

## of the College of Agriculture and Life Sciences



# Greater Harmony Between Agriculture and the Environment School IPM

#### Issue

The Kyrene School District in the metropolitan Phoenix area routinely sprayed its facilities to control an assortment of fire ants, cockroaches, mosquitoes and bark scorpions. Each month the pesticide treatments were repeated, but pest populations remained at what district officials considered to be unacceptable levels. More significantly, while the poisons were being applied and reapplied, children were being pulled out of school for a day or two each month by their parents to avoid pesticide exposure. In April 2000, the school district tried another approach and brought in a team of specialists that included entomologists from the University of Arizona.

#### What has been done?

Three schools in the Kyrene district were chosen for a pilot Integrated Pest Management (IPM) project, to control

pests while avoiding reliance on chemical pesticides. The schools concentrated their efforts (and capital resources) on identifying what the pests were, finding where they came from and preventing their entry into buildings. The custodial and kitchen staffs also were mobilized to learn how to spot trouble. All of the openings around pipes and conduits were sealed, crawl spaces were closed off, and drains and building slabs were repaired to inhibit cockroaches. Trees were trimmed back and birds were encouraged to roost where their droppings wouldn't contaminate walkways and other high traffic areas.

The new program initially came from Indiana University (IU). IU entomologist Marc Lame had done a pilot study in the Midwest and wanted to try a similar program in the desert Southwest.

### **Impact**

The IPM midterm evaluation showed that the schools reduced their pesticide applications by 90 percent and kept pest populations below 85 percent of their original levels. The program has been expanded to 27 sites in the Kyrene School District, and will start on The Navajo Nation in 2002.

UA faculty also are currently working with the Arizona Structural Pest Control Commission and Arizona Game and Fish Department on ways to provide pest control companies with certification that will recognize those who practice IPM techniques.

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