

## LOGIC MODEL for PROGRAM DEVELOPMENT and ASSESSMENT

## Bat IPM: Addressing Stakeholder Needs

SITUATION	INPUTS	OUTPUTS		OUTCOMES - IMPACT		
		Activities	Participation	Short	Medium	Long Term
What is the problem or need?  Problem: Rabies among statetested bats on the rise; presence of bats and rabies exposure incidents in schools on the rise; pest managers not target audience of any current bat IPM outreach effort.  Need: IPM workshops (presentations and demonstration) on bats specific to school pest managers – both inhouse and contracted.	What we invest  UA staff time (classified staff and faculty)  Collaborator 's time (Bat biologists, public health scientists)  Materials for workshops	What we do  Conduct two workshops on bat IPM (Maricopa county, Cochise county) and one half-day training (Nogales, AZ); will entail presented information, written information and an inspection.  Consult with state agency experts to ensure current, accurate, comprehensive information.  Conduct evaluations of workshop and training attendees to measure benefit.  Compose at least one bi-monthly school IPM newsletter on bat IPM.	Who we reach  School facilities and maintenance personnel.  Pest Management Industry professionals.  State agency personnel (e.g. county agents, veterinarians, etc.)	What the short term results are  Previously untargeted school personnel (i.e., facilities and maintenance) will know when to remediate active maternity colonies found in school buildings and how.  Increased compliance with state laws and AZGFD bat conservation efforts.  Increased appreciation for bat ecology.	What the medium term results are  School facilities will be better pest-proofed, resulting in fewer bats with long term roosts and/or maternity colonies within school buildings.  Greater synergy statewide for bat conservation, as furthered by AZGFD/the North American Strategic Plan for Bat Conservation.	What the ultimate impact(s) is  Reduction in the number of bats moving into school buildings from disturbed maternity roosts in eves, etc., will result in fewer rabies exposure incidents for staff and students.

## Assumptions: (Beliefs, expectations, and principles that guide our work.)

- 1. Children's environmental health is an important issue to all citizens; the general public **want** safer living and learning environments for children;
- 2. University of Arizona faculty and staff can work with state agency personnel to promote a common ideal;
- 3. Pest managers attending workshops will choose to implement IPM methods saving time and other resources in the long term.

## **Environment:** (Influential factors)

- 1. Increasing wildlife encounters in urban settings, particularly with bats (Chiroptera)
- 2. State agency personnel excel in educating community on conservation, ecology and public health concepts; resources fall short for integrating and demonstrating IPM principles.
- 3. General public concern over contracting rabies virus and requiring preventative vaccines, particularly on school grounds.
- 4. Expanding definition of "pest" in IPM for both educators and practitioners.