

**A Comprehensive Table of the Rank, Status,
Origin, Location, Life Cycle, and Phenology of
the Rare, Threatened and Endangered Plants of
Cove Point Marsh, Calvert County, Maryland**

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Compiled by Brent W. Steury

PHENOLOGY

Species Name	Global Rank	Heritage State Rank	State Legal Status	Origin	Sites	Life Cycle	MONTHS											
							J	F	M	A	M	J	J	A	S	O	N	D
<i>Apocynum sibiricum</i>	N	SH	X	I	11, 9, 7	P						X	X	X	X	X		
<i>Carex aggregata</i>	G5	SH	X	I	3	P					X	X	X					
<i>Carex hyalinolepis</i>	G4G5	S1	T	I	9, 6	P					X	X	X	X	X			
<i>Carex radiata</i>	G4	S1	E	I	10	P					X	X	X	X				
<i>Fuirena pumila</i>	G4	S1	E	I	5, 8, 7, 9	A							X	X	X	X		
<i>Lemna trisulca *</i>	G5	S1	E	I	9, 10	A*				X	X	X	X	X	X	X		
<i>Leptochloa fascicularis</i>	G5	S1	E	I	5	A							X	X	X	X		
<i>Linnobium spongia *</i>	G5	S1	E	I	6, 9, 10	A**				X	X	X	X	X	X	X		
<i>Myosotis macrosperma</i>	G5	S1	T	I	3, 11	A				X	X							
<i>Myriophyllum humile</i>	G5	S1	E	I	9	P					X	X	X	X	X	X		
<i>Polygonum densiflorum</i>	G5	S1	E	I	9	P					X	X	X	X	X	X	X	
<i>Potamogeton foliosus *</i>	G5	S1	E	I	3	P					X	X	X	X	X	X		
<i>Rhynchospora glomerata</i>	G5	S1	E	I	10	P							X	X	X	X	X	
<i>Scutellaria galericulata</i>	G5	S1	N	I	3	P						X	X	X	X			
<i>Zizaniopsis miliacea *</i>	G5	S1	E	I	2, 3, 4	P				X	X	X	X	X	X	X		
<i>Ammannia latifolia</i>	G5	S2	N	I	8	A							X	X	X			
<i>Eleocharis tortilis</i>	G5	S2	N	I	10	P						X	X	X	X			

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<i>Xyris difformis</i>	G5	S2	N	I	10	P						X	X	X	X	X		
<i>Bidens discoides</i>	G5	S2S3	N	I	9	A							X	X	X	X	X	X
<i>Castanea dentata</i> *	G4	S2S3	N	I	4	P					X	X	X	X	X	X		
<i>Fraxinus profunda</i>	G4G5	S2S3	N	I	9, 11	P			X	X	X	X	X	X	X			
<i>Cynanchum laeve</i>	G5	S3	N	I	2, 4, 7, 9	P					X	X	X	X	X	X		
<i>Asclepias verticillata</i>	G5	S3	N	I	11	P						X	X	X	X	X		
<i>Carex atlantica</i>	G5	S3	N	I	10	P				X	X	X	X	X	X			
<i>Carex canescens</i>	G5	S3	N	I	10	P			X	X	X	X	X	X	X			
<i>Carex complanata</i>	G5	S3	N	I	11	P			X	X	X	X	X	X	X			
<i>Carex scorsia</i>	G4	S3	N	I	10	P			X	X	X	X	X					
<i>Commelina virginica</i>	G5	S3	N	I	10, 11	P					X	X	X	X	X	X		
<i>Cyperus erythrorhizos</i>	G5	S3	N	I	9	A						X	X	X	X	X		
<i>Eleocharis olivacea</i>	G5	S3	N	I	4, 6, 7, 8	P					X	X	X	X	X	X		
<i>Glyceria septentrionalis</i>	G5	S3	N	I	10	P				X	X	X	X	X	X			
<i>Hydrocotyle ranunculoides</i> *	G5	S3	N	I	3, 4	P			X	X	X	X	X	X	X	X		
<i>Hydrocotyle verticillata</i> *	G5	S3	N	I	2, 3, 4, 5, 7, 8, 9, 10	P			X	X	X	X	X	X	X	X	X	

