

Appendix F



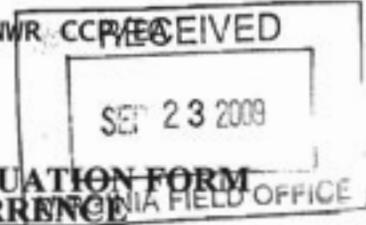
USFWS

Federal-threatened sensitive joint vetch

Endangered Species Act Consultation

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Rappahannock NWR



**INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
CONSULTATION/CONFERENCE/CONCURRENCE**

Originating Person: **Joseph McCauley**

Signature: *Joseph F. McCauley*

Date: **September 22, 2009**

I. Region: **Northeast -- R-5**

II. Service Activity (Program): **NWRS, Rappahannock River Valley NWR CCP/EA**

III. A. Listed species and/or their critical habitat within the action area:

Sensitive Joint Vetch (SJV) - *Aeschynomene virginica*

B. Proposed Species and/or proposed critical habitat within the action area:

N/A

IV. Geographic area or station name and action:

Northern Neck and Middle Peninsula, Rappahannock River Valley NWR acquisition boundary area.

V. Location (attach map):

A. County and State: **Caroline, Essex, King George, Lancaster, Middlesex, Richmond, Westmoreland, VIRGINIA**

B. Section, township and range (or latitude and longitude): **See map**

C. Distance (miles) and direction to nearest town: **See map**

VI. Proposed Action:

Refuges are required by the Refuge Improvement Act of 1997 to complete a Comprehensive Conservation Plan (CCP) and by the National Environmental Policy Act to complete an Environmental Assessment to accompany the CCP. The combined documents serve to guide refuge management decisions over the next 15 years, and inform the public and other interested parties, agencies, partners, communities of these plans. The Rappahannock River Valley NWR CCP/EA document explains the refuge mission and goals, describes the affected environment at the time of writing, offers 3 alternatives to management, describes the environmental consequences on the major habitat types for each alternative, and summarizes the consultation and coordination with others throughout this process. The primary distinction between the alternative concerns the number of acres of grasslands to be provided. Alternative B would offer up to 1200 acres over the current 600, and Alternative C proposes a forest emphasis with no grasslands. The document can be downloaded from the site: <http://www.fws.gov/northeast/planning/Rappahannock/ccphome.html>. References to SJV within this document occur on pages: 1-20; 2-14; 2-35-37; 3-82-83; 3-86; 3-88-90; 3-122; 4-27-31; 4-93; A-22; B-8; B-32-33; B-61; B-91.

VII. Explanation of impacts of action (attach additional pages as needed):

Across all three alternatives, and particularly in the preferred alternative (Alt B), we describe protection of wetlands and riparian zones, where sensitive joint vetch is likely to occur. Protection would come in the forms of land acquisition or easement, establishing vegetation buffers on the upland edges of wetlands, and controlling invasive plant species that threaten to overtake the marsh (Common reed, *Phragmites australis*). Treatment to control common reed undertaken by the Refuge is usually aerial or ground applications of aquatic-approved herbicides.

VIII. Effect of determination and response requested:

Natural disturbance events (storms and high energy wave action) actually create favorable areas for SJV to establish, and the species also occurs in a number of unexpected locations off refuge property within the acquisition boundary. Given its ephemeral pattern of occurrence, we do not anticipate the need for further protective measures other than those described above, or that the management actions described in the CCP/EA will have an adverse effect on the SJV population within the boundary area. We have developed standard operating procedures for protecting SJV populations during herbicide applications for Phragmites control. These procedures are described in a separate Section 7 Intra-Service Biological Evaluation Form.

A. For listed species/critical habitat:

Determination		Response Requested	
	Will Not Affect (Sensitive Joint Vetch)		Concurrence
			Informal Consultation
X	Is Not Likely to Adversely Affect (identify species)	x	Concurrence
			Informal Consultation
			Formal Consultation
	Is Likely to Adversely Affect (identify species)		Concurrence
			Informal Consultation
			Formal Consultation
	Undetermined Affect (identify species)		Informal Consultation

B. Proposed species/proposed critical habitat: N/A

C. Remarks: None

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Rappahannock NWR CCP/EA

IX. Reviewing office evaluation:

A. Concurrence Nonconcurrency

B. Comments:

Tylan Dean, Acting Supervisor 9-24-09
Name/Signature/Date
Tylan Dean, for Cindy Schultz



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CONSULTATION/CONFERENCE/CONCURRENCE**

Originating Person: **Joseph McCauley**

Signature: 

Date: **September 22, 2009**

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II. Service Activity (Program): **NWRS, Rappahannock River Valley NWR**

III. A. Listed species and/or their critical habitat within the action area:

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B. Proposed Species and/or proposed critical habitat within the action area:

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A. County and State: **Caroline, Essex, King George, Lancaster, Middlesex, Richmond, Westmoreland, VIRGINIA**

B. Section, township and range (or latitude and longitude): **See map**

C. Distance (miles) and direction to nearest town: **See map**

VI. Proposed Action:

The Rappahannock River Valley National Wildlife Refuge proposes to control invasive populations of *Phragmites australis* using herbicides. Any herbicide used will be approved through a Pesticide Use Proposal form. As of this date, herbicides being used are imazapyr- or glyphosate-based and approved for aquatic environments. Herbicides may be applied by backpack sprayer, truck or boat mounted sprayer, or via helicopter. Applications will occur primarily within the refuge boundary as shown on the attached map, but may also occur on both public and private lands within the tidal portion of the Rappahannock River watershed.

