Interstate Pest Control Compact

APPLICATION FOR FINANCIAL ASSISTANCE
PEST CONTROL INSURANCE FUND

The Pest Control Compact provides that any party state can apply to the Insurance Fund for financial support of pest control or eradication activities which it wishes to have undertaken or intensified in one or more other party or, in limited circumstances, in nonparty states. When a pest is found in another state that constitutes a threat to valuable agricultural or forest crops or products within the applying state, the Insurance Fund can provide financial support for control or eradication measures. State parties to the Compact are expected to maintain their existing pest control programs at normal levels aside from any assistance from the Insurance Fund. This safeguards the soundness of the Fund and assures that it will be used to apply the additional thrust necessary to combat outbreaks, which otherwise would not be controlled.

The Insurance Fund is under the control of the Compact's Governing Board, consisting of an official representative of each party state chosen by that state in accordance with its own laws. An Executive committee, consisting of the chairman and a representative from each of the four regions, is authorized to exercise certain responsibilities for the Governing Board when the Board itself does not meet.

A Technical Advisory Committee has been established to assist the Governing Board with the technical information necessary to make a decision on whether or not the Compact should be invoked on any particular requests. The Technical Advisory Committee is composed of two state plant control officials from each of the four regions of the Plant Boards, together with a representative of the U.S. Animal and Plant Health Inspection Service and a representative of the U.S. Forest Service.

When an application to the Insurance Fund is filed, the request is referred to the ten-member Technical Advisory Committee, which makes a study of the request and a recommendation on the feasibility of the project to the Governing Board. In an emergency, the Committee could make this recommendation within 72 hours or less after receiving the initial request for Compact assistance.

This is a two-part application. All questions must be answered in order for the application to be considered. Attach additional sheets as necessary. Attach letters of support from neighboring Party States, as necessary. The completed application should be submitted to the Executive Director, Interstate Pest Control Compact. A Cooperative Agreement and Final Report Template (with Financial Statement) are also included.

APPLICATION SUMMARY

Requesting State(s):	**Wisconsin, North Dakota**
Responding State: *(State where requested action will take place)*	**Minnesota**
Pest:	***Lymantria dispar* L. (Gypsy moth)**
Type of Program: ***(Quarantine, eradication, suppression, delimiting survey, etc.)***	**Eradication**
Amount of Request:	**$52,000**
Term of Program: ***(Single-year/Multi-Year)***	**Single year**
Program Implementation: ***(Estimated Date)***	**January 1, 2011**
Program Completion: ***(Estimated Date)***	**December 31, 2011**

PART I

1. Requesting State(s)
[*Must be a Party (Member) State]*

State and Agency: **Wisconsin Department of Ag, Trade, and Consumer Protection**
Compact Administrator: **Ben Brancel, Secretary**
Mailing Address: **2811 Agriculture Dr., Madison, WI 53718**
Telephone: **608-224-5012**
Fax: **608-224-4656**
Email: **Ben.Brancel@wisconsin.gov**

State and Agency: **North Dakota Department of Agriculture**
Compact Administrator: **Doug Goehring, Commissioner**
Mailing Address: **600 E Boulevard Ave Dept 602, Bismarck, ND 58505**
Telephone: **701-328-4754**
Fax: **701-328-4567**
Email: **ndda@nd.gov**

2. Responding State
[*State where requested action will take place]*

State and Agency: **Minnesota Department of Agriculture**
Compact Administrator: **Dave Frederickson, Commissioner**
Mailing Address: **625 Robert St. N., St. Paul, MN 55155**
Telephone: **651-201-6219**
Fax: **651-201-6108**
Email: **dave.frederickson@state.mn.us**

Is responding state a Compact member? (Yes/No)

Is responding state in agreement with this application? (Yes/No)

3. Pest Involved

A. Common and scientific name: **Gypsy moth, *Lymantria dispar* L.**

B. Is pest native, or introduced from outside the continental U.S.? **Introduced**

C. Major means of dispersal or transmission: **Natural and human-assisted**
Known geographical range: **New England south to Virginia and west to central Wisconsin**

D. Potential geographical range in U.S.: **Potentially the entire country, as gypsy moth can feed on over 500 species of trees and woody shrubs. Some of the most preferred hosts are oak, birch, aspen, willow, and basswood species; all abundant in Minnesota.**

