Title: Facilitation of School District IPM Implementation

Project Leader: Lynn Braband

Cooperators: Livonia School District, Genesee Valley BOCES, CCE of Livingston County, Rentokil Pest Control, Debra Marvin

Type of grant: Cultural methods; sanitation; physical controls

Project location: Livonia Central School District, Livonia, Livingston Co.

Abstract: Genesee Valley BOCES recommended the Livonia School District as a partner for developing a comprehensive IPM program. During 2000, the partnership was initiated. Specific projects included adoption of a district pest management policy, in-service training, and assistance in IPM implementation with an emphasis on stinging insects, mice, lice, and ants.

Background and justification: In late 1999, the Livonia Central School District was identified as a partner for the development of a comprehensive school IPM program. Genesee Valley BOCES personnel recommended Livonia because of the probable good cooperation of the school administration and the district’s desire to reduce pesticide use. The project has focused on the Primary School. During 2000, our partnership has resulted in the adoption of a district pest management policy, proactive stinging insect management, building exterior exclusion, and the initial steps of a rodent monitoring program and lice education project. Additionally, a successful and well-attended workshop was held at Livonia that highlighted the demonstration project to other school districts. During 2001, the goal was to build upon and finish the objectives of the partnership.

Objectives:
1) IPM training of district and pest control personnel. (Date to be decided by Livonia School District)
2) Assist general implementation of IPM. (Throughout project)
3) Continue a focus project on mice. (Throughout project, especially in Autumn and Winter)
4) Continue a focus project on lice. (Throughout project, especially September 2001)
5) Conduct a focus project on ants. (Throughout project, especially non-Winter)
6) Hold educational meeting on district property. (October 2001)

Procedures:
1) Conduct an in-service for buildings and grounds personnel, cafeteria staff, and pest control contractors.
2) Conduct monthly inspections (especially of the Primary School) and monthly evaluations of the record keeping system. Make recommendations based upon the results of the inspections/evaluations.
3) First level of mouse control: exclusion and sanitation. Second level of control: when needed, trap and removal. Third level of control: rodenticides. An approval process will be developed for when, what, and where rodenticides will be used. The outside of the buildings (especially the Primary School) will be monitored to compare “mouse pressure” on the outside to the intensity of mouse problems inside the buildings.
4) Work with the school nurse to update lice policies and educational outreach.
5) Work with pest control contractor on inspection/monitoring procedures. Educate school personnel on consistent “microsanitation” in sensitive/problem areas. Facilitate exclusion as needed. When pesticides are needed (via an approved process), the emphasis will be on baits.
6) Working with Genesee Valley BOCES and CCE of Livingston County, an educational meeting will be held on Livonia School District property to highlight the demonstration project to others outside the school district.

Results and discussion:

IPM Training: On March 30, 2001, an in-service was held for custodial and cafeteria staff of the Livonia School District. Twenty-five people attended. The district’s structural pest control contractor was invited but did not attend. The Texas A&M University videotapes on “IPM for Schools; Module 1: An Introduction” and “IPM for Schools: Module 3: Food Handling Areas” were used. A discussion of IPM practices and products (especially in food handling areas) followed.

General IPM Implementation: The focus was on the Primary School. Monthly, we inspected the exterior of the school looking for signs of pest
problems. Any problems (or potential problems) were reported in writing to the school facilities administration.

We have also been checking the monthly report forms of the school district’s structural pest control contractor. In general, they have reported little pest activity within the district’s buildings. One exception was an ant problem in the High School during spring. We interacted with the custodian where the problem occurred. It had been successfully controlled.

**Mice:** In late September, 17 mouse monitoring stations were set around the foundation of the Primary School. In an effort to compare two techniques, we alternated pairs of mouse traps (8 stations) with bait boxes with non-toxic monitoring blocks (9 stations). The stations were checked weekly through October and monthly since then.

In late October, three pairs of snaptraps and three non-toxic bait stations were similarly placed around the district maintenance/BOCES building. This building appeared to have more mouse “pressure” than the Primary School.

Areas of consistent mouse activity were reported to the school district with recommendations for exclusion. Evaluation of the comparison of the two monitoring techniques (snaptraps versus non-toxic bait blocks) is ongoing.

**Lice:** We have met with the Primary School nurse to suggest updates to their lice policies. Information of lice IPM and lower risk scalp treatments were given her.

**Ants:** Little interior activity occurred during the demonstration period. One episode in the High School was effectively solved by the district’s structural pest control contractor. During monthly inspections of the Primary School, suggestions for preventative exclusion (when needed) were made. However, major construction work in the school limited the practicality of preventative exclusion.

**Educational Meeting:** On October 12, a half day workshop was held in the school district. Twenty-six school (from 16 districts) and BOCES personnel attended. The demonstration (see attached agenda) was described along with the stinging insect project (Livonia was a cooperator with that also). The workshop included a tour. Written evaluations (see attached) were positive with appreciation being expressed for the information on stinging insects, mice, and lice.

**Overall Impact:** The greatest impact probably came from the educational meetings in October 2000 and October 2001. School pest managers from 24 school districts in 8 counties and several BOCES personnel interacted on the IPM principles and practices demonstrated at Livonia.
Future Plans: Withdrawal of grant funds may impact the final months of the demonstration including the development of mice, lice, and ant control protocols. In addition, plans for a second in-service for district maintenance personnel may be affected.

Hopefully, we will have a final meeting in March with all cooperators to discuss the implications of the project.

The Livonia Central School District may partner with our program in 2002 in an athletic field and grounds demonstration project.

References: (See attached)