

**The Child Safe Playing Fields Act:
NY's ban on pesticide use on school and day care center grounds**

Dr. Jennifer Grant, NYS IPM Program at Cornell University

*Adapted from an article originally printed in Cornell University Turfgrass Times, Vol. 22(1), 2011

By now you've probably heard that a new law in New York State essentially bans pesticide use on the grounds of schools and day care centers. It is commonly called the *Child Safe Playing Fields Act*. The law exempts a few pesticide uses (very few), and includes a provision for requesting permission to make emergency applications. Though many of you have already curtailed your pesticide use for budgetary or policy reasons, others will have to find alternative ways to prevent and deal with their pest problems. This mandate is sure to usher in renewed emphasis on good cultural practices and field management. Sounds like time to go back to the basics of IPM...

First, let's review the letter of the law. You can see the full text at <http://public.leginfo.state.ny.us/menugtf.cgi?COMMONQUERY=LAWS> (Education Law 409-k for schools; Social Services Law 390-g for day care centers). The Department of Environmental Conservation (DEC), in consultation with the State Department of Education and Department of Health, has written guidance for alternative management of turf—as mandated by the law—but has no role in enforcement. DEC also consulted with the Office of Children and Family Services regarding the guidance. The guidance has been released and can be found at (<http://www.dec.ny.gov/chemical/41822.html>).

The following questions and answers should help you understand the implications, and prepare to live under the new law.

What areas are affected?

“No school or day care shall apply pesticide to any playgrounds, turf, athletic or playing fields.” The DEC guidance further clarifies that playground equipment is included, and that family day care centers are exempted. Pesticides used inside of schools or day care centers, or to protect a structure, are not banned. Although ornamental plants such as trees, shrubs and flowers are not specifically mentioned, a representative from the State Education Department indicated to me that the intent of the law is to reduce children's exposure to pesticides, so it would be best to attempt to eliminate all use outside.

When does the ban take effect?

November 14, 2010 for day care centers and May 18, 2011 for schools.

What pesticides are included, and are there any exceptions?

Pesticides are substance intended to prevent, destroy, repel or mitigate pests and any substance or mixture of substances intended as a plant growth regulator, defoliant or desiccant. They include insecticides, fungicides, herbicides and plant growth regulators. All are banned by this law for use on grounds at schools and day care centers, with the exceptions summarized below:

1. Antimicrobials such as bleach.
2. Aerosol sprays (18 ounce or less) to protect from imminent danger from stinging or biting insects
3. Insect and rodent baits in non-volatile containers

4. Products containing boric acid or disodium octaborate tetrahydrate
5. Horticultural oils and soaps
6. EPA exempt pesticides or *minimum risk pesticides* are not registered by EPA, because they find them to pose little or no risk. They include corn gluten meal, garlic, many plant-derived oils and other active ingredients. More info at http://www.epa.gov/oppbppd1/biopesticides/regtools/25b_list.htm.

Are exemptions available for emergencies?

Yes. Under the law, a public school can seek permission for an emergency application from their school board. Non-public schools and day care centers ask the Department of Health in the case of emergencies that threaten public health, or the DEC for those significantly affecting the environment. The law does not indicate what might be construed as an “emergency”.

The DEC Guidance advises that the DEC, State DOH and SED, in consultation with OCFS, identified the following situations that these agencies generally would NOT consider to warrant an emergency pesticide application determination:

- Routine or repetitive problems;
- Pests which can be managed with allowed pesticides or alternative practices; and
- When the pesticide application would be for purely aesthetic purposes.

Where do we go from here?

We have tried to establish the basics of the law above, sticking closely to the language of the law and the interpretation offered in the DEC draft guidance. Now let’s move onto how you can manage without pesticides, from the Cornell perspective. Many of you already manage your schools or day care center grounds with few or no pesticides, and we encourage you to share your successes with your peers. The basics of good turfgrass and field management are more important than ever.

1. Overseed, a lot!
2. Irrigate—at least your high priority fields
3. Keep field use at a reasonable level
4. Maintain good field fertility levels
5. Mow at as high a height as your grass and sport will allow

Looking at the sunny side of this situation, now is a good time for you to reestablish these priorities for yourself, staff, school board, coaches, athletes, and outside community groups. When the school board asks how you’re going to handle the new law, tell them your cultural management strategies, and that you need more seed, more staff, a water cannon, more practice fields—whatever it is that you do need. Discussion of the law can open up new avenues of conversation that may have been shut for years, giving you an opportunity to demonstrate your professional knowledge.

