

# FLANDREAU FLIERS



## Flandreau School's Integrated Pest Management in Schools Newsletter Fall 2009

### 5 Myths about Pesticides

Jim Wilson

South Dakota State University

*A pesticide is "any chemical that is used to control a pest." When we use the word pesticide we include all of the different types: insecticides (for insects), herbicides (for weeds), rodenticides (for rats and mice), bactericide (for bacteria) and many others.*

**Myth #1 – Pesticides are the quickest and best approach to pest problems in the school. Fact:** Pesticides may be one approach, but often it is not the best. Pesticides can be used, but only after the situation justifies its use. Integrated Pest Management (IPM) looks at ways to prevent pests from entering and surviving in your school, as well as using non-chemical control measures first.

**Myth #2 – Pesticides sold today are really very safe for anyone. Fact:** For many people this is a true statement, but every individual is different in their sensitivity to pesticides. Couple this with the fact that because of their body weight and skin area per pound, small children may be affected by exposure to an amount of pesticide that would have no effect on an adult.

**Myth #3 – Over-the-counter pesticides are not as toxic as the ones used on crop fields. Fact:** Over-the-counter (OTC) pesticides contain the same active ingredients as pesticides used on the farm. They may not be as concentrated, but when diluted according to label directions, OTC products are similar in strength and toxicity to those used on crop ground.

**Myth #4 – Anyone in the school can use OTC pesticides. Fact:** According to South Dakota Pesticide law, any governmental employee (i.e. school employee) must be certified and licensed as a commercial pesticide applicator before using any pesticide at their workplace.

**Myth #5 – Using a School IPM approach means no pesticide use in the school. Fact:** School IPM doesn't mean we can't use any pesticides to help control a pest problem, it just means that we have a planned approach focusing on preventing pest problems and only use pesticides as a last resort. If prevention is carried out properly, often pesticides are not needed.

### Head Lice in Schools

Barbara Ogg

University of Nebraska

Millions of children in the U.S. get head lice each year. Identifying infestations is the first step toward controlling this human parasite and stopping its spread.

**Identification.** Adult head lice are about 1/10 to 1/8-inch long and grayish in color. Immature lice are smaller. Head lice are wingless, cannot fly, and do not jump.

Head lice primarily infest children, but will also infest parents, teachers, and daycare providers. Head lice only feed on humans and do not feed on dogs, cats or other small animals, like gerbils or hamsters that may be found in classrooms.

Viable lice eggs ("nits") are cemented to hair shafts about 1/2 inches from the scalp. These eggs are brown and oblong, and are often found at the nape of the neck and above the ears.

When an immature louse hatches, the glue is so strong that the white shell remains attached to the hair shaft. School nurses and parents often mistake this empty eggshell for a viable nit. Other particles are confused with head lice eggs: dandruff, hair castes, and gel from hair care products.

In addition, active head lice are often overlooked by persons examining children. These scenarios may result in children being unnecessarily exposed to pesticides. They also may be not allowed to go to school so it is important to accurately identify head lice and live nits.

**Environmental Treatments Unnecessary.** Head lice get all their food and liquid by feeding on host blood and begin to dry out within 12 hours off the host. Experts believe head lice are transmitted from child to child primarily through head-to-head contact. Children with long hair may pick up lice more frequently than short-cropped hair styles. *(continued on back)*





**Yellowjackets**  
**Mark Shour**  
**Iowa State University**

Serious pests for school officials are stinging insects such as wasps, bees, and some ant species. Their stings are painful and can be very dangerous to those who are allergic to insect venom. As the school year resumes, conflicts arise between humans and one common stinging insect, yellowjackets.

Yellowjackets are wasps with bright yellow and shiny black bodies about ½ inch long. Often mistaken for yellowjackets, honey bees are insects with fuzzy, fine hair on their muted gold and dark brown bodies.

Yellowjackets capture large numbers of flies, caterpillars, and spiders to feed to their young. Unfortunately, they also scavenge for sugar and protein sources. Ripening tree fruits, picnic foods, and trash are very attractive to yellowjackets.

These wasps build their nests in protected locations, such as abandoned rodent burrows, logs, landscape timbers, rock walls, and various buildings. Walking, mowing, and other human activities can disturb the wasp colony, which often leads to aggressive behavior. Each fall the wasp colony numbers peak – more than 5000 individuals per nest!

Tactics for yellowjacket management on school property can include:

- **Minimize attractive food sources.** Keep food and beverages covered until ready to be eaten. Place plastic liners in trashcans and empty them immediately following outdoor functions. Locate trashcans and dumpsters away from high traffic areas and keep them covered.
- **Avoidance.** Do not swat at a hovering wasp since foraging yellowjackets are seldom aggressive. Use cups instead of cans to serve sweet beverages; you can see if a wasp is in your cup before you take a drink!
- **Repellants.** A dilute solution of household ammonia and water can be used to sanitize outdoor picnic tables and trashcans. This mixture helps to mask food odors. Mosquito repellants are ineffective in deterring wasps.
- **Destroy the nests.** If a yellowjacket nest is on the school property, an insecticide application might be justified. This action will be directed by the IPM Coordinator. It is impossible to eliminate all the nests near the school campus since these wasps forage up to ¾ mile away from their nest.
- **Trapping.** Commercially available yellowjacket traps may decrease wasp numbers in a given area. Use sugary or meat bait lures wasps in the trap; insects cannot find their way out. Sweet substances (sugar water, honey, pancake syrup, grenadine, etc.) are most attractive in the fall, while meat (cat or dog food, raw ground beef, fish, etc.) is taken during the summer. Check and clean the traps each day, replenishing the bait as needed.

One researcher conducted a study looking for lice on floors and desks where more than 20% of the school children were infested with head lice. A special vacuum was used to catch the lice. No lice were found anywhere other than on the children in this study. Accordingly, it makes no sense to spray insecticides in schools or homes.

**Chemical Control.** Controlling head lice should be the responsibility of parents. Head lice management has become more difficult because of resistance to over-the-counter medications. A second treatment should be done 7-10 days after the first treatment. These products do not kill viable nits. Also, some lice are not killed even when products are used correctly.

**Combing.** After head lice control products are used, parents should comb the hair with a fine nit comb to remove lice and nits not controlled by the product. Use vegetable oil or hair conditioner to lubricate the hair. Use small pair of scissors to clip individual hairs to remove nits.

**Additional Resources.** A video, Removing Head Lice Safely, teaches how to comb a child's hair for head lice. It can be viewed at: <http://lancaster.unl.edu/pest/lice/>. DVDs are also available for purchase (\$10 plus shipping/handling). Four languages (English, Arabic, Spanish, and Russian) are available on one DVD. For more information call 402-441-7180 or email [bogg1@unl.edu](mailto:bogg1@unl.edu).

School IPM Newsletter in collaboration with

- Flandreau Public Schools
- South Dakota State University
- South Dakota Department of Agriculture

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