

FIELD REPORT FOR PROVIDENCE N.W. AND PROVIDENCE S.W.
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Many of the photo interpretation problems for Providence N.W. and S.W. are similar to those dealt with in previous field reports (Boston N.E., Boston S.E. and Providence N.E., Boston N.W. and S.W.).

(1) We had difficulties delineating areas affected by spring flooding. Some areas were so wet that we could not distinguish between emergent, and or, scrub shrubs. Site 2 was initially delineated as a PSS/EM wetland. In the field we classified the area as a PSS1F wetland. SS and OW areas are visible on the photo and the signature is very dark. Site 6 was initially delineated PSS. In the field we classified the area as a PEMSE wetland. The signature on the photo is very dark and a few shrubs are visible. Accurate classification of these areas is impossible without either field checks or the use of collateral data (i.e., map down photos).

(2) Aquatic beds are not always visible on early spring (4-1-77 and 4-20-74) photographs. In areas where they can be seen they may not have attained maximum growth. Site 1 was initially delineated as PEM/OW but in the field we called it PAB/OW. Site 28 was initially delineated as L20W/AB because only some vegetation was noticeable. In the field we called it L2AB4H based on the maximum vegetational development at the height of the growing season.

(3) Transition zones between salt marshes and fresh marshes are difficult to classify unless a ground check is made of the vegetation and water. Site 20B was initially labeled as an E2EM wetland. Our field check established it as a PEM5E wetland. The water tasted fresh and the presence of Scirpus cyperinus indicated that this area should be classified as Palustrine.

(4) Some upland areas may give a dark photographic signature. In many cases golf courses look wet because they are watered. Upland areas made muddy by pastured livestock may also look wet.

In addition to the "old" photointerpretation questions discussed above, we dealt with several new problem areas on this field trip that may be typical to the Providence N.W., S.W. areas. We had difficulty distinguishing between deciduous and evergreen trees. Several areas were labeled as Cedar Swamps on the USGS maps, but ground checks proved them to be F01 or F01/4 wetlands.

The Cedar Swamp at Site 12 was correctly delineated as a PF01 wetland. Dead cedar in the surrounding upland indicated that the wetland cedar had probably been cut and removed from the area. Site 17, Bell Cedar Swamp, was initially delineated PF04. Our ground check established that red maple and cedar were co-dominant (PF01/4). Sites 24, Cedar Swamp, and 26, Pocasset Cedar Swamp, were initially delineated PF01/4. Field checks confirmed Pinus strobus and Acer rubrum were the dominant species at the first site (PF01/4). But Acer rubrum was dominant at the latter Site (PF01F) although white pine and Atlantic cedar were present.

Thus, deciduous trees in wet areas may look unusually dark and the signature of mixed 01/04 areas may be confusing. We should examine our check sites carefully and compare them with similar troublesome signatures. In addition, map down photos should be consulted when these areas occur in Massachusetts or Rhode Island. Unfortunately, we have no such collateral data for Connecticut.

