

Wildlife in the Urban Interface

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What is Wildlife?

- Animals, fish, birds.....
- Animals with intrinsic, social, cultural and economic values....
- Source of food and a vital part of the cultures and economies...
- Indicator of the health of that environment...
- Do or should we assume a stewardship responsibility for wildlife



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What Does Wildlife Need?

- Food



3

What Does Wildlife Need?

- Water



4

What Does Wildlife Need?

- Space



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What Does Wildlife Need?

- Shelter
(or cover)



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What Does Wildlife Need?

- Arrangement



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Elements of Habitat

1. Food
2. Water
3. Space
4. Shelter
5. Arrangement



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Habitat can be changed...

- Altering any one habitat element will change how wildlife uses the area
- To attract, learn the habitat preferences of the desired species and add or enhance those elements
- To discourage, learn the habitat preferences of the unwanted species and remove or modify those elements
- Large gravel areas and/or mowed lawns are not attractive to wildlife



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Wildlife Enhancements

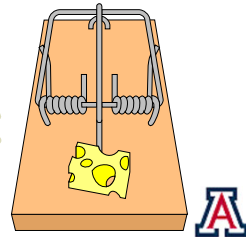
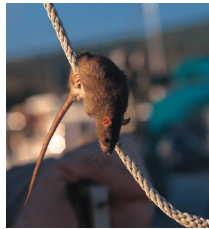
- Feeders
- Water features
- Nectar producing plants
- Diverse structures
- Preserve dead and down material
- Bird/bat houses
- Brush piles
- Wildlife friendly fences
- Contain dogs/cats
- Native landscaping
- Allow plants to grow naturally
- Be patient



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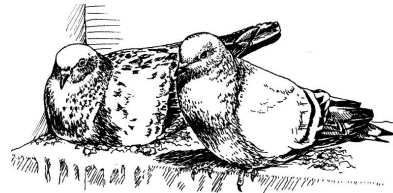
Dealing with Problem Wildlife

- Use Integrated Pest Management (IPM)
 1. Correctly identify the pest
 2. Employ prevention options
 3. Select a population control strategy
 4. Monitor for reinfestation



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Legal Status



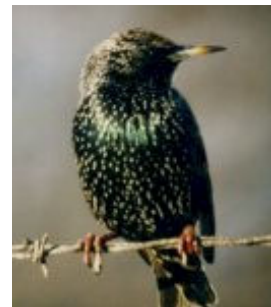
- In Arizona, most wildlife species are protected

- Some are not, these include:

- Wood rats (Pack rats)
- Norway rats
- House mice
- Ground squirrels
- Pocket gophers
- Rock doves (Pigeons)



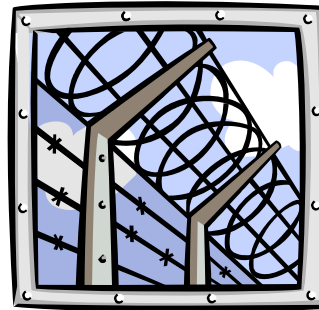
- House sparrows (House sparrows)



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Prevention Measures

- Habitat modification
- Exclusion
- Frightening
- Repellents



Prevention is Long Term
Control is Short Term



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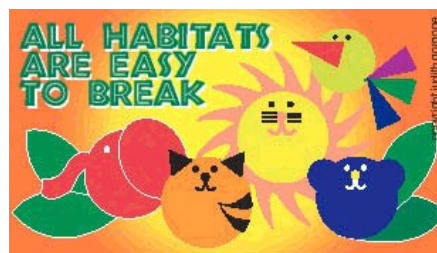
Habitat Modification

No Food

No Water = No Pests

No Shelter

No Access



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Habitat Modification

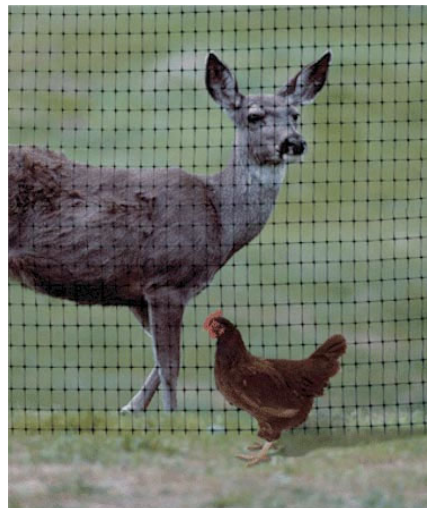
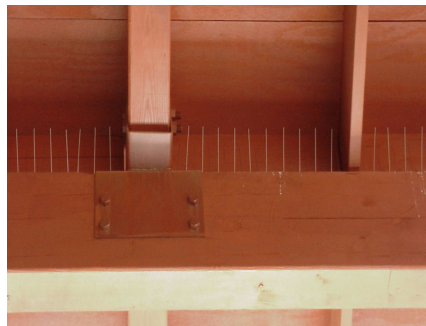
- Removal of Attractants
- Limit Shelter
- Sanitation



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Exclusion

- Fences
- Barriers



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Frightening

- Sight and/or Sound
- Habituation



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Repellents

- Odor
- Taste
 - Pain
 - Malaise
- Touch



All repellents work some of the time
No repellents work all of the time



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Population Control Measures

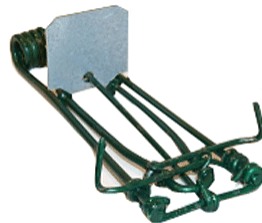
- Trapping (lethal or live)
- Toxicants
- Fumigants
- Shooting
- Biological Control



