27. PF01A--Acer saccharinum, Platanus occidentalis, an unidentified grass (possibly Leersia oryzoides)