## PROACTIVE, LOW-TOXIC MANAGEMENT of STINGING INSECTS in CHILD-SENSITIVE AREAS

## Lynn Braban<sup>1</sup> and Jody Gangloff-Kaufmann<sup>2</sup>

<sup>1</sup>NYS IPM Program, Cornell University, Geneva, New York
<sup>2</sup>NYS IPM Program, Nassau Cooperative Extension, Plainview, New York

Stinging insects are among the most frequent and persistent pest problems at schools, parks, and similar locations. Responses for control are usually reactive and involve pesticides. During the past two years, IPM specialists from the New York State Community IPM Program and Cornell Cooperative Extension have worked with proactive, non-toxic, and low-toxic approaches to stinging insect management. These demonstrations were held at schools and other sensitive sites throughout New York State. Sites were inspected regularly for nests. Nests were removed with water sprays and other physical methods. Commercially available, low-toxic insecticides were also used. Additional techniques included sanitation, exclusion, vacuums, and traps. Effectiveness was evaluated by comparing the results of sites with weekly, semimonthly, and monthly inspections. "Managed" schools were also compared to nest counts at "unmanaged" schools. Nurses at "managed" and "unmanaged" schools were also asked to record the number of reported stinging incidents. Additionally, an experimental trial was conducted to assess the effectiveness of perimeter wasp traps for reducing wasp entry into the perimeter.

Semimonthly inspections were sufficient for maintaining control of paper wasps and locating yellow jacket nests. Physical methods and low-toxic sprays were effective in removing paper wasp nests. The removal of yellow jacket nests was more difficult. Vacuums and low toxic insecticides (especially dusts) were among the most promising tools. Physical methods of removing yellow jacket nests were labor intensive. The stinging insect perimeter trap experiment will reveal how effective traps are in maintaining a wasp-free area. The results of this work can be applied to many situations where risks from both pests and pesticides must be minimized, such as schools and day-care facilities.