



# Healthy Colorado Schools



**WELCOME TO LEWIS-PALMER #38** in Monument.

We look forward to working with staff to implement IPM programs.

## SCHOOL IPM IN TURF & LANDSCAPES

IPM isn't just for school buildings. In September, the western school IPM working group held a workshop in Salt Lake City on incorporating IPM into outdoor management routines, geared toward grounds and facilities staff. In August, US EPA Region 2 hosted an Outdoor and Field School IPM. Let us know if you are interested in hosting a similar workshop in Colorado this spring.

Challenges for school outdoor environments include limited budgets, weather, variability among sites, and a wide variety of pests including insects, diseases and weeds. Benefits of outdoor school IPM include a

healthier environment, better long-term control of pests, reduced liability, lower costs and reduced pesticide use.

**Tips for grounds personnel:**

- **Designate an IPM coordinator** to spearhead development and implementation of turf and landscape IPM plans. Gaining buy-in from school administrators helps achieve long-term success. An IPM coordinator can be a key liaison between field staff and management.

- **Develop site-specific management plans** appropriate for intended use, pest tolerance levels and maintenance standards.

A hierarchy might include:

**Highest care** - high visibility grounds, varsity and practice fields

**Moderate care** - playground areas, multipurpose fields and common grounds

**Lowest care** - low use, utility areas, property lines, ditches and natural areas

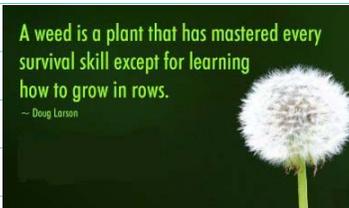
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**Special points of interest:**

- ✓ Tips for using IPM in Turf & Landscapes
- ✓ How To Calculate IPM Costs
- ✓ What is MUP?
- ✓ Colorado's Asthma Response Rating
- ✓ What One Mouse Can Do ....

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**THANK YOU TO ALL THE DISTRICTS THAT FILLED OUT OUR SCHOOL IPM SURVEY!**

*We are excited to use the information to create better programs for you!*

# CALCULATE YOUR SCHOOL'S IPM BUDGET & PEST RISK



# \$\$\$

Texas AgriLife Extension school IPM extension specialists Mike Merchant and Janet Hurley have created an online [IPM cost calculator](#) to help schools estimate pest risk and IPM costs. The calculator includes an online questionnaire that leads the user through an IPM inspection, much like the inspection Hurley conducts when she visits a school.

After data from the inspection are entered, the calculator generates a "pest risk report card" with a letter grade from A to F. A graph indicates the top five possible sources of pest entry, food, water or harborage that need to be addressed, such as exterior or garbage areas, external doors or

windows.

***"The calculator teaches you why each problem contributes to the pest problem,"*** says Merchant. ***"For instance, the distance of the dumpsters from the building can affect the proximity that rodents have to the doors. So it's a teaching as well as a data collection tool."*** A score is also given for each predominant pest in the area, such as rats, mice, cockroaches and mold, along with a comparison of the school's score to the probability of each

pest in that zip code.

The budget tool allows IPM coordinators to enter items needing repair or replacement, and cost per item. Because IPM costs can be higher initially and decrease over time, it is vital for school officials to get an accurate picture of long-term costs and benefits.



## CLUSTER FLIES

You're used to swatting flies in the summer, but what are those flies you see in the fall and winter? Cluster flies make their debut in the autumn when they fly to the sunny sides of buildings in search of protected overwintering sites. They are not reproducing within the structure, but they do become active on warm days and crawl out of wall voids and access in a confused attempt to go back outside.

Adult cluster flies are a little bigger than the common house

fly and have crinkly golden hairs on the thorax.

The larvae of these flies develop as parasites of certain species of earthworms. They are not a health hazard to people and they do not lay their eggs in human food.



Photo: Whitney Cranshaw, CSU

To avoid problems in the future, **be sure to caulk and seal all exterior openings – a good practice to prevent many pest problems.** In the meantime, get out the fly-swatter!

## DO YOU SUFFER FROM MUP?

The house mouse is the most common pest found in Colorado schools and homes. Mouse urine contains molecules known as **MUPs** (Major Urinary Proteins). Public health specialists believe that these are responsible for many asthma attacks in the U.S. Other triggers for asthma include dust, pets and cockroaches. MUPs are crystalline proteins that mice use to 'talk to' and signal other mice their sex, degree of male dominance, age and genetic makeup. Wherever mice live, they secrete these proteins, which are

designed to be lightweight (so they'll stay airborne) and are also sticky (so they remain on walls).

