Final Project Report to the NYS IPM Program, Community IPM 2000 – 2001

Title: Community Education & Outreach to Increase Awareness and Adoption of Landscape IPM Practices in support of the Requirements of the NYS Pesticide Notification Law.

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Type of grant: Training practitioners to use IPM techniques; Public Education

Project location(s): Tompkins County, NY

Abstract: This project was undertaken in response to County consideration of the adoption of the NYS Pesticide Notification Law. County officials felt that additional information and public education was needed. Cornell Cooperative Extension of Tompkins County assumed leadership for outreach efforts and applied for Community IPM funds to support the work. The goal of this project was to use the NYS Pesticide Notification Law as a timely opportunity to teach IPM principles and practices to turf and landscape industry professionals, garden center staff, Master Gardener volunteers, and the general public using a variety of outreach methods including workshops, field days, meetings, newspaper and radio. As a result of the outreach efforts, all landscape, turf and garden center operators in the county became informed about the Notification law, about IPM practices and strategies for managing pests if the law was adopted. A survey of pesticide applicators revealed that only a very limited number and quantify of pesticides are used in the County and that IPM practices are applied. As part of the effort to educate the public, Master Gardener Growline volunteers were trained to make recommendations that avoided or limited pesticide use. Records of phone calls show that approximately 120 people were instructed on how to manage pests in the landscape without pesticides. Additionally 20 people were reached at a public class on Lawn Care Without Pesticides and via newspaper and radio reports. As a result of this outreach effort, the County has evidence that further supports the need for public education, moreso than to regulate the industry given limited pesticide use.

Background and justification: In December 2000 the Tompkins County Environmental Management Council brought the issue of local adoption of the Pesticide Notification law to the County’s Planning Committee. County officials felt several questions needed to be addressed prior to considering adoption of the law in Tompkins County. These included: what the county’s responsibility for and capacity to enforce the law is; how other counties that had adopted the law were handling enforcement and other issues; impact of the law in terms of protecting residents and on the lawn care industry; and alternatives to adoption including public education to reduce pesticide use.

In response to some of the above questions, Cooperative Extension initiated a phone survey of the landscape and turf industry and garden center operators to determine their level of
awareness and understanding of the law. While there was some awareness, many had not considered adjustments they would make in their pest management practices or recommendations if the law were locally adopted. This demonstrated the need to educate the industry on alternative pest management strategies including IPM practices. Additionally county residents also had not been made aware of how the law would impact them when treating their own properties. The County’s decision to focus on education during 2001 and reconsider the law in 2002 provided an opportunity for CCETC to plan and implement several educationanl targeted outreach activities.

**Objectives:**
1. Use the Pesticide Notification Law as an opportunity to educate the public and members of the landscape industry about IPM practices and alternatives to landscape pest management and increase their adoption.
2. Increase public awareness of the Pesticide Notification Law and how it will impact them, and make them aware of pest management practices that do not require the use of pesticides.
3. Inform Master Gardener Growline volunteers about the Pesticide Notification Law and train them in assisting callers with making appropriate pest management choices that limit or eliminate pesticide use.
4. Inform local government officials about the extent to which pesticides are used in the county by the landscape and turf industry and about the potential impact of the law, as well as, about the experiences of other counties that have adopted or are considering adoption of the law.