E. Type of damage caused by the pest: **Defoliation. Each caterpillar can eat three square feet of foliage in a short period of 5-6 weeks. The rapidity and timing of the damage can stress the host tree and leave it more susceptible to secondary invaders. Successive years of gypsy moth defoliation can lead directly to tree mortality.**

4. Economic Importance

A. To responding state (*for each crop affected list acres produced and value*): **Present infestations are in residential/business neighborhoods in the St. Paul/Minneapolis metro area. According to the National Tree Benefit calculator, a single 24 inch-diameter white oak tree in the metro area provides around $243 of benefits annually. These benefits include storm water interception, property value, heating/cooling savings, air quality, and carbon sequestration, all on an ongoing basis. Economic assessments of programs aimed at mitigating gypsy moth spread have consistently shown a 3:1 benefit to cost ratio, primarily due to negative impacts to timber, recreational and ecosystem services, and the industry costs associated with federal and state quarantines (Leuschner et al. 1996, Sills 2008). Gypsy moth infestations in the urban forest can also have significant impacts to human health (Tuthill et al. 1984, Allen et al. 1991). According to the Minnesota DNR, a total of 1.8 million cords stumpage was sold for $33.6 million by public agencies alone in 2009. The precise impact on the many aspects of the wood-products industry is difficult to calculate, but if gypsy moth is left unchecked, the potential impact is significant.**

B. To requesting state(s) (*for each crop affected list acres produced and value*): **Both Wisconsin and North Dakota have significant resources of shade trees and shelter belts. Residential Shade Trees represent approximately the equivalent monetary value of trees in Minnesota. On Wisconsin's 35 million acres of land, almost 16.7 million are forested, providing 48% of the state's land cover. Another 5% of the land is covered by urban forest. Many of these forests are not yet impacted by gypsy moth. The Wisconsin Forestry Council estimates that forest products industry jobs in Wisconsin contribute about $3 billion per year in wages to the state economy.**

While North Dakota is not a heavily forested state the forest resources they do have are important. Urban forests are important infrastructure in the state's 387 communities and encompass 629 square miles. Farmstead plantings and 55,000 miles of windbreaks are vital components of the agricultural infrastructure of the state. Forest areas comprise about two percent of the state with about 70 percent of the forested area classified as timberland. This includes native upland and riparian forests and state park system forested areas. These resources provide significant benefits including wildlife habitat,

recreational opportunities, and wood products and contribute to soil conservation, riverbank stabilization, and filtration of runoff from agricultural lands.

C. *Value of impacted crop(s)/plant resources to the United States:*
Urban shade trees and shrubs provide habitat for song birds and small mammals, other ecological benefits and aesthetic benefits to the community and its inhabitants. These values are near to incalculable, because they are extremely difficult to measure, but, nevertheless, highly significant.

On a broader scale, the value of standing timber across the country is just one measure of resource value that does not include recreation, hunting/fishing, watershed and fisheries protection, wildlife habitat and biodiversity protection, and nontimber products such as berries, mushrooms, and medicinal plants. Jeff Prestemon, forest economist with the US Forest Service, acknowledges the complexity in computing the value of standing timber and uses an average price multiplied by the quantity of forested acres nationwide to get approximately $630 billion in timber availability. Likewise, the value of shipments was about $193 billion for the forest products sector in 2009. Significant damage to this resource would, in turn, have a cascade effect on the many other benefits and resources listed.

D. Estimated potential damage to crop(s)/plant resources in requesting state if Compact is not invoked:
Urban forests in Wisconsin and North Dakota supply ecological, aesthetic, emotional and economic value to citizens. Continued defoliation of these trees if gypsy moth is not eradicated has the potential to cause tree mortality and the loss of these values. Moreover, because gypsy moth spreads through the establishment and subsequent growth of new populations ahead of the established area, the current infestations – if left untreated – would consequently become source populations for new populations, thus increasing the rate of gypsy moth spread and the costs of damaging outbreaks to other areas (Sharov and Liebhold 1988).

E. Other states which may be adversely impacted:
Since Gypsy moth mainly travels by "hitchhiking" on vehicles and outdoor household articles with egg masses attached, it is easily transported to neighboring states such as Wisconsin, Iowa and the Dakotas and could easily go beyond to other uninfested states to the south and west.

