

Muelle  
1993



## Minnesota Department of Agriculture

April 8, 1993

(612) 297-7279

Dr. Richard Neves  
Department of Fish & Wildlife  
Virginia Polytechnic  
Blacksburg, VA 24061-0321

Dear Dr. Neves:

Thank-you for taking the time to review the first draft of the Minnesota Department of Agriculture's endangered freshwater mussel informational booklet. I received many insightful comments and excellent suggestions which helped to make the final draft a more readable and accurate document. Many of you will recognize your contributions in the enclosed copy.

In addition to requiring an immersion in musselology (sic), this project gave me a renewed appreciation for the challenge of communicating a technical message in a language that is understandable to the general public. My hope is that this booklet will successfully convey the mussel message to an important audience.

If you have time, please give this **last draft** a quick once over and call me if you note errors or would recommend changes. We plan to go to the printer by the end of April.

Enclosed in this mailing you will also find a request to review draft U.S. Environmental Protection Agency bulletins for Higgins Eye Pearly Mussels in three Minnesota counties. The attached letter explains both the national pesticides/endangered species program and the Minnesota Department of Agriculture's alternative program.

Again, thank you for your time and assistance on the mussel booklet. I will look forward to sending you the final product!

Sincerely,

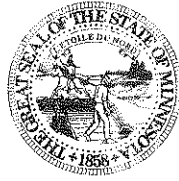
Lisa C. Mueller, Specialist  
Endangered Species Protection Program  
Agronomy Services Division

LCM:trj

Enclosures

*Just received 2 copies of your poster + have one proudly displayed in my office. Great job! Thanks again for your comments. Most of the jargon is gone or explained better. this time around.*

*Sincerely,  
LCM*



## Minnesota Department of Agriculture

April 9, 1993

(612) 297-7279

Dr. Richard Neves  
Department of Fish & Wildlife  
Virginia Polytechnic  
Blacksburg, VA 24061-0321

Dear Dr. Neves:

Since 1986, the U.S. Environmental Protection Agency has been developing an endangered species protection program to satisfy the federal Endangered Species Act requirement that no federally listed species be negatively impacted by a USEPA-registered pesticide. Currently, EPA's Endangered Species Protection Program is centered on the development and distribution of county bulletins for all federally listed species in all affected U.S. counties. Pesticides for which the USEPA has issued a "May Affect" determination and the U.S. Fish and Wildlife Service (USFWS) has issued a jeopardy opinion would bear a label statement referring users to the county bulletins.

For several years, the Minnesota Department of Agriculture has been developing an alternative to EPA's proposed pesticide labeling/county bulletin approach for protecting endangered species. Owners and managers of listed plant species (approximately 125, at present) are contacted individually by MDA and interviewed with regard to their pesticide management practices. Individualized pesticide management plans are then drafted and landowners/managers are asked to sign voluntary protection agreements which state that they will comply with the pesticide use recommendations outlined in their management plans. This approach, although time and labor intensive, appears to be the best strategy for protecting listed plants from adverse pesticide exposure in Minnesota. It may also work well for other sessile, localized, terrestrial or non-migratory species (e.g. the Karner Blue butterfly which is restricted to a single site in Minnesota).

In order for the MDA program to be comprehensive, we need to also address the 7 of 12 federally listed species that are either aquatic (the three mussels) or highly mobile (gray wolf, peregrine falcon, bald eagle and piping plover). To protect mussels, our rationale was that before landowners would be willing to adopt pesticide buffers, they would first need to have a better understanding of the organisms they were being required to protect (i.e., who is it?, where does it live?, why should I care?, where do pesticides fall out relative to other threats?, etc.). Hence, the mussel booklet.

And, while we understand that the booklet will not do the full job of reducing pesticide/water quality problems for mussels, it will hopefully serve as an introduction to the topic of watershed protection for pesticide applicators in the St. Croix and Upper Mississippi watersheds. We are now envisioning a program wherein we would work with other state and federal agencies and local watershed management organizations to encourage the adoption of pesticide and soil best management practices in critical watersheds and subwatersheds. This approach will perhaps be used in concert with the USEPA bulletins to inform landowners about risks to federally listed species.

