



PESTICIDE ALERT: PROPOSED USE OF DIMILIN FOR CONTROLLING GYPSY MOTH

New Jersey's Department of Agriculture is proposing to amend its regulations to allow aerial spraying of chemical pesticides on state and private lands to control gypsy moth caterpillars. A decision by the Department of Environmental Protection to lift the current ban on aerial spraying of chemical pesticides is expected by the end of January. The State is proposing to aerial spray the toxic chemical Dimilin on 6,000 acres of state forest, Brendan Byrne and Bass River State forests, and 27,000 acres of private land, including home lots, in 22 municipalities. The Pinelands municipalities (in the box below) will have the option, if

the proposed rule gets approved, to have Dimilin sprayed on certain blocks for Gypsy Moth.

Dimilin, the trade name for Diflubenzuron, is an insect growth regulator, which is classified as a Restricted Use Pesticide by EPA due to its severe toxicity to aquatic organisms and other hazards to wildlife (University of Maryland, 2000). Diflubenzuron degrades most rapidly in alkaline water and more slowly in acidic water (half life is 16+ days), and the half-life in soil is between four days and four months, depending on the particle size (Willcox and Coffey, 1978). One study reports that 90% of the pesticide could be detected on leaves thirty to sixty days after treatment (Willcox and Coffey, 1978). Based on this research, the Pinelands with its acidic waters and sandy soils would retain Dimilin for a much longer time period than in alkaline ecosystems and thus would likely pose a greater threat to aquatic invertebrates and other wildlife living off of the aquatic ecosystem and to residents who come into contact with the chemical.

This proposal raises significant human and ecological health concerns and provides questionable benefits. This pesticide:

- will continue to have a 6-9 month residual in leaf litter after the chemical has been applied;
- is highly toxic to aquatic insects and crustaceans (i.e., blue crab reproduction is impaired at concentrations with an LC50 (concentration needed to kill 50% of the test population) of only 0.5 parts per billion);
- breaks down into a probable human carcinogen (called 4-chloroaniline or known as PCA);
- can rob the blood of oxygen;
- is an endocrine disruptor, capable of reducing testosterone; and
- may not relieve and may prolong the gypsy moth infestation.

Proposed Number of acres for Dimilin spraying	
Atlantic County	
Estell Manor	630
Galloway	1320
Hamilton	126
Cape May County	
Upper Township	214
Burlington County	
Medford	1380
Pemberton	3445
Shamong	1432
Southampton	1560
Tabernacle	4752
Washington	664
Woodland	1123
Ocean County	
Jackson	2195
Manchester	1920
Ocean	93
Plumsted	835

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The government suggests that Dimilin not be sprayed during days and hours when children are most likely to be around. But even spraying during school hours leaves children who are too young to go to school, home-schoolers and adults in the way of the spraying. The proposed Department of Agriculture spray areas are all in forested residential areas. The New Jersey public policy for the past twenty years has generally not supported aerial application of broad spectrum pesticides over residential areas except in extreme circumstances like the threat of West Nile Virus from mosquitoes.

Since 1985, the Dept. of Agriculture and the NJDEP have used ONLY Bt, a biological pesticide with no known mammalian toxicity as the pesticide of choice for gypsy moth suppression. Bt. provides adequate protection from defoliation when properly applied without the risks associated with Dimilin. Without human intervention, gypsy moth populations rise and fall in cycles, and are subject to collapse due to a naturally occurring fungus. Spraying has a questionable impact on the cycle; in fact, some scientists believe spraying may actually prolong the cycle.

PPA is concerned about tree defoliation, but believes based on the research that Bt meets the needs to protect trees from repeated defoliation while also minimizing human and wildlife exposure to chemical pesticides, including Dimilin, that have potential adverse effects on humans and wildlife. A number of unanswered concerns are not being addressed by the department regarding residual of Dimilin in acidic environments, the effects of over spray or accidental spray of water bodies to aquatic invertebrates and food chains they support, and health effects to humans when being sprayed by aerial applications of Dimilin.

What you can do:

There are two quick steps you can take to ensure Governor Corzine sees the forest through the trees and maintains the ban on aerial spraying of toxic pesticides!

- Email Governor Corzine now by visiting: <http://actionstudio.org/?go=2645>.
- Call Governor Corzine now at 609-292-6000.

Tell the Governor's office that the Department of Agriculture is not providing enough time for public comment; the aerial ban for spraying should not be lifted, and Dimilin should not be provided as an alternative to Bt.

- Contact the Department of Agriculture at 609-292-5442 or email at agpzolt@ag.state.nj.us to also give your comments.

For more information, please contact Jaclyn Rhoads at Pinelands Preservation Alliance at 609-859-8860 ext. 18 or jaclyn@pinelandsalliance.org.