5. **Type of Program (i.e., quarantine, eradication, suppression, delimiting survey, etc.)**
Eradication and follow-up delimiting survey

6. **Will Compact implementation result in an increase or decrease in normal plant pest control activity in the requesting state(s)? If a decrease results, explain how and why.**
Pest control activity will increase with IPCC funding. High moth activity at three Twin Cities metro sites was detected in 2010 and eradication projects could not proceed without this assistance.

7. **Fund Request**

A. Amount requested from pest insurance fund: $52,000

B. Will State funds supplement this request? If so, how much? Not directly, as State expenditures on the project are needed for in-kind services matching for Federal dollars, but the State is, nevertheless, contributing through the personnel and other resources dedicated to carrying out the project.

C. Will Federal funds supplement this request? If so, from whom and how much? Yes, USDA-APHIS-PPQ ($50,000) and USDA-Forest Service-State & Private Forestry ($36,000).

D. Will other funds supplement this request? If so, from whom and how much? No

8. **Term of Program (Single-Year vs. Multi-Year)**

A. To the best of your knowledge, can the conditions which initiated this application for funds be abated, by a program undertaken with these funds, in one year or less? Yes, larvicide applications are completed in spring and adults are monitored throughout the summer. Evaluation results will be available in the fall/winter of 2011.

B. If not, is this request for an installment in a program which is likely to continue for a longer period of time? How long? N/A