USEPA/MDA Pesticide Programs

Page 2

Consequently, your thoughtful review of and comment on the enclosed endangered species draft county bulletins for Higgins Eye Pearly Mussel populations in Houston, Winona and Washington counties, Minnesota would be greatly appreciated. Of particular interest to USEPA is the degree to which pesticide applicators in the proposed buffer zones will be able to translate the bulletin information to their particular land management situation. Your assessment of whether or not adoption of the recommended buffer zones and restriction of the specified active ingredients will effectively protect this mussel (and mussels, in general) from pesticide impacts is an equally important consideration.

EPA has extended the review deadline, but I would appreciate your comments by the end of May, if possible. Thank you, in advance, for your time. Please feel free to call if you have any questions.

Sincerely,



Lisa C. Mueller, Specialist  
Endangered Species Protection Program  
Agronomy Services Division

Enclosures

cc: Mussel Booklet Review Group (see distribution list)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

FEB 11 1993

SP-14J

MEMORANDUM

SUBJECT: Draft Review U.S. EPA Endangered Species Maps

FROM: Craig Thiel, <sup>CWT</sup> Environmental Protection Specialist

TO: Lisa Mueller, Endangered Species Specialist  
Minnesota Department of Agriculture








Pursuant to our phone conversation of February 11, 1993, I am supplying you with draft U.S. EPA endangered species maps. The maps cover four counties in Minnesota, three for the Higgins' eye pearly mussel and one for the piping plover. These maps (duplicates) will be sent out for your review again within a month under a cover letter from Mary Hood, U.S. EPA, Headquarters. That letter will represent U.S. EPA's formal request for comments from various state agencies in Minnesota.

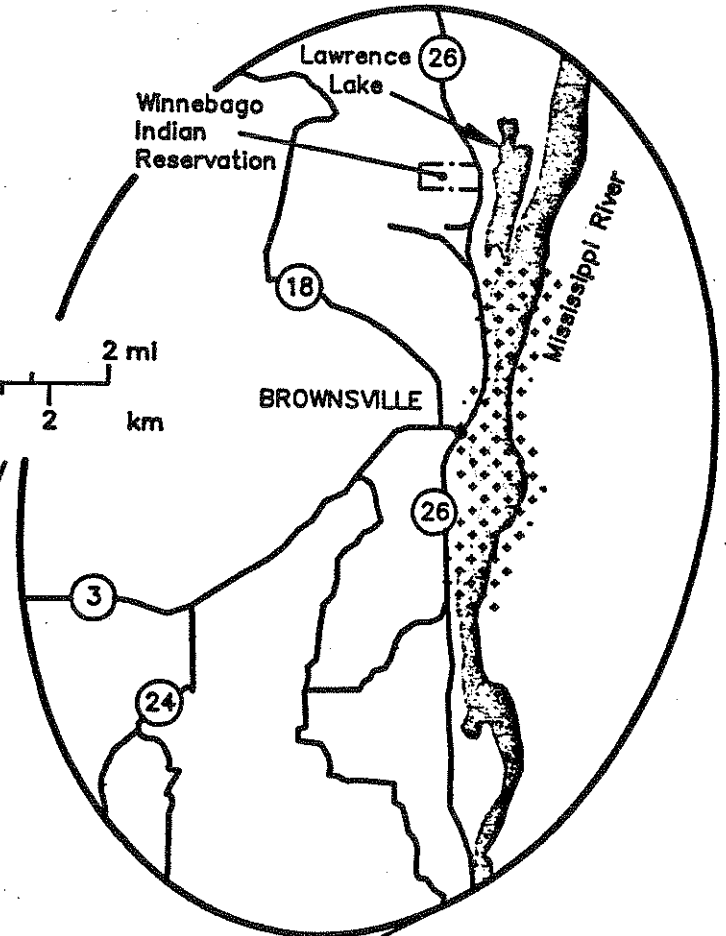
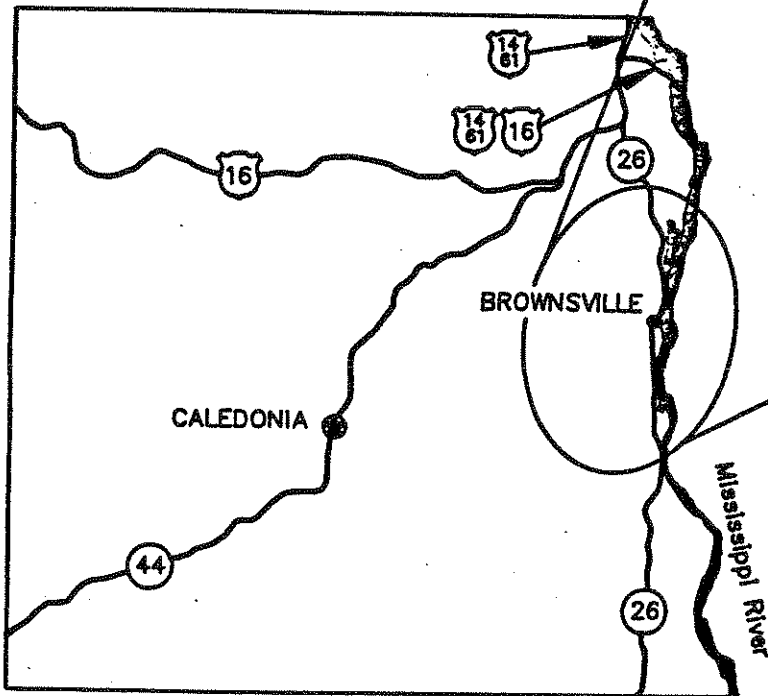
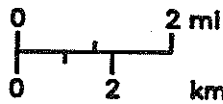
If you have any questions, please contact me at (312) 353-6353. The Endangered Species Conference to be held in Chicago is scheduled for March 23, I am sorry for the confusion regarding its date. Thank you, in advance, for your cooperation in protecting these valuable resources. See you on the 23rd!