References:

University of Maryland, MD Cooperative Extension. 2000. "Restricted Use Pesticides." <http://pest.umd.edu/spatc/Leaflets/>. Willcox and Coffey, USDA-FS. 1978. "Environmental impacts of diflubenzuron (Dimilin TM) insecticides." Northeast Area State and Private Forum.

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 : The gypsy moth, *Lymantria dispar*, is one of North America's
 : most devastating forest pests. The species originally evolved
 : in Europe and Asia and has existed there for thousands of
 : years. In either 1868 or 1869, the gypsy moth was acciden-
 : tally introduced near Boston, MA by E. Leopold Trouvelot. The
 : gypsy moth is known to feed on the foliage of hundreds of
 : species of plants in North America but its most common
 : hosts are oaks and aspen. In most northeastern forests, less
 : than 20% of the trees in a forest will die, but occasionally tree
 : mortality may be very heavy. The gypsy moth has been an
 : established part of the food chain in New Jersey for over thirty
 : years. A variety of natural agents are known to kill gypsy
 : moths in nature. These agents include over 20 insect para-
 : sitoids and predators that were introduced over the last 100
 : years from Asia and Europe. Small mammals are perhaps the
 : most important gypsy moth predator, especially at low popu-
 : lation densities. A nucleopolyhedrosis virus usually causes the
 : collapse of outbreak
 : populations, and
 : recently an ento-
 : mopathogenic fungus
 : species has caused
 : considerable mortali-
 : ty of populations in
 : North America. Gypsy
 : moth populations will
 : fluctuate and reach a
 : peak time of popula-
 : tion growth and will
 : die off after this peak. The outbreak phase is character-
 : ized by populations high enough to cause noticeable tree defolia-
 : tion. Outbreaks are rarely sustained for more than one to two
 : years, after which high levels of mortality, primarily from star-
 : vation and disease, bring about a rapid population crash. This
 : is the decline phase.
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Water Allocation Workshop

Groundwater Supply and Ecosystem Needs

Thursday, January 25, 2007

5:30 to 9:00 PM

Ramada Inn, Vineland

Hosted by
**Pinelands Preservation Alliance &
Association of NJ Environmental
Commissions**

**Presenter: Richard Bizub, Geologist &
Director for Water Programs,
Pinelands Preservation Alliance**

This workshop will focus on the State's water allocation process, and how groundwater withdrawals for public water supplies and for golf courses can impact surface waters such as streams, rivers and wetlands.

A hand-on component will show workshop participants how to analyze the various NJDEP documents to determine loss of surface water flow and potential impacts to threatened and endangered species.

Who should attend: This workshop is geared toward members of watershed associations, land-trusts, environmental commissions, planning boards and interested citizens.

Registration Required: The cost is \$5 for Association of NJ Environmental Commission (ANJEC) members, and \$15 for non-members. A light supper will be served.

To register, call ANJEC directly at 973-539-7547. For additional information contact: info@anjec.org. Please register early since printed materials will be prepared for registrants.

**Location: Ramada Inn
2216 W Landis Avenue
Route 55, Exit 32A
Vineland, NJ, 08360**

SAVE THE DATE! LOBBY DAY

For the
Garden State Preservation Trust

**January 29, 2007
9:00 am - 3:00 pm**

We will be meeting at the Trenton State House to lobby for the renewal and strengthening of the Garden State Preservation Trust. Time is of the essence, so please mark this date on you calendar.

R.S.V.P. or Questions contact
Crystal Snedden, Sierra Club
crystal.snedden@sierraclub.org

The Garden State Preservation Trust (GSPT) is the funding mechanism that has allowed New Jersey to save over 350,000 acres of parks, farmland, and historic sites in the last 10 years. It funds programs like Green Acres and Farmland Preservation, but unfortunately it will run out of money this year. We must act quickly to renew and strengthen GSPT, otherwise we will lose some of our most valuable places to overdevelopment and sprawl. Come out on January 29th and demand action from your legislators.

You can also email or call your legislators:
<http://actionnetwork.org/campaign/GSPT>

PLEASE SUPPORT OUR MISSION & BECOME A MEMBER

Name: _____

Address: _____

City: _____ County: _____ State: _____ Zip: _____

Phone (Day): _____ (Evening): _____

E-Mail: _____

Check enclosed payable to PPA

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Card Number: _____ Exp. Date: _____

Signature of Card Holder: _____

Membership Categories

- Basic \$35
- Family \$60
- Sponsor \$100
- Patron \$250
- Benefactor \$500
- Chairman's Circle \$1,000
- Other _____

All members receive:
 A PPA membership card
 A year's subscription to *Inside the Pinelands*
 A Free *Pinelands Adventure*
 A PPA window sticker
 Discounts on PPA merchandise and events

A Sponsor will receive an *Exploring the Pine Barrens of New Jersey* map
 A Patron will receive a copy of *Exploring the Pine Barrens of New Jersey* book
 A Benefactor will receive a Pinelands Botanical Print by Robin Jess
 A member of the Chairman's Circle will receive a personalized tour of the Pinelands



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