9. **Target dates**

A. Program implementation: January 1, 2011
B. Program completion: December 31, 2011

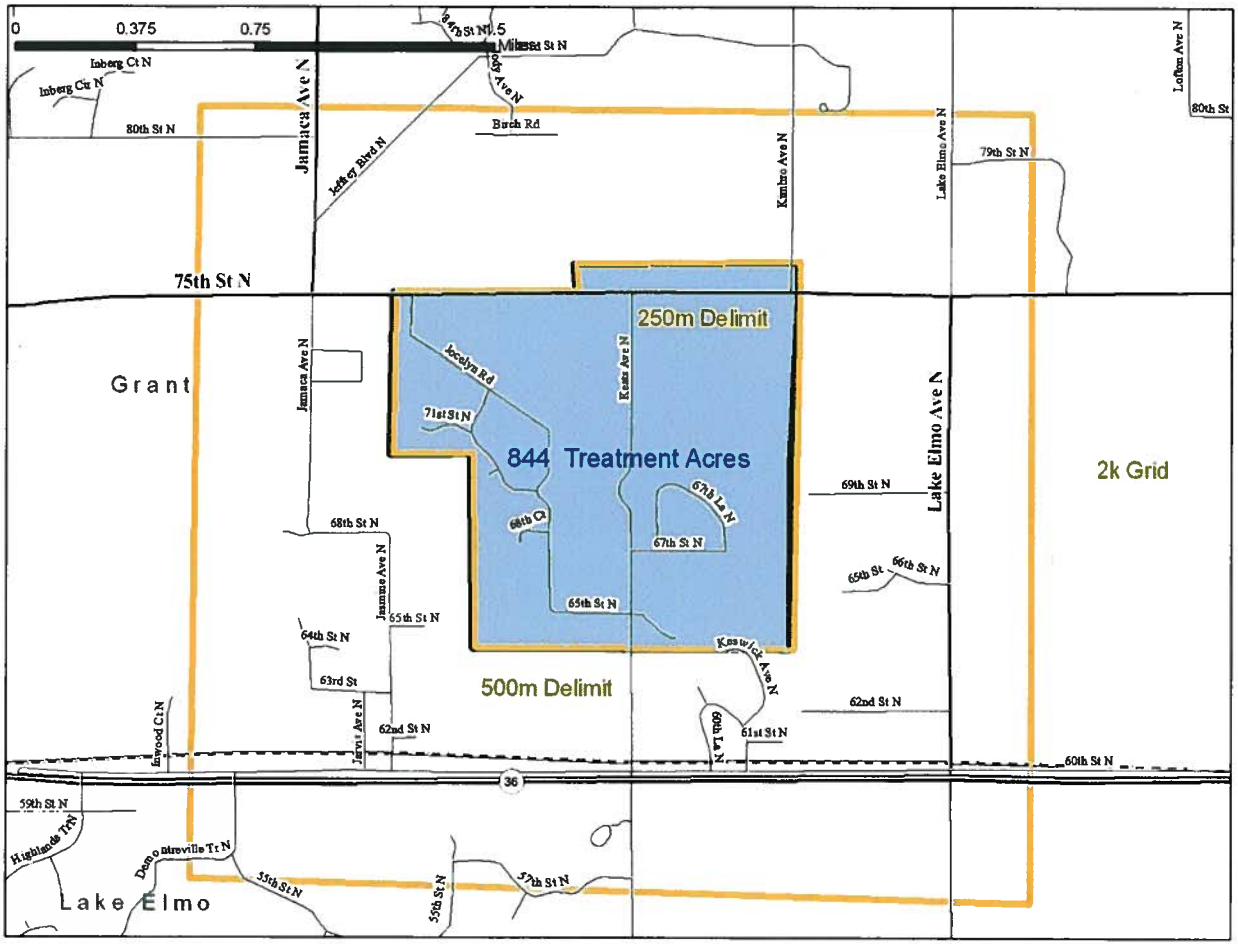
PART II

10. **Detail exactly what work will be performed and what will be accomplished with the funding request from the insurance fund. (Work Plan)**

This eradication is being carried out in conjunction with the US Forest Service and is supported by the Gypsy Moth Program Advisory Committee. Multiple agencies, federal, state, and local, are involved in the planning and execution of the aerial treatments. Because federal funds will be used for the eradication, an environmental assessment is required. Part of the assessment calls for an analysis of impacts to non-targets (including humans) as well as appropriate notification of the operation to residents. The MDA will use a portion of IPCC monies for outreach, mailings, and permits associated with the eradication.

Eradication Plan: The primary use of IPCC funds will be toward contractual obligations. A licensed and qualified aerial applicator will be contracted through the State of Minnesota and will perform two applications of Btk (Foray 48B) for control of gypsy moths. The estimated cost per acre for this work is $35 based on past years' bids. The treatment will be carried out from a fixed-wing or rotary aircraft with properly calibrated nozzles. Treatment timing will be based on insect development, phenological indicators, and weather conditions. Safety and Security plans will be developed for the operation.

Monitoring Plan: Assistance from IPCC will allow the MDA to hire a seasonal trapper to set, check and remove traps from inside and around the treatment area for evaluation of success of the application. Delimit traps will be set at a density of 250-500m apart in and around the treatment block, approximately 108 traps in total. This entire area is embedded in the standard 2k trapping grid. Gypsy moth traps are highly reliable so determination of success is certain. Traps will be placed at a higher density around the treatment in 2012 as well to ensure the size of the treatment block was appropriate and the population completely eradicated.



11. **Detail the circumstances that occasion this request for the invoking of the Compact. Include information on how and why the situation is serious, whether or not an emergency exists, and the reasons why financial assistance is needed.**

Gypsy moth traps have been showing adult male moth activity in this area for three years. In the fall of 2010, a group of scouts looked for alternate life stages and found a small grove of oak trees heavily infested with gypsy moth egg masses, pupal cases, and shed skins; all conclusive signs of a successfully reproducing population. Federal scientists were consulted and all agreed that an 844-acre treatment area would be sufficient to destroy the infestation. IPCC Funds are needed at this time to supplement a short-term eradication project. State budget shortfalls mean that required match is not available to access other federal grant monies. An isolated gypsy moth infestation as large as this one must be aggressively addressed before it grows beyond the scale of eradication.

12. **Detail an itemized budget indicating how funds from the Compact and all sources indicated in #7 above will be spent.**

ITEM				IPCC FUNDS	USFS FUNDS	APHIS FUNDS
Personnel (Salary)	**Salary/hr**	**Hours worked**	**No. staff**			
Full Time Staff						
Unit Supervisor	$29.17	208	0	$0		
GIS Intermediate Analyst	$20.02	104	0	$0		
Office Administrative Specialist	$18.84	40	0	$0		
Seasonal Trapper (Ag Tech, Step 2)						
Orientation & Trap set , check, removal, & checkout	$12.77	580	1	$4,074	$1,852	$1,481
Subtotal				$4,074	$1,852	$1,481
Fringe Benefits	**Salary total**	**% Fringe**				
Full Time and Seasonal Staff (FICA Included in Wages)				$0	$0	$0
Subtotal				$0	$0	$0
Travel (mileage, meals, lodging, etc)						
Trapper				$12,968	$1,804	$1,443
Subtotal				$12,968	$1,804	$1,443
Contractual	**Acres**	**# Appl.**	**$/Ac/Appl**			
Aerial Application - 2 x 24 CLU Btk	1519	2	$34.93	$28,363	$31,018	$46,679
Supplies	**Quantity**	**Unit Cost**				
Printing, Mailing, Postage	1	$300.00		$3,804	$830	
Permits	1	$1,500.00		$1,500		
Advertisements & Legal Notices	2	$100.00		$200		
Subtotal				$33,867	$31,848	$46,679
Total Direct Costs				*$50,909*	*$35,504*	*$49,603*
Indirect Costs	**Salary & Fringe**	**Rate:**				
	$4,073.63	26.80%		$1,092	$496	$397
Total Program Cost				$52,000	$36,000	$50,000