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Trapping

- Non-lethal
- Lethal



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Toxicants

- General or Restricted Use
- Read Label
- Hazards
 - Non-Target
 - Primary
 - Secondary
 - Environment
- Not recommended for most situatio



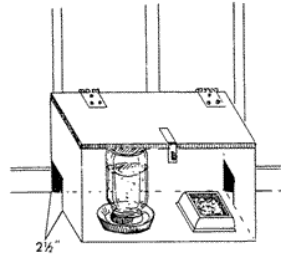
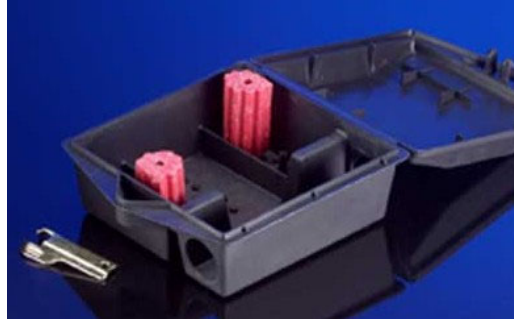
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Fumigants



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Bait Stations



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Shooting



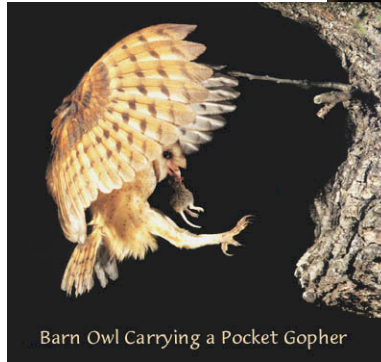
Not legal in most situations



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Biological Control

- Predators
- Diseases
- Birth Control



Barn Owl Carrying a Pocket Gopher



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Health/Safety Concerns

- Zoonotic Diseases
 - Rabies
 - Hantavirus
 - Plague
- Parasites
- Handling/Disposal
 - Gloves
 - Wash Hands



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Pocket Gopher

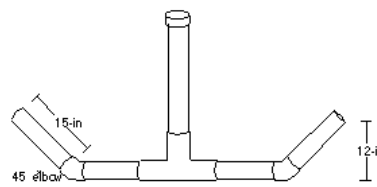
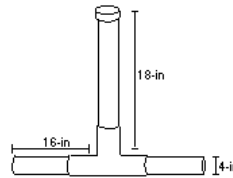
- Trapping
- Exclusion (hardware cloth wrapped around root ball or garden perimeter)
- Fumigants
- Poison Baits
- Repellents
- Resistant plants



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Rock Squirrel

- Fumigants
- Trapping
- Toxicants
- Eliminate brush and rock piles, other habitat features
- Flood irrigation



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Woodrat (Packrat)

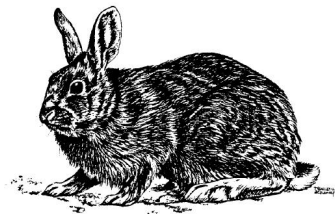
- Exclusion (buildings)
- Trapping
- Anticoagulants
- Destruction of dens



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Cottontail Rabbit

- Exclusion (1" chicken wire, 2 ft above and 1 ft below)
- Plant resistant plants
- Habitat modification
- Repellents
- Trapping
- Biocontrol



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Beaver

- Exclusion (low fence, wire or electric)
- Hardware cloth barriers around trees
- Live trapping



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Skunk

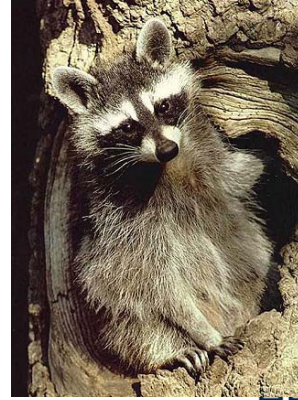
- Exclusion
- Remove attractant
- Live traps
- Ammonia/moth balls?
- Skunk Deodorizer Recipe
 - 1 qt 3% Hydrogen Peroxide
 - ¼ cup baking soda
 - 1 tsp dish detergent



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Raccoon

- Exclusion (best solution)
- Remove attractant
- Live traps
- Professional assistance



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Javelina

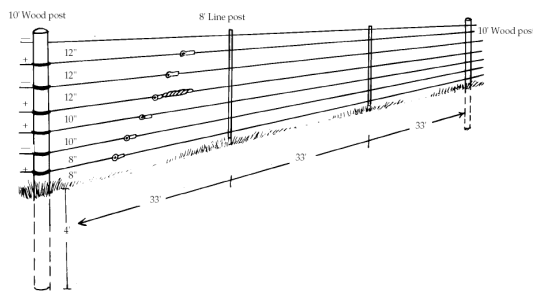
- Sturdy fencing (2½ - 3ft)
- Electric Fence
- Remove attractant



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Deer/Elk

- Fencing (8-10 ft)
- Repellents
- Frightening
- Harvest crop asap



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Wildlife Damage Control Professionals (NWCOS)

- Licensed by the Arizona Game and Fish Department
- Look in the Yellow Pages under "Pest Control"
- Or, call your local Arizona Game and Fish Office



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On-line Resources

Internet Center for Wildlife Damage Management

icwdm.org/

ICWDW Handbook

digitalcommons.unl.edu/icwdmhandbook

Yavapai County Cooperative Extension

extension.arizona.edu/yavapai

The Mammals of Texas

www.nsrl.ttu.edu/tmot1/

