Wetland Gems of America



Wetland Gems of America

- Quick Summary
 Motivation
 Program Goals
- Example of State Implementation Process
 WGA Fact Sheet

Wetland Gems of America: Initiative Description

- Assemble fact sheets for high-quality and criteria appropriate wetlands through-out the U.S., representing varied wetland community types
- Link to SWS website with an interactive interface and geospacial capability
- Provide resources for wetland education

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Welcome to the web site of the Society of Wetland Scientists (5%5), an international organization of about 3,500 members dedicated to fostering sound wetland science, education, and management. SWS is the society for wetland professionals, it puts at your fingerips the latest research, access to the mart interesting developments. Explore our site and see for yourself. Weed Birth in General Brother Carl, PWS SWS News and Current Events SWS Members Receive National Wetland Award							Ioin SWS Ioin a Section Jonations to SWS ior SWS Members Jontact SWS WS Professional Certification Program or PWS. Certification
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Wetland Gems of America: Motivation

- Wisconsin Wetland Gems rooted in state's 19th century history protecting navigable waters and wetlands
- SWANCC (2001) and Rapanos (2006) decisions
 - State agency jurisdiction over protection of isolated wetlands
- Reverse wetland loss
 - More than one-half of originally estimated 225 million acres of U.S. wetlands lost
 - ✓ Since 1972 CWA slowed to 80,000 acres/year
 - ✓ Estimate increase resulting from 2012 Farm Bill





Wetland Gems of America: Motivation

- Public perception of wetlands
- Youth involvement critical for future of wetland science







Wetland Gems of America: Goals

- Increase public awareness and appreciation of wetlands through the dissemination of WGA information
- Identify high-quality and criteria appropriate wetlands throughout U.S. for WGA inclusion; list examples of diverse wetland types across each state





Wetland Gems of America: Goals

- Create a centralized database with an interactive interface and geospatial capability to map WGA sites
- Provide wetland educational teaching resources and links to academic research for WGA wetlands





Wetland Gems of America: Goals

- Launch WGA database by December, 2012
- Complete preliminary databases by December, 2013
- Use U.S. Ramsar sites



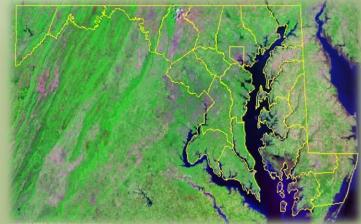


Wetland Gems of America: Implementation in Maryland

- Criteria for Selection: 100 high-quality wetlands representing all community types across MD
 - Community Types include open water, emergent, scrub-shrub, and forested wetlands

Selection parameters:

- Coordinate with partners and wetland experts
 - ✓ USACE, EPA and USFWS
 - MD Dept. of Env. & MD DNR (Wetlands of Special State Concern)
 - ✓ SWS Mid-Atlantic Chapter
 - ✓ Association of State Wetland Mgrs.
 - ✓ Chesapeake Bay Foundation
 - ✓ Universities environmental science programs: UMD, Johns Hopkins & Towson
 - ✓ Environmental Concern



Wetland Gems of America: Implementation in Maryland

- Selection parameters (cont.):
 - Coordinate with County and State resource agencies
 - Youth involvement:
 - ✓ Involve CBF, EC and universities
 - ✓ County Schools
 - Middle/high school science curriculums
 - Develop program for representative County schools to select County

gems







Wetland Gems of America: Fact Sheet



BEAR BRANCH MAGNOLIA BOG

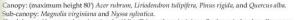
ECOLOGY

Bear Branch Bog is a fairly large, mostly undisturbed example of a globally-rare Fall Line Terrace Gravel Magnolia Bog. This approximately fouracre bog is a rare type of seepage wetland, once more widespread in saturated, sandy-gravelly soils of the exposed Potomac Formation along the Fall Line in the Washington, D.C. area. The headwaters of Bear Branch begin as springs just north of the headwaters of Little Paint Branch and Indian Creek. All three streams emanate from the vast sand and gravel aquifers of the Konterra complex, however, Bear Branch flows into the Patuxent River while Little Paint Branch and Indian Creek flow to the Anacostia. The entire site comprises a mosaic of open bogs and surrounding acidic seeps in high-quality woodlands on a gently sloping, gravelly hillside. Gravel terrace springs and streams, and many distinctive bog plants characterize the site.