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<i>Juncus coriaceus</i>	G5	S3	N	I	3, 9, 10	P						X	X	X	X			
<i>Lemna perpusilla</i> *	G5	S3	N	I	7	A*						X	X	X	X	X		X
<i>Passiflora lutea</i>	G5	S3	N	I	11	P					X	X	X	X	X	X		
<i>Rhynchospora gracilentata</i>	G5	S3	N	I	10	P						X	X	X	X	X		
<i>Smilax bona-nox</i>	G5	S3	N	I	9, 11	P				X	X	X	X	X	X	X		X
<i>Smilax walteri</i>	G5	S3	N	I	2, 3, 10	P				X	X	X	X	X	X	X		X
<i>Utricularia gibba</i>	G5	S3	N	I	3, 6, 8, 10	A					X	X	X	X	X	X		
<i>Celastrus scandens</i>	G5	N	N	I	11	P					X	X	X	X	X	X		
<i>Phragmites australis</i> ****	G5	N	N	I?	1, 2, 3, 4, 5, 7, 9, 11	P									X	X		X

*** Not a rare species.

Key to Column Codes

Column 1 Species names: nomenclature follows the Maryland Natural Heritage Program (1994) list of rare, threatened and endangered plants of Maryland.

Columns 2, 3 and 4 Rank and Status Categories: following the Maryland Natural Heritage Program (1994) and Maryland's Nongame and Endangered Species Conservation Act and the Threatened and Endangered Species Regulations (COMAR 08.03.08).

Explanation of Global Element Ranks (Column 2)

- G4 = A species which is apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- G5 = A species which is demonstrably secure globally, though it may be rare in parts of its range, especially at the periphery.
- N = The species has not been ranked.

Explanation of State Element Ranks (Column 3)

- SH = A species which is historically known from Maryland, but which has not been verified in the past 20 years, yet is suspected to still be extant.
- S1 = Critically imperiled in Maryland because of extreme rarity (generally 5 or fewer extant populations known in the State).
- S2 = Imperiled in Maryland because of rarity (generally 6 to 20 estimated occurrences in the State).
- S3 = Rare or uncommon in Maryland (generally 21 to 100 estimated occurrences in the State).
- N = The species has not been ranked.

State Legal Status (Column 4)

- X = Endangered Extirpated; a species that was once a viable component of the flora or fauna, but for which no naturally occurring populations are known to exist in the State.
- E = Endangered; a species whose continued existence as a viable component of the State's flora or fauna is determined to be in jeopardy.
- T = Threatened; a species which appears likely, within the foreseeable future, to become endangered in the State.
- N = The species has not been given a State Legal Status.

Rank Qualifiers: a range of ranks, e. g. S2S3 or G4G5, is assigned to a taxa if available information is insufficient to assign a single numerical rank.

Key to Column Codes

Column 5

Origin: I = A species indigenous to Maryland.
I? = A species probably indigenous to Maryland but the origin is somewhat uncertain.

Column 6

Sites: These are the sites where the species was observed to occur in Cove Point Marsh. Site numbers correspond to the areas delineated on the Site Map (page 6).

Column 7

Life Cycle: Information in this column follows Brown and Brown (1984), Fernald (1950), Gleason and Cronquist (1991), and Radford *et al.* (1968).

P = a perennial species

A = an annual species

A* = the genus *Lemna* reproduces by vegetative budding in pouches on the margins of the thallus or by autumnal bulblets which sink in the water, but float to the surface and vegetate in spring.