Should I go for one last hurrah?

Does it make any sense to make a pesticide application before the looming cutoff date for schools of May 18, 2011? Some may put their heads in the sand, and apply pesticides while they still can. Doing so without a transition plan seems irresponsible. However, with a good plan in

place, targeted applications may help you attain better turf and field quality in the upcoming years.

Use of a preemergent herbicide to prevent crabgrass germination is a good case in point—IF this spring application is followed by a rigorous program to establish and maintain a dense turfgrass stand. Also, herbicides aimed at poison ivy or other noxious weeds or invasive plants can give you a fighting chance at keeping these weeds under control through physical removal and cultural management down the road.

When it comes to grub control, insecticides applied before the deadline may offer you protection through the season, though it is a little earlier than we'd normally suggest a treatment. It will also not afford you any help in the transition. Grub management without pesticides is going to be difficult.

Are there problems I won't be able to handle without pesticides?

That's a loaded question. Theoretically, you should be able to keep a dense stand of healthy turfgrass if you oversee heavily, have water when needed, and are able to rotate play to alternate fields as needed. However, most schools don't have enough fields to keep the traffic on the game fields at acceptable levels, and often aren't successful in keeping play off of wet fields. These problems need to be addressed at their root cause. An occasional emergency herbicide application, if granted, would not solve these issues.

White grubs, poison ivy, and several species of invasive plants may also pose problems. Currently, the only hope for non-pesticidal control of grubs is the use of beneficial nematodes—a costly solution with inconsistent results. Arguably, a high population of grubs that decimates turfgrass roots, thereby wreaking havoc on the footing for student athletes, can be a safety issue. Does that warrant an “emergency pesticide application”? Each school board (or the DEC or DOH) will be the judge. Likewise, high populations of weeds in a playing field provide poor footing. However, I believe they are more likely to be considered a routine or repetitive pest problem, and would not qualify as an emergency application.

Keeping poison ivy and many other invasive plants in check won't be easy. Physical removal along with the potential use of alternative, allowable herbicides containing acetic acid, citric acid, or plant-based oils will help. Minimizing preexisting levels, as discussed above, may also be critical for success.

How can I best prepare for managing my playing fields and lawns without pesticides?

1. Review your historical and potential pest problems, and generate plans to prevent and manage them.
2. Make a plan to optimize cultural management of your fields and lawns, and **COMMUNICATE** it to others. Be sure to involve your staff, coaches, players, teachers, parents, school board and other interested community members.
3. Apply any critical, targeted pesticide applications before mid May, 2011.
4. Decide which problems would constitute an “emergency” in your opinion, and present them (in advance of the problem arising) to your school board if you are at a public school, or the Health Department or DEC (as appropriate) if you are at a non-public

school or day care center. This should encourage thoughtful discussion and consideration before a crisis arises. It will also alert you as to what their concerns may be, and better prepare you for requesting an emergency application if the need arises.

Conclusions

The limitations created by the *Child Safe Playing Fields Act* will likely change how you do business, in either small or large ways. It's up to you to make the changes be positive. Make your playing fields even better than before. Educate your school board, students, parents and community. Turn your grounds crew into plant health managers. It's all possible, but nobody said it was going to be easy. Good luck!

Active Ingredients Exempted Under 25(b) of the Federal Insecticide, Fungicide, & Rodenticide Act

* indicates exempt active ingredients that are also exempt from pesticide residue tolerance requirements

Castor oil (U.S.P. or equivalent)*	Linseed oil
Cedar oil	Malic acid
Cinnamon and cinnamon oil*	Mint and mint oil
Citric acid*	Peppermint and peppermint oil*
Citronella and Citronella oil	2-Phenethyl propionate (2-phenylethyl propionate)
Cloves and clove oil*	Potassium sorbate
Corn gluten meal*	Putrescent whole egg solids
Corn oil*	Rosemary and rosemary oil*
Cottonseed oil*	Sesame (includes ground sesame plant) and sesame oil*
Dried Blood	Sodium chloride (common salt) *
Eugenol	Sodium lauryl sulfate
Garlic and garlic oil*	Soybean oil
Geraniol*	Thyme and thyme oil*
Geranium oil	White pepper
Lauryl sulfate	Zinc metal strips (consisting solely of zinc metal and impurities)
Lemongrass oil	

http://www.epa.gov/opp00001/biopesticides/regtools/25b_list.htm - content