FLORA & FAUNA

Dominant flora include sweetbay magnolia, swamp azalea, Canada mayflower, wintergreen, and extensive fern belts.

Flora observed in October, 2009 include:



Shrub layer: Alnus serrulata, Aronia arbutifolia, Chionanthus virginicus, Gaylussacia frondosa, Ilex opaca,

llex verticillata, Leucothoe racemosa, Lyonia ligustrina, Rhododendron viscosum, Smilax rotundifolia, Toxicodendron vernix, and Vaccinium spp. Herb layer: Anelanchier canadenisis, Aralia nudicaulis, Arisaena triphyllum, Calamagrostis coarchata, Carex foliculata, Carex intumescens, Carex leptalea sep. harperi, Chasmanthium luxum, Chelone glabra, Cypripedium acaule, Dichanthelium lucidum, Dioscorao villos, Eupatorium pilosum, Lobelia puberula, Lycopodium obscurum, Lycopus virginicus, Maianthemum canadense, Medeola virginiana, Mitchella repens, Osmunda cimaanomea, Osmunda regalis, Pinus rigida (seedlings), Rubus hispidus, Selaginella apoda, Smilax pseudochina, Solidago rugosa, Solidago rugosa, Solidago rugosa, Solidago rugosa, Songerapus feetidus, Thalictrum pubescens, Thelypteris noveboracensis, Uvularia sessilifolia, Viburnum nudum, Viburnum recognitum, Viola cucullata, Viola primulifolia, Woodwardia areolata, and Woodwardia virginica. Dominant fauna include red tail hawk, great blue heron, box turtle, raccoon, and deer.

THREATS

Conservation efforts have been challenging for the Terrace Gravel Magnolia Bogs because the surrounding woodlands are being increasingly replaced with impervious surfaces, reducing the quality of these rare bogs. Seven known remaining Fall Line Magnolia Bogs and five small variants occur in the upper Anacostia watershed in the Paint Branch, Little Paint Branch, and Indian Creek drainages. Alteration of the steady supply of groundwater seepage to the bogs, either by interrupting the flow by building too nearby or by directing stormwater runoff into the bogs, is second only to habitat destruction as the principal reason for their degradation. Invasive plants including, *Polygonum perfoliatum* and *Microsteium vimineum* are present alone the perimeter of the site and becoming more established.

Maryland Department of Natural Resources (DNR) has determined that this wetland warrants Wetland of Special State Concern (WSSC) designation; it will be added to the state's WSSC listing as soon as the Code of Maryland Regulations is revised by Maryland Department of the Environment.

ACCESS

Directions: take Route 95 to Laurel, exit at Route 198 (Sandy Spring Road) east; take first rite to Van Dusen Road, travel past light at Cherry Lane, turn right on Olive Branch Way and park near the intersection of Olive Branch Way and Van Dusen Road. Hikers will find an unmarked trail along the bottom of the slope north of Bear Branch.

Wetland Gems of America format and inspiration derived from Wisconsin's Wetland Gems sponsored by the Wisconsin Wetlands Association





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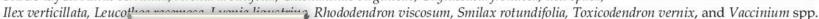
FLORA & FAUNA

Dominant flora include sweetbay magnolia, swamp azalea, Canada mayflower, wintergreen, and extensive fern belts.

Flora observed in October, 2009 include:

Canopy: (maximum height 80') Acer rubrum, Liriodendron tulipifera, Pinus rigida, and Quercus alba. Sub-canopy: Magnolia virginiana and Nyssa sylvatica.

Shrub layer: Alnus serrulata, Aronia arbutifolia, Chionanthus virginicus, Gaylussacia frondosa, Ilex opaca,



Herb layer: Amelancl ssp. harperi, Chasman Lycopodium obscurum rigida (seedlings), Ru Thelypteris noveborace Woodwardia virginica



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