Comparison of Photo-intrepretive Results to In-field Classifications

Field Site #	USGS Quad/ Photo Name	Initial Delineation	In-field Classification	Photo Review Comments
1	Attleboro	PEM/OW	PAB/OW	AB not visible on photo (4-1-77), unclear photo.
2	Attleboro	PSS/EM	PSS1F	Very wet dark signature on photo, SS and OW visible, Cephalanthus compact form.
3	Providence	PF01	PRO1E	Signature dark (texture looks finer than 04), 4-30-75 photography.
4	Georgiaville	PSS	PF01E	Looks like FO on photo.
5A	Georgiaville	PSS/EM	PEM3F	Glare and flooding.
5B	Georgiaville	PSS/EM	PSS/EM5F	
6	Georgiaville	PSS	PEM5E	Dark signature, some shrubs visible (looks like SS or SS/EM on photo).
7A	Georgiaville	PEM	PEM5E	Light typical EM signature.
7B	Georgiaville	PEM	PEM5E	Light typical EM signature.
8	Clayville	PF01/SS1	PF01E	Looks like FO1 on photo.
9A	Putnam	PSS	PSS1/EM5F	SS visible, very wet.
9B	Putnam	POW	PAB4/OWH	AB not visible on photo (4-20-74).
107	Putnam	L1OW	PSS1/OW	Flooding, SS not visible on photo. Vegetated on USGS map.
11	Plainfield	PSS	PSS1/EM5	Only one area looks like PSS/EM.
12	Oneco	PF01	PF01E	Deciduous (4-20-74) photo), round crowns visible.
13	Voluntown	PSS1/EM	PSS1/4/EM5	Typical SS/EM signature, SS very dark.
14	Jewett City	PSS1/EM	PEM5E	Very flooded on photo; visible vegetation looks light, textured, height noticeable (Typha and dead trees).
15	Jewett City	PF01	PF01E	
16	Old Mystic	PF04	PF01/4	
17	Ashaway	PF04	PF01/4	
18	Carolina	PF01/4	PF01/4	
19	Hope Valley	PF04/SS1	PSS1E	Not enough trees.
20A	Kingston	E2EM	PEM5E	
20B	Kingston	E2EM	PEM5E	Field check necessary for accurate classification.
21	Wickford	PSS3	PF04/1E	
22	Wickford	PSS3	PSS3/1B	
23	Bristol	not delineated	PF01/SS1E	
24	Tiverton	PF01/4	PF01/4E	
25	Sakonnet Point	not delineated	PF01/4E	
26	Fall River	PF01/4	PF01F	Very wet field check or collateral data (map down photos necessary).
27	Fall River East	L1OW	L2FLG	
28	Taunton	L2OW/AB	L2AB4H	Some vegetation noticeable (4-1-77).
29A	Somerset	PSS1	PSS1/EMSF	Shrubs noticeable, also some lighter areas. EM on USGS map.
29B	Somerset	PF01	PSS1/EM5F	Break out SS/EM area and include undelineated area shown on USGS map as EM.

PROVIDENCE N.W. AND PROVIDENCE S.S.--PARTIAL LIST OF COMMUNITIES

Site 1 PAB/OW (4H)

Brasenia dominant, associated with Potamogeton spp., Juncus sp., Chamaedaphne (edge), Leersia (edge), Sparganium, Juncus militaris, Spirea tomentosa, Nuphar, Nymphaea, Typha latifolia (edge).

Site 2 PSS1F

Cephalanthus dominant, associated with Dryopteris, Acer rubrum, Chamaedaphne (common), Sparganium.

Site 3 PFO1E

Acer rubrum dominant, associated with Clethra alnifolia (dominant shrub), Vaccinium corymbosum, Carex cf. stricta, Bidens sp., Lemnaceae.

Site 4 PFO1E

Acer rubrum dominant, associated with Bidens, aspen, sensitive fern, cinnamon fern, Ilex verticillata, Fraxinus, Carex sp.

Site 5A PEM3F

Eleocharis dominant.

Site 5B PSS/SS (1/5F)

Cephalanthus and Polygonum and Typha latifolia dominant, associated with Bidens, Leersia, Sparganium, Pontederia and Juncus effusus.

Site 6 PEM5E

Typha latifolia and Calamagrostis sp. dominant, associated with Dulichium arundinacea, Sparganium sp., Scirpus cyperinus, Nymphaea (edge), Cephalanthus (edge), Carex stricta, Panicum.

Site 7A PEM5E

Calamagrostis sp. dominant, associated with Spirea tomentosa, Nymphaea, Hypericum, Solidago, Aster, Sphagnum.

Site 7B PEM5E

Typha latifolia dominant, associated with Scirpus cyperinus (abundant), Leersia cryzoides, Aster sp.

Site 8 PFO1E

Acer rubrum dominant, associated with Cornus amomum and Viburnum dentatum (co-dominant shrubs), Onoclea sensibilis, Sphagnum, Vitis sp., and Clethra alnifolia.

Site 9A PSS/EM(1/5F)

Typha latifolia, Carex stricta, Acer rubrum and Alnus sp. (shrubs) co-dominant, associated with Aster sp., Nymphaea sp., Bochemeria cylindrica, Sparganium sp. (common).

Site 9B PAB/OW (4H)

Floating bed aquatics predominate in open water area.

Site 10 PSS/OW (1)

Cephalanthus (unconfirmed) dominant, edge species include Sparganium (dominant), Polygonum sagittatum, Impatiens, Phalaris, Bidens, Scirpus cyperinus, Cyperus, Leersia.