Attachments

# Houston County, Minnesota

## Legend

-  County Border
-  County Seat
-  City
-  U.S., State or Other Highway
-  Park, Reservation, Forest, Monument
-  River, Stream, Creek
-  Lake, Reservoir



**DRAFT**

## Shading Key



Freshwater mollusks (*Higgins' eye pearly mussel, *Lampsilis higginsii**). Within the shaded area shown on the map, pesticide use limitations only apply on and along the river.

Table of Pesticide Active Ingredients

Higgins' eye pearly mussel

a

CHLORPYRIFOS	
Alfalfa, Peanuts	43
Apples	41
FLURIDONE	20
PROPICONAZOLE	1

Limitations On Pesticide Use  
Code/Limitation

- 1 Do not apply this pesticide within 20 yards of the edge of water within the shaded area for ground applications, nor within 100 yards for aerial applications.
- 20 Do not apply directly to water within the shaded area.
- 41 Do not apply this pesticide within  $\frac{1}{4}$  mile of the edge of water within the shaded area for ground applications, nor within  $\frac{1}{2}$  mile for aerial applications.
- 43 Do not apply this pesticide within 100 yards of the edge of water within the shaded area for ground applications, nor within  $\frac{1}{4}$  mile for aerial applications.

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a = Code

CS036

Houston, Washington, Winona, MN 11/19/92

**DRAFT**

# Washington County, Minnesota

## Legend

- County Border
- County Seat
- City
- Ⓜ Interstate, U.S., State or Other Highway
- +++++ Railroad
- - - - - Park, Reservation, Forest, Monument
- ~~~~~ River, Stream, Creek

## Shading Key

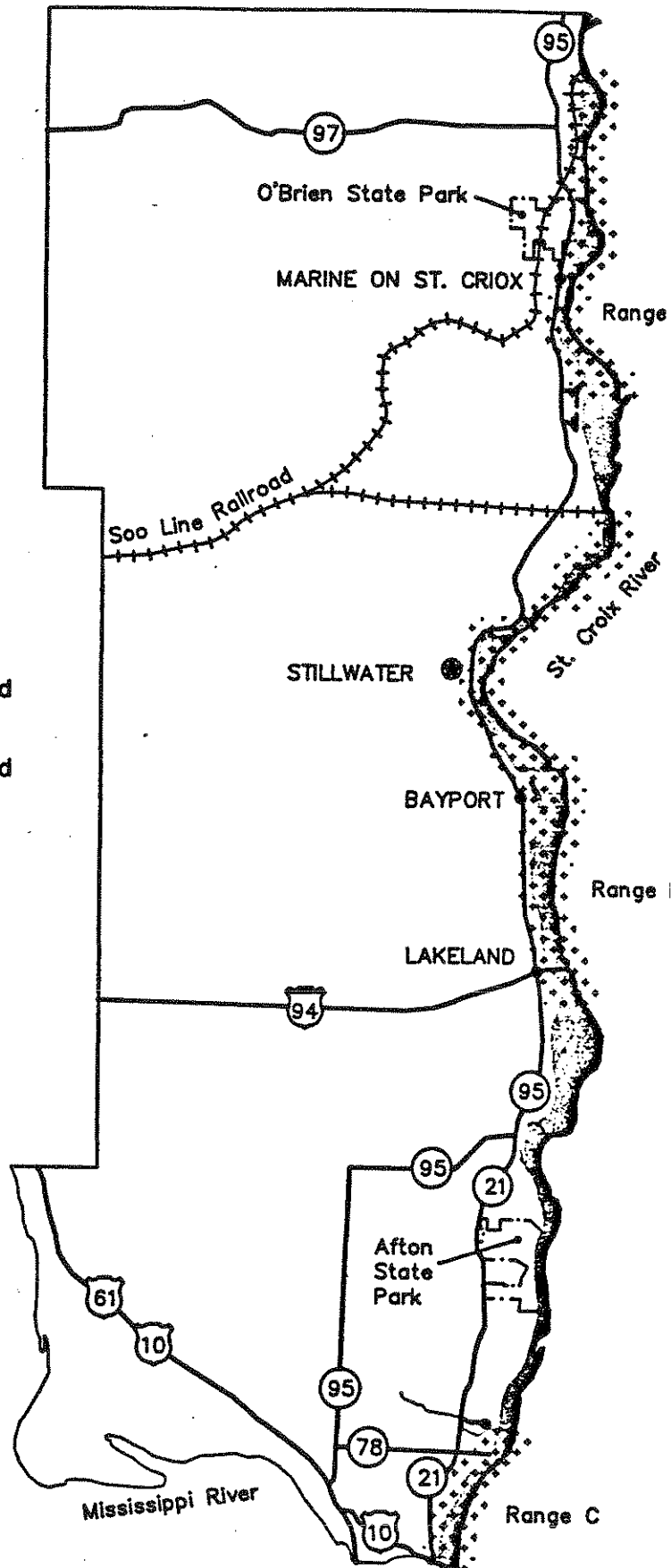


Freshwater mollusks (Higgins' eye pearly mussel, *Lampsilis higginsii*). Within the shaded areas shown on the map, pesticide use limitations only apply on and along the river and connecting sloughs.

**Range A** extends from the Soo Line Railroad bridge south to the southern edge of T31N R19W Sec. 18.

**Range B** extends from the Soo Line Railroad bridge to just below Interstate 94 at the southern edge of T29N R20W Sec. 35 and 36.