We recommend using mechanical traps to control light to moderate infestations of mice. Place traps along the base of walls and in corners of rooms. Set traps in the evening and collect them the following morning.



Where there's one .....

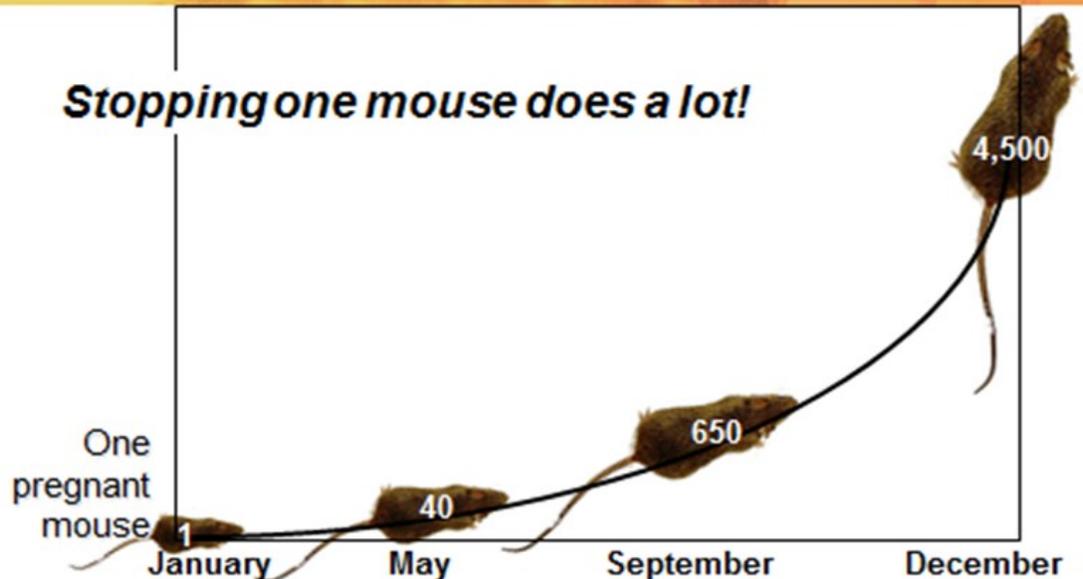
Every day in America, 36,000 kids miss school due to asthma, according to the Asthma and Allergy Foundation for America. How does Colorado's response to asthma rate? Click below to find out:

<http://www.aafa.org/display.cfm?ID=5&sub=105&cont=759>



## One mouse, one year...

*Stopping one mouse does a lot!*





**For More Information about the Colorado Coalition for School IPM:**

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The Colorado Coalition for School IPM is an effort by Colorado State University, U.S. Environmental Protection Agency, Colorado Department of Agriculture, Colorado Department of Public Health and Environment, Colorado Department of Education, school districts, National Environmental Health Association and private pest control professionals.



**We're on the Web!**  
<http://coloradoipmcenter.agsci.colostate.edu/Communities>




*Wishing You  
 A Very Happy Thanksgiving!*

**SCHOOL IPM IN TURF & LANDSCAPES Continued:**

<ul style="list-style-type: none"> <li>• <b>Establish a monitoring and record keeping system.</b>                      Follow tolerance levels for specific pests and limit interventions to when they are truly needed, reducing costs.</li> </ul>	<p>objects often provide harborage for insect pests and complicate vegetation management. Mowing strips and underlayments can be created using concrete or brick surfaces under landscape features or next to fences, eliminating the need to apply herbicides or trim where mowers cannot reach. Standing water in playground equipment, especially tire swings, is a breeding ground for mosquitoes.</p>	<p>exposure requirements. Many problems can be avoided simply by putting the right plant or variety in the right place. Fertilize plants according to soil or foliar analysis results. Irrigate deeply and less frequently to encourage deep rooting. Increase turf mowing height to reduce stress. Spot treat problem areas to save time and reduce costs. Keep records of plant locations, planting dates, irrigation, fertilization, aeration or other cultural interventions, and any problems. Evaluate results to identify opportunities for improvement.</p>
<ul style="list-style-type: none"> <li>• <b>Accurately identify any pests</b> and learn pest life cycles to improve timing and efficacy of any intervention.</li> </ul>	<p>Turf varieties and landscape plants have unique pH, soil type and sunlight</p>	
<ul style="list-style-type: none"> <li>• <b>Identify problem areas.</b>                      Walls, fence lines, tables, benches, picnic tables, bleachers and other</li> </ul>		