**Procedures:**
1. Efforts to inform/educate the landscape industry included the following:
   • Phone survey of industry members to assess awareness of Pesticide Notification Law (Feb. 1, 2001).
   • Meeting of operators of Landscape and Turf Companies, Grounds Maintenance Professionals and Garden Center Operators to discuss law and present information about IPM practices and alternatives for pest management if the law is adopted, Feb. 9, 2001, Ithaca.
   • Sent information about Cornell Turf Field Day, Aug. 21, Ithaca.
   • Consultation provided throughout the season as requested.
   • Mail Survey of Landscape and Turf Companies, and Grounds Maintenance Professionals about pesticide use during 2001 season (Nov. 2001).
2. Efforts to inform/educate the public included the following:
   • Public Meeting – Chemical Free Lawn Care – May 24, 2001, Ithaca.
   • Articles in newsletters: Ithaca Journal press release-May; Caring for Children with Special Needs–summer newsletter.
3. Efforts to inform/educate Master Gardener volunteers included the following:
   • Training for Growline volunteers to inform them about the law, reinforce basic IPM practices and principles, and instruct them on appropriate recommendations for managing landscape pests. Also pointed out resource materials for their use in making recommendations.
4. Efforts to inform/educate local officials and agency staff included the following:
   • Meeting with representatives of Cooperative Extension, County EMC, Planning, Health Departments and County government to discuss strategies for educating/informing both the public and county officials about the impact of the law if adopted, April 3, 2001.
   • Presentation to County Board of Health about the Pesticide Notification Law to inform them about it’s implications for enforcement if the law is adopted, April 10, 2001.
Results and discussion:

Impacts on Turf/Landscape Industry
Turf and Landscape industry professionals attitudes about the Pesticide Notification Law and its impact changed significantly between the phone survey conducted in early February and the follow-up survey conducted in the fall. Phone survey results revealed that only about half of the people (27 total) called were aware of the law while the survey conducted in the fall revealed that most of the members of the industry were aware of the law and were prepared to respond to it if locally adopted.

24 business owners and key staff attended an information meeting on Feb. 9 to learn about the pesticide law and alternatives to use of liquid pesticides if the Notification Law is adopted. Fall survey results show that liquid pesticides were used but for limited purposes where the liquid materials are the preferred choice for efficacious control, i.e., Round-up for general weed control and the liquid turf herbicides for broadleaf weed control. From the survey it is evident that industry members are selective about the type and amount of pesticide applications. The total number of customers served by the commercial industry in the County is only 500-600 properties which indicates that the risk of exposure to pesticide applications made by commercial applicators by the total population (100,000) is minimal. However, depending on the size of the firm, the impact on the business if a law was passed was moderate to major.

Impacts on Public Awareness
19 people attended the class on Lawn Care without Pesticides and voiced their support for the Notification law or their concern about having to notify neighbors. While the attendance number is low, this is nonetheless significant because past experience with hosting lawn care classes was dismal with only 3-5 people attending, hence this represents a 400% increase in attendance and demonstrates public interest in limiting pesticide use and exposure. At the class, it was stressed that successful lawns can be established if attention is paid to cultivar selection, pH and fertilizer management, and through cultural practices such as proper mowing and irrigation. In addition information on proper and safe use of pesticides was presented including information on when and how to spray to reduce drift onto neighbors property. It was also suggested that neighbors be voluntarily notified by the person who is about to spray or have their property sprayed.

The class was publicized in the Ithaca Journal Down to Earth Column and hence information about the notification law reached many more people (circulation approx. 30,000) though the impact is limited to those who took notice. The radio interview on Casey Stevens show which reaches well over 100,000 people did result in a few follow-up phone calls for clarification about the law and impacts.

Growline Training Impacts
A group of 12 Tompkins County Master Gardeners work from April to November answering an average of 70 calls per month from the public on pest management questions. Volunteers are trained both on the job and in bi-weekly Growline staff meetings where detailed information is presented on pests and management options. Volunteers received training about the pesticide notification law at their April meeting and were reminded of tools to aid them in proper diagnosis and procedures in making pest management recommendations. Volunteers are
instructed to send written information in lieu of making pesticide recommendations on the phone. On the phone they are to stress alternatives to pesticides only. Information on each call is recorded and reviewed at the Growline staff meetings where responses are discussed. In addition, Pat Curran, Horticulture Program Manager is located within earshot of volunteers and is able to guide them if they get stuck. Based on Growline phone records, evidence exists that volunteers suggested non-chemical alternatives when making pest management recommendations. This means that 120 of the people calling about landscape pest problems were able to respond to a problem in a more informed and eco-friendly manner.