13. **If the requested insurance fund money is to be used by a non-party (non-member) State, detail why conditions in the non-party state warrant financial assistance. Also, explain the value of such expenditures to the party (member) State(s).**
N/A

14. **Application submitted by:**
[Compact Administrator in Requesting State]

Name: **Ben Brancel**
Title: **Secretary**
Department: **Wisconsin Department of Ag, Trade, and Consumer Protection**
Mailing Address: **2811 Agriculture Dr., Madison, WI 53718**
Telephone: **608-224-5012**
Fax: **608-224-5045**
Email: **Ben.Brancel@wisconsin.gov**
Date of Application: **2/4/11**

Name: **Doug Goehring**
Title: **Commissioner**
Department: **North Dakota Department of Agriculture**
Mailing Address: **600 E Boulevard Ave Dept 602, Bismarck, ND 58505**
Telephone: **701-328-4754**
Fax: **701-328-4567**
Email: **ndda@nd.gov**
Date of Application: **2/7/11**

The following person(s) in the **REQUESTING** state(s) can be contacted for further details:

Name: **Brian Kuhn**
Title: **Director, Bureau of Plant Industry**
Department: **WI Department of Ag, Trade, and Consumer Protection**
Mailing Address: **2811 Agriculture Dr., Madison, WI 53718**
Telephone: **608-224-4590**
Fax: **608-224-4656**
Email: **brian.kuhn@wisconsin.gov**

Name: **Dave Nelson**
Title: **State Entomologist**
Department: **North Dakota Department of Agriculture**
Mailing Address: **600 East Boulevard Ave, Bismarck, ND 58505**
Telephone: **701-328-4765**
Fax: **701-328-4567**
Email: **danelson@state.nd.us**

(Continue list for each requesting state, if applicable)

The following person(s) in the **RESPONDING** state can be contacted for further details:

Name: **Lucia Hunt**
Title: **Gypsy Moth Unit Supervisor**
Department: **Plant Protection Division, Minnesota Department of Agriculture**
Mailing Address: **625 Robert St. North, St. Paul, MN 55155**
Telephone: **651-201-6329**
Fax: **651-201-6108**
Email: **lucia.hunt@state.mn.us**

References

Allen, V.T., Miller III, O.F., & Tyler, W.B. (1991) Gypsy moth caterpillar dermatitis—revisited. *Journal of the American Academy of Dermatology* 24: 979-981.

Leuschner, W.A., Young, J.A., Waldon, S.A., & Ravlin, F.W. (1996) Potential benefits of slowing the gypsy moth's spread. *Southern Journal of Applied Forestry* 20: 65-73.

Sharov, A.A.; Liebhold, A.M. 1998. Bioeconomics of managing the spread of exotic pest species with barrier zones. *Ecological Applications* 8: 833-845.

Sills, E.O. 2008. Assessment of the Economic Feasibility of the Gypsy Moth Slow the Spread Project. Final Report to USDA Forest Service State & Private Forestry, Grant # NC-06-DG-11244225-337.

Tuthill, R.W., Canada, A.T., Wilcock, K., Etkind, P.H., O'Dell , T.M., & Shama, S.K. (1984) An epidemiologic study of gypsy moth rash. *American Journal of Public Health* 74: 799-803.

COOPERATIVE AGREEMENT
BETWEEN
THE INTERSTATE PEST CONTROL COMPACT
AND

MINNESOTA
(Responding State)

The principal parties to this Cooperative Agreement are the Interstate Pest Control Compact, hereinafter called the Compact, and the State of Minnesota, hereinafter called the Responding State.

