

Research-Based Integrated Pest Management (IPM) Programs that Impact People, Communities, State and National Economies (November, 2012)

Pests in homes, schools, parks, landscapes and other community settings threaten human health and impact local and national economies. **Pests can vector diseases (West Nile Virus, Rocky Mountain Spotted Fever); contribute to allergies and asthma problems (rodents, cockroaches); reduce quality of life (bed bugs); and damage structures (termites) and landscapes (insect, weed and disease pests of plants), reducing the value of homes and parks.** The Arizona Pest Management Center (APMC) plans and delivers research-based Integrated Pest Management (IPM) solutions for communities through the multidisciplinary Community IPM Team. Our target audience includes pest management professionals, environmental health professionals, school communities, medical professionals, homeowners, parks and recreation management staff, public housing staff, and residents. The impact of our programs are felt both locally and nationally.

Job Support for Pest Management Professionals

- In 2012, the national pest control industry (21,562 businesses) is predicted to **generate \$11.4 billion in revenue**, \$902.4 million in profit, and pay \$4.3 billion in wages. The annual growth of the industry was 2.9% between 2007 and 2012.
- 1,241 pest management companies in Arizona represent 5.8% of businesses nationally.
- In 2011, we provided over 1,700 continuing education units (CEUs) to environmental health professionals, helping to maintain professional licenses in Arizona. This **included pest management professionals, industrial hygienists, Arizona real estate and Arizona Medical Association professional CEUs**, impacting over 1,796 professionals and 802 members of the general public.
- Over 775,300 residents and thousands more tourists tee off each year for nearly 12 million rounds of golf in Arizona, impacting a **\$3 billion dollar leisure / recreational industry**.

Dollars Saved

- U.S. public schools and government buildings pay \$296,400,000 annually for commercial pest control. Based on a Utah study, IPM has been shown to save \$0.01 per square foot of school property. Collectively the schools in Arizona practicing rigorous IPM (third-party STAR Certified by IPM Institute of North America) have an estimate of \$10,500 of cost savings annually.

Quality of Life

- Implementation of IPM in schools has been shown to **reduce pest incidence by 78% and pesticide use by 71%**. **Arizona IPM programs impact over 303,600 students statewide.**
- The Community IPM team has contributed to national school IPM efforts that **impact over 4.5 million U.S. students.**
- **Measurable improvements in air quality** have been noted following IPM implementation in Arizona's schools.
- Active children and athletes play on turf at home, parks, and on professionally managed sports fields. By showing turf managers where and when their uses of insecticides are unnecessary or ineffective, **the elimination of 2–3 applications each year has been possible.**
- 374 units at a public housing site in Phoenix were renovated in 2011 (\$24.7 million HUD Capital fund grant). Families were relocated and then rehoused after upgrades were complete and belongings were inspected for German cockroaches and bed bugs, as advised by our Community IPM team and guidelines. Families were returned to pest-free refurbished homes, **enjoying a greatly increased quality of life** while breaking a vicious cycle of re-infestation by pests in high density housing situations.