Wildlife in the Urban Interface



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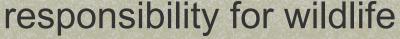




What is Wildlife?

- 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







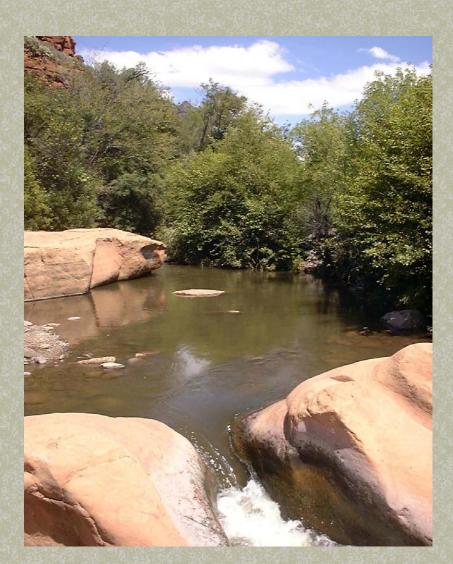






What Does Wildlife Need?

Water









What Does Wildlife Need?

Cover (shelter)







What Does Wildlife Need?

Arrangement

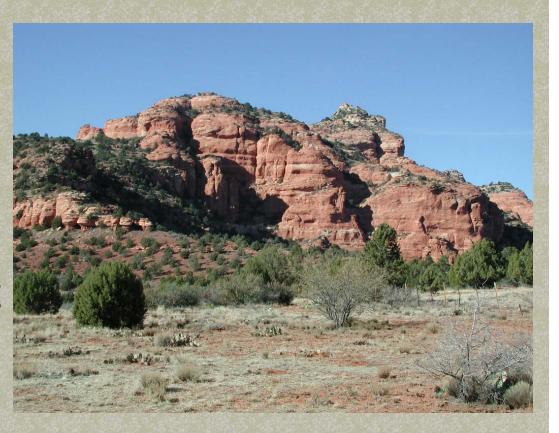






Elements of Habitat

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







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





Wildlife Enhancements

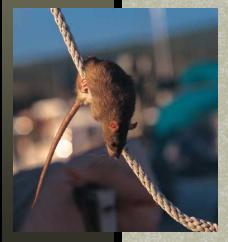
- Feeders
- Water features
- Nectar producing plants
- Diverse structures
- Preserve dead and down material
- Bird/bat houses

- Wildlife friendly fences
- Exclude dogs/cats
- Native landscaping
- Allow plants to grow naturally
- Be patient



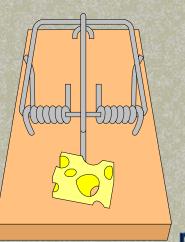


- Use Integrated Pest Management (IPM)
 - 1. Correctly identify the pest
 - 2. Employ prevention options
 - 3. Select a population control strategy
 - 4. Monitor for reinfestation













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)
 - Starlings
 - English sparrows (House sparrows)



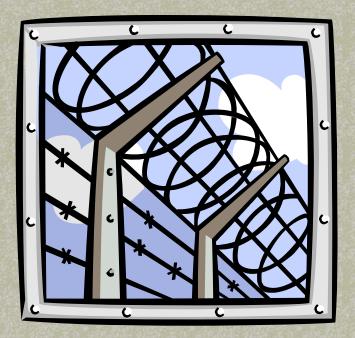






Prevention Measures

- Habitat modification
- Exclusion
- Frightening
- Repellents



Prevention is Long Term
Control is Short Term





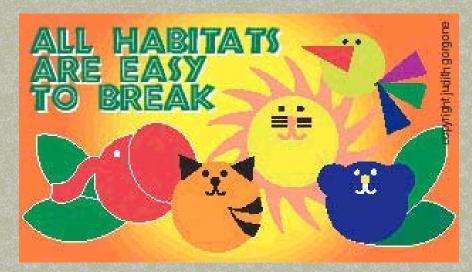
Habitat Modification

No Food

No Water = No Pests

No Shelter

No