The purpose of this Cooperative Agreement is to stipulate the general conditions under which the Compact will provide funds to the Responding State to finance other than normal pest control operations, hereinafter called Project, as approved by the Compact Governing Board. Such Project will be provided to the Responding State as an approved "Request for Financial Assistance from the Pest Control Insurance Fund," hereinafter called Request.

The cooperation shall be conducted consistent with the Compact enabling legislation, as adopted by member states, and the Bylaws of the Compact Insurance Fund and with all applicable statutes and regulations of the Responding State.

A. The Compact Agrees:
   1. To provide funds in the amount of **$52,000** to the responding State upon timely and satisfactory completion of the Project as outlined in the request, or upon satisfactory evidence that expenses have been incurred on account of measures taken toward Project completion.
   2. To furnish the services of the Compact Executive Director whose duties shall include coordinating activities relative to this Cooperative Agreement.
   3. To furnish the services of the Compact Technical Committee for advisory purposes, as mutually agreed, or for Project evaluation and monitoring.

B. The Responding State Agrees:
   1. To provide necessary resources to perform Project activities as outlined in the Request in an expeditious and efficient manner.
   2. To submit a progress report on Project activities to the Compact Executive Director by **January 31, 2012.**
   3. To submit a final report to include evidence of satisfactory and timely completion of the Project and including a detailed financial statement of funds expended, to the Compact Executive Director by **January 31, 2012.**
   4. To cooperate fully with the Compact technical Committee in any evaluation or monitoring of the Project, either during progress or after completion.
   5. To maintain pest control and eradication activities of interstate significance at a level that would be reasonable in the absence of the Project.
   6. To meet emergency outbreaks or infestations of interstate significance to no less an extent than would have been done in the absence of this Project.

C. It is Mutually Understood and Agreed:
   1. That the cooperating parties may mutually agree to minor adjustments in Project details as outlined in the Request, consistent with Project objectives.
   2. This agreement shall become effective upon date of final signature and shall continue until **December 31, 2011**, unless amended by mutual agreement of both parties.

Charles C. Coffman

Charles C. Coffman
Executive Director, Interstate Pest Control Compact

Date: February 17, 2011

Dave Frederickson
Commissioner, Minnesota Dept. of Agriculture

Date: 2/22/11

INTERSTATE PEST CONTROL COMPACT
FINAL REPORT

Responding State: _____ Date Project Approved: _____
Requesting State(s): _____ Date Project Completed: _____

Project Title: _____

Brief Summary of the Project *(limit to 2 pages or less)*:

A. Reason for Requesting Funds:

B. Action Taken:

C. Results:

Financial Statement:

Compact Funds Authorized $_____

Expenditures:	**Compact Funds**	**State Funds**	**Other Funds (Specify)**
Personal Services:			
Equipment:			
Supplies:			
Travel & Subsistence:			
Other Expenses:			
Total:			
Additional Comments:			
Submitted By:		Date:	
Title:			
Agency & Address:			

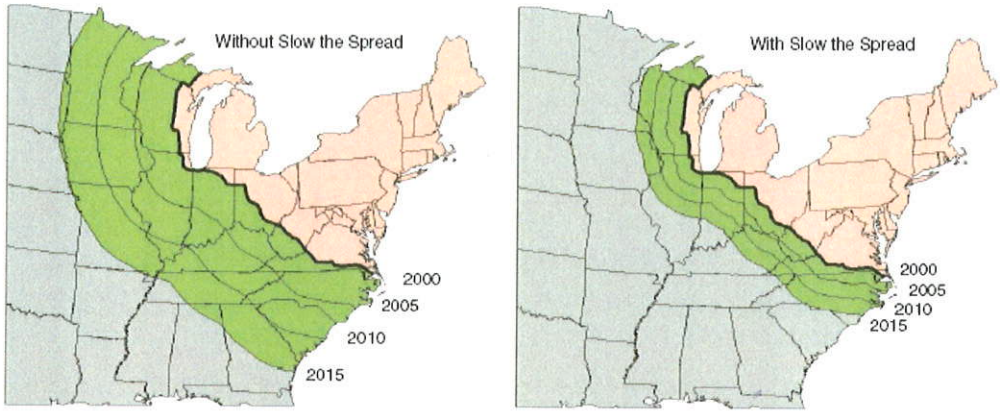


Figure 6. **Projected gypsy moth spread with and without the Slow the Spread project.**