VII. Explanation of impacts of action (attach additional pages as needed):

We have developed protocols for application of herbicides intended to minimize or eliminate negative impacts to *Aeschynomene virginica* during control operations. These protocols (attached) will employ techniques to avoid known or potential occurrences of *Aeschynomene virginica*, including use of models developed by the Virginia Department of Conservation and Recreation to predict where unknown populations of *Aeschynomene virginica* may exist.

Proposed Protocol to Ensure Protection of Sensitive Joint Vetch (*Aeschynomene virginica*)
as part of a
Control Program for Common Reed (*Phragmites australis*)

Introduction: Common reed (hereafter referred to as Phragmites) has been identified as one of the highest priority invasive species in the Northeast Region of the U.S. Fish and Wildlife Service. The Rappahannock River Valley National Wildlife Refuge works with landowners and other Federal, State, and county governments, and non-profit conservation organizations on control of invasive populations of Phragmites in the lower Rappahannock River watershed. We have secured two grants (North American Wetlands Conservation Act Small Grant and National Fish and Wildlife Foundation Pulling Together Initiative Grant) and other funding to conduct Phragmites control using applications of glyphosate via helicopter, boat- or truck-mounted sprayer, and backpack sprayer on public and private lands.

Spraying from a helicopter will be accomplished through contracts with professional applicators. Non-target effects will be minimized by applying chemicals with a precision nozzle and only during periods of minimal wind. The applicators have stated that drift will not occur more than 100 feet from the target area.

Sensitive joint vetch (*Aeschynomene virginica*) is an annual herb in the pea family that is listed as a Federally-threatened species by the U.S. Fish and Wildlife Service. Its habitat overlaps that of Phragmites and may be found in proximity to Phragmites stands targeted for control. Encroachment by Phragmites has been identified by the Virginia Division of Natural Heritage as a threat to sensitive joint vetch.

The following protocol will be used by the refuge and its partners to ensure protection of known or suspected populations of sensitive joint vetch during control operations.

Protocol:

Prior to issuing contracts or conducting control operations, we will have identified all proposed Phragmites locations to be treated and obtained landowner permission if on private lands.

In consultation with Virginia DCR, we will compare maps of known and potential populations of *Aeschynomene virginica* with maps of Phragmites stands proposed for control and determine which of the following three scenarios exists: 1) the proposed control area can be eliminated from concern due to salinity or other habitat factors that make the presence of *Aeschynomene virginica* unlikely; 2) the proposed control area is within 500 feet of known or historic populations of *Aeschynomene virginica*; or 3) the proposed control area is greater than 500 feet from any known or historic populations of *Aeschynomene virginica*, and due to habitat conditions is likely to support *Aeschynomene virginica*. We will use information from models developed by DCR in 2009 to help predict where unknown populations of *Aeschynomene virginica* might exist due to favorable habitat conditions.

Under scenario #1 above: Any spray methods (helicopter, boat or truck-mounted sprayer, or backpack sprayer) may be used.

Under scenarios #2 or #3 above: Surveys of suitable *Aeschynomene virginica* habitat within 500 feet of the proposed control areas will be conducted by qualified State, Federal, or private personnel. Names of survey personnel will be provided to the Service's Virginia Field Office for approval if requested.

If no *Aeschynomene virginica* plants are found within 500 feet, any spray methods (helicopter, boat or truck-mounted sprayer, or backpack sprayer) may be used.

If *Aeschynomene virginica* plants are found between 100 and 500 feet of the proposed control area, boat-mounted, truck-mounted, or backpack sprayers may be used.

If *Aeschynomene virginica* plants are found within 100 feet of the proposed control area: only backpack sprayers may be used if winds are greater than 10 mph. If winds are less than 10 mph, truck or boat-mounted sprayers may be used.

If *Aeschynomene virginica* plants are found within 10 feet of the proposed control area, only backpack spraying will occur.

New locations of sensitive joint-vetch will be marked with GPS equipment and sent to the Virginia DCR – Division of Natural Heritage.

VIII. Effect of determination and response requested:

By using the attached protocols, we expect that our actions are not likely to adversely affect known or expected occurrences of *Aeschynomene virginica*.

A. For listed species/critical habitat:

Determination		Response Requested	
	Will Not Affect (Sensitive Joint Vetch)		Concurrence
			Informal Consultation
X	Is Not Likely to Adversely Affect (identify species)	x	Concurrence
			Informal Consultation
			Formal Consultation
	Is Likely to Adversely Affect (identify species)		Concurrence
			Informal Consultation
			Formal Consultation
	Undetermined Affect (identify species)		Informal Consultation

B. Proposed species/proposed critical habitat: N/A

C. Remarks: None

IX. Reviewing office evaluation:

A. Concurrence X Nonconcurrence

B. Comments:

Tyler Dean, Acting Supervisor 9-24-09
 Name/Signature/Date
 Tyler Dean, for Cindy Schultz