Impact on Government Decision-Making
Throughout this year, County EMC and the County Planning committee continued to stay abreast of this matter, however, it was not brought back onto the County Planning committee agenda until late in the year—too late for action that would result in adoption of the law in 2002. Instead it was decided based on information gathered both from the industry and from other counties, that the law continue to be considered and that education efforts be further developed in 2002. CCETC presented information to the County Planning Committee and EMC that revealed what was already suspected, that pesticide use by the turf and landscape industry is limited to relatively few operations and that the products used are minimal and that on a per capita basis pesticide use by the industry is very low. Further assessment of what is used by homeowners is needed suggesting that homeowners should be the target of educational efforts as the industry is already using limited quantities and making appropriate choices as would conform with IPM practices. Plans for a meeting to discuss educational activities in 2002 are underway.

Summary of Educational Needs identified in the above outreach and education efforts:
Among the general public (including government representatives) the conventional wisdom is that all pesticides are bad. Yet there is the contradictory opposing view among some members of the public, that when it comes to a problem that annoys me in the least way, I will use whatever is needed at whatever dose to eliminate the problem. Unfortunately both views are incorrect and this makes it challenging to educate the public on this issue without appearing to be an advocate pro or con for pesticides. In large part this is due to the fact that the public lacks understanding of toxicology and environmental fate of pesticides.

Some of the educational needs and opportunities identified as a result of this outreach effort include:
- information that explains toxicity, dose and exposure
- information on how pesticides breakdown and time it takes
- information that eliminates painting with a broad brush—all pesticides are not equally toxic—perhaps more specificity is needed for a clearer understanding of the mode of action or how the material is derived...eg growth regulators, botanicals, etc.
- information that explains testing that is required by the registration process
- recommendations that first stress cultural and least toxic strategies for pest management that is made available at point of sale; i.e. approach the problem completely opposite from the product on the shelf mentality to a pest minimalization mentality
- information that explains proper pesticide use for those who chose to use them including pesticide use "etiquette"
- information that enables pesticide users to make more informed choices about least toxic alternatives (perhaps a rating system for use on labels that is required for consumer-over-the-counter materials)
- emphasis on risk management

Benefits of this Project
Public relations: This project allowed CCETC to take the lead in working to fulfill County government’s request to focus on education and demonstrate resources of the CU IPM program
and extension system. The County looks to us for this kind of information. Additionally it allowed us to partner with County agencies and advisory groups such as the EMC and County Health Dept. The cooperative approach to addressing this issue has been appreciated by government officials who want to see agencies working together on behalf of the public. Furthermore it enabled us to act on behalf of the industry of which they were aware and appreciative.

**CCETC Horticulture Program:** As a result of this effort, Growline volunteers became more conscious of their responses to caller questions which improves our reputation with the public. This program further helped to focus our horticulture program work plan on eco-gardening and least toxic practices given public concern and lack of understand of pesticides and their use.

**Factors that limited project impacts**
The vision for this project in terms of providing the public with a consistent message via the media was not realized in part due to the inability to hire a work study student with sufficient knowledge to develop copy and press releases on the subject. So efforts fell back into the hands of staff members Monika Roth and Pat Curran who made their best attempt at getting information out. In the future, it will be worth it to hire someone with greater understanding of pest biology and management in order to be able to increase outreach. Given County interest in education, we hope to request additional support from government to further develop our outreach efforts.

Additionally the training of Garden center employees proved to be difficult since employers hire over a long period of time without much lead time prior to the season when the employers are reluctant to release staff from the job for off-site training. A future idea is to host in-store training for staff rather than to try to get staff to attend workshop in one location. This seems feasible since there are not too many garden centers in the county.

**Samples of Materials**

**Industry Outreach**
- Feb. 9 Meeting Announcement
- Feb. 9 Meeting Agenda
- Letter and Survey sent Nov. 7, 2001
- Survey Results - presented to County Planning Committee on Nov. 28, 2001

**Public Outreach**
- Class Notice and Flyer
- Article appearing in Caring for Children with Special Needs newsletter, produced by County Health Dept.
- Radio show was not recorded