**Range C** extends from the stream outflow into the St. Croix River in T27N R20W Sec. 27 south to the Mississippi River.



**DRAFT**

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
ENDANGERED SPECIES PROTECTION PROGRAM

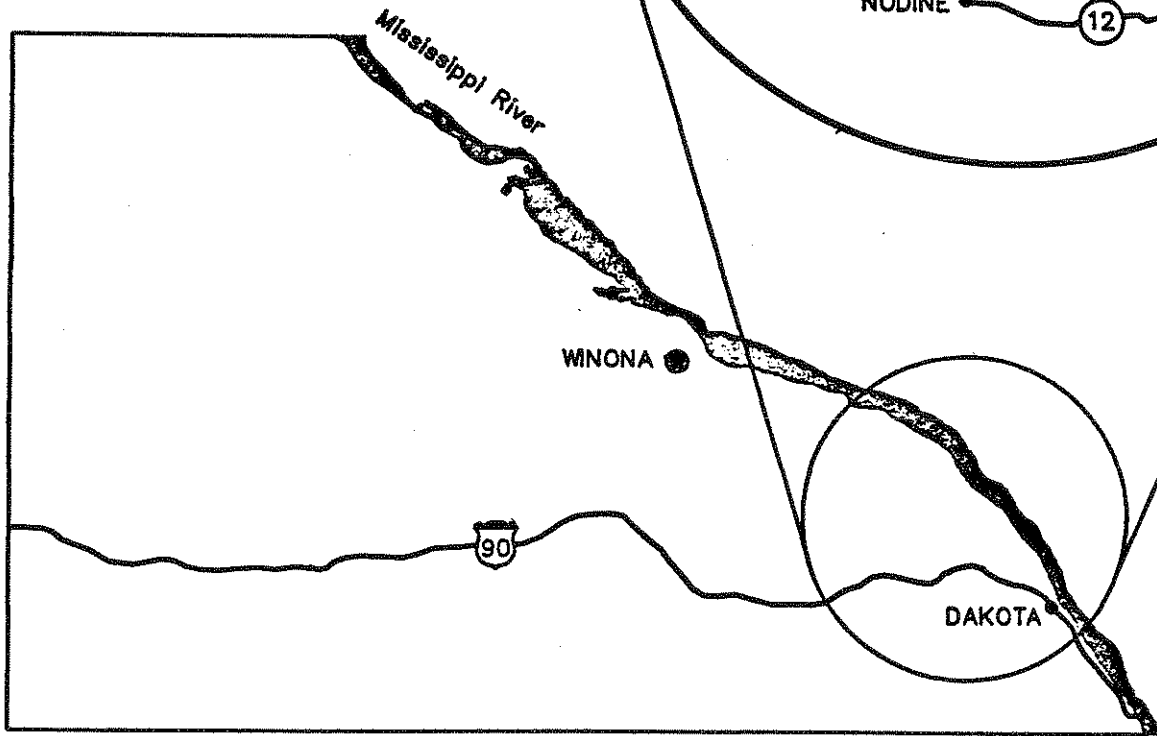
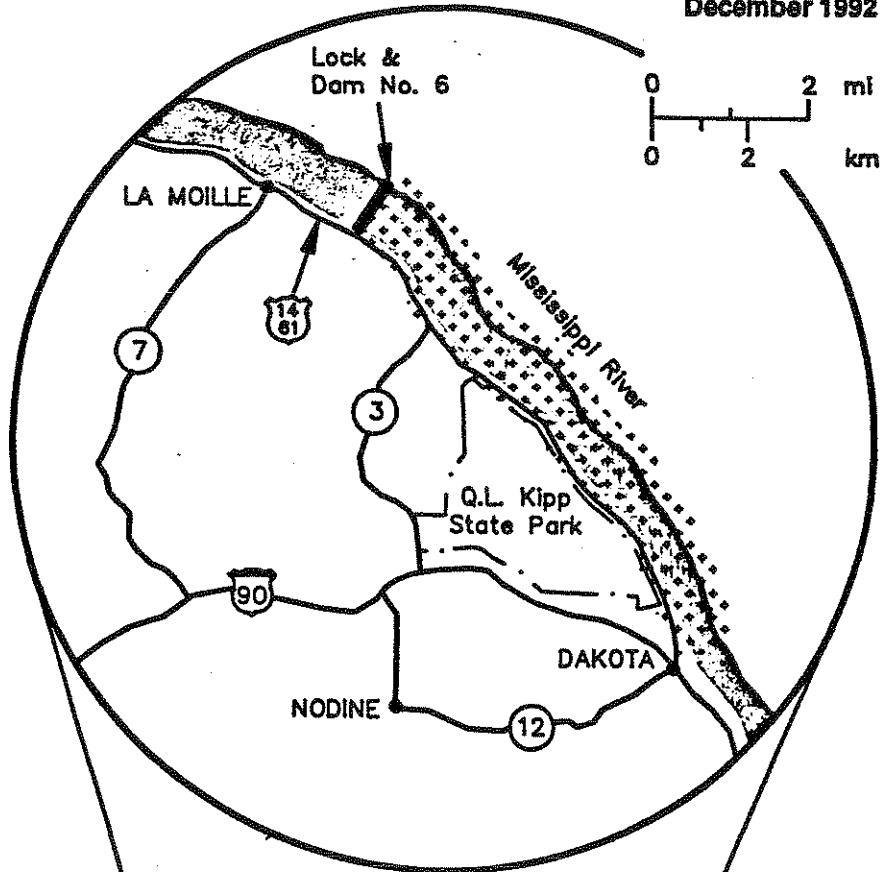
Map Of Areas Where Pesticide Use Limitations  
May Apply To Protect Endangered Species

Review Draft  
December 1992

# Winona County, Minnesota

### Legend

-  County Border
-  County Seat
-  City
-  Interstate, U.S., State or Other Highway
-  Dam
-  River, Stream, Creek



### Shading Key



Freshwater mollusks (Higgins' eye pearly mussel, *Lampsilis higginsii*). Within the shaded area shown on the map, pesticide use limitations only apply on and along the river.

DRAFT

Table of Pesticide Active Ingredients

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Houston, Washington, Winona, MN 11/19/92

**DR. T**