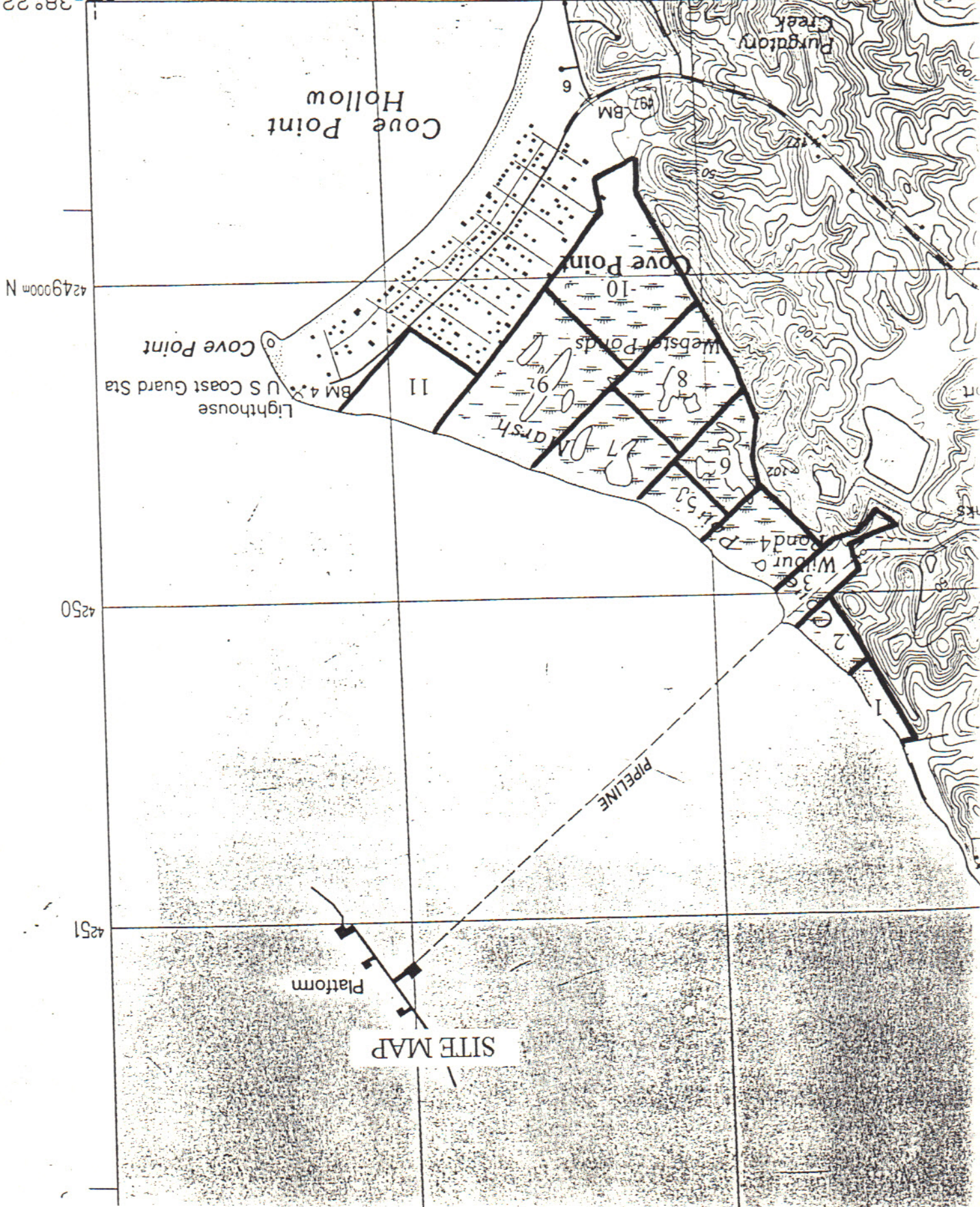
A** = the genus *Limnobium* reproduces by production of leaves at the nodes of the stolons, and by indehiscent fruit which ripen under water.

Column 8

Phenology: This column delimits by month, the flowering and fruiting times of *Phragmites australis* and the rare, threatened and endangered plants of Cove Point Marsh, following Steury (1996). Species marked by an asterisk also include the months when the species was observed by Steury (1996) in a vegetative (photosynthesizing) state at Cove Point Marsh. This phenology is a combination of the flowering and fruiting times cited by Britton and Brown (1913), Brown and Brown (1984), Brown and Brown (1972), Fernald (1950), Gleason and Cronquist (1991), and Radford *et al.* (1968).

38° 22' 30" 76° 22' 30"

378 ● INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1987 79000mE



SITE MAP

Platform

PIPELINE

Lighthouse U S Coast Guard Sta BM 4
Cove Point

Cove Point

Cove Point

Cove Point Hollow

Purgatory Creek

BM 497

11

Webster Ponds

W. Bour Pond 4

4250

4251

4249000m N

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