COMMISSIONER
DOUG GOEHRING

ndda@nd.gov
www.agdepartment.com

NORTH DAKOTA
DEPARTMENT OF AGRICULTURE
STATE CAPITOL
600 E BOULEVARD AVE DEPT 602
BISMARCK ND 58505-0020

February 7, 2011

Charles Coffman
Executive Director
Interstate Pest Control Compact
845 Sutherland Drive
Saint Albans, WV 25177

Dear Mr. Coffman:

The North Dakota Department of Agriculture requests that funding from the Interstate Pest Control Compact (IPCC) Insurance fund be provided to assist Minnesota in the eradication of infestations of European gypsy moth in the Minneapolis/St. Paul metropolitan area. These funds would be used as a match to allow access to funding from USDA-APHIS-PPQ and the USDA-Forest Service under plans support by the Gypsy Moth Program Advisory Committee.

The gypsy moth infestation in Minneapolis is isolated and far from the main front in central Wisconsin. Failure to eradicate the outlier infestations in Minneapolis would compromise the integrity of the Gypsy Moth Slow the Spread program which has been very effective in protecting the nation's hardwood forests outside of the quarantine area.

While North Dakota is not a heavily forested state the forest resources we do have are important. Urban forests are important infrastructure in the state's 387 communities and encompass 629 square miles. Farmstead plantings and 55,000 miles of windbreaks are vital components of the agricultural infrastructure of the state. Forest areas comprise about two percent of the state with about 70 percent of the forested area classified as timberland. This includes native upland and riparian forests and state park system forested areas. These resources provide significant benefits including wildlife habitat, recreational opportunities, and wood products and contribute to soil conservation, riverbank stabilization, and filtration of runoff from agricultural lands.

North Dakota's forest resources include species susceptible to attack by gypsy moth which is why delaying its introduction is important. The impending threat of emerald ash borer to the ash resources of North Dakota makes these other tree species even more important.

I encourage the IPCC to favorably consider the request for funding to assist in the eradication of gypsy moth in the Minneapolis metropolitan area.

Sincerely,

Doug Goehring
Agriculture Commissioner

State of Wisconsin
Governor Scott Walker

Department of Agriculture, Trade and Consumer Protection
Ben Brancel, Secretary

February 4, 2011

Charles Coffman
Executive Director
Interstate Pest Control Compact
845 Sutherland Drive
Saint Albans, WV 25177

Dear Mr. Coffman:

The state of Wisconsin requests that funds from the Interstate Pest Control Compact (IPCC) be used to assist Minnesota in the eradication of gypsy moth in the metropolitan area of Minneapolis/St. Paul. These infestations are a great distance from the leading edge of the generally infested area in central Wisconsin. Taking no action would compromise the integrity of the Gypsy Moth Slow-the-Spread (STS) program.

Wisconsin and the USDA have invested significant resources in the STS program for over a decade, to defend and sustain Wisconsin's $28 billion forestry resource. Those efforts have included actions to eradicate isolated, outlier populations like those identified in Minnesota. Those eradication efforts have been very successful at eliminating Gypsy moth infestations. On the basis of the established eradication protocols and the track record of success, eradication of these isolated populations is a reasonable expectation. Additionally, the funding provided by the IPCC will leverage federal funding that will be contributed toward this eradication effort. Not treating these isolated, reproducing populations shoots a hole through the coordinated, multi-state STS partnership and would undermine Wisconsin's investment in the STS program.

The Gypsy moth feeds on over 300 species of trees and shrubs. Gypsy moth poses a serious threat to natural resources, property values and the tourism industry as its caterpillars are one of the most destructive defoliators of both hard and softwood trees. Approximately 75 percent of the nation's hardwood forests lie outside the current Gypsy Moth quarantine area and are protected by the coordinated efforts of the state/federal STS program.

In summary, by reducing the rate at which gypsy moth spreads, and by detecting and eradicating outlying infestations, the Gypsy Moth Program protects the Nation's forests from this damaging pest. This eradication effort reduces the risk of Gypsy moth establishment and spread for all states surrounding Minnesota. I encourage the committee's prompt approval of this request.

Sincerely,

Ben Brancel

Ben Brancel
Secretary