Site 11 PSS/EM (1/5)

Chamaedaphne and Carex stricta dominant, associated with Spirea tomentosa, Glyceria, Carex sp., Sparganium, Pontederia, Neuphar, Myriophyllum, Nymphaea.

Site 12 PFO1E

Acer rubrum dominant, associated with Yellow birch, Vaccinium corymbosum (co-dominant shrub), Sphagnum, Osmunda cinnamomea, Clethra alnifolia (co-dominant shrub), Viburnum dentatum.

Site 13 PSS/EM (1/4/5)

Atlantic white cedar and Acer rubrum co-dominant shrubs, Cladium mariscoides, dominant emergent, associated with Calamagrostis sp., Juncus effusus, Aster sp., Dulichium, Chamaedaphne, Scirpus cyperinus.

Site 14 PEM5E

Typha latifolia dominant-monospecific.

Site 15 PFO1E

Acer rubrum dominant tree, associated with Clethra alnifolia, Ilex verticillatus (co-dominant shrubs), Vaccinium corymbosum, Impatiens, Sphagnum, Osmunda cinnomea, Dryopteris sp.

Site 16 PFO1/4

Well mixed: Pinus strobus, American elm, Hemlock, Acer rubrum, Ilex verticillatus, Clethra alnifolia, Viburnum dentatum, Alnus sp., Yellow Birch, Aster sp., Rosa sp.

Site 17 PFO1/4

Acer rubrum and Atlantic white cedar dominant, associated with, Clethra alnifolia, Sphagnum, Smilax, Dryopteris, Ilex verticillatus, and swamp azalea.

Site 18 PFO1/4E

Acer rubrum and white pine dominant, associated with Ilex verticillatus, Clethra alnifolia, Sphagnum, Blueberry and other mosses.

Site 19 PSS/E

Vaccinium corymbosum dominant, associated with Acer rubrum (abundant along edges), Pinus rigida (common), Sphagnum, and Gray Birch (few).

Site 20A PEM5E

Phragmites and Typha angustifolia co-dominant, associated with Carex sp., Spartina pectinata (along road), Scirpus cyperinus.

Site 20B PEM5E

Scirpus cyperinus and Calamagrostis co-dominant, associated with Carex stricta, Spartina pectinata, Typha latifolia, Sparganium, Aster spp., Nymphaea.

Site 21 PFO1/4E

Pinus strobus and Acer rubrum co-dominant, associated with Clethra alnifolia, Vaccinium corymbosum, Osmunda cinnamomea, unidentified shrub.

Site 22 PSS 3/1 B

Chamaedaphne, Clethra alnifolia, Rhododendron canadense, Gray Birch, Acer

rubrum, Vaccinium corymbosum, Myrica gale, Spirea tomentosa, Sphagnum, Carex sp.

Site 23 PFO/SS (1/1E)

Acer rubrum and Alnus sp. co-dominant, associated with Leersia (abundant), Scirpus cyperinus, Impatiens, Viburnum dentatum, Bidens, Vaccinium corymbosum.

Site 24 PFO1/4E

Pinus strobus and Acer rubrum dominant, associated with Yellow birch, Alnus sp., Understory: Vaccinium corymbosum, Ilex verticillatus, Sphagnum, Aster sp., grape.

Site 25 PEM5C

Well-mixed emergents: Glyceria spp., Juncus effusus, Juncus sp., Carex spp., Aster, Spirea tomentosa, Ilex verticillatus, Sphagnum.

Site 26 PFO1F

Acer rubrum dominant, associated with Nyssa sylvatica (?), white pine, Atlantic cedar, Clethra alnifolia, Vaccinium corymbosum, Sphagnum, Glyceria, Onoclea sensibilis.

Site 27 L2FLG

Scattered--Decodon verticillatus, Chamaedaphne, Salix (edge), Nuphar, Scirpus validus, Sphagnum, Lysimachia sp., Potomageton (vicinity).

Site 28 L2AB4H

Nymphaea dominant, associated with Sparganium, Pontedaria, Typha latifolia

Site 29A PSS/EM (1/5F)

Decodon and blueberry co-dominant, associated with Aster, Spirea tomentosa, Acer rubrum, Typha latifolia.

Site 29B PSS/EM (1/5F)

Decodon and Spirea tomentosa dominant, associated with Sphagnum, Scirpus cyperinus, Clethra, Vaccinium corymbosum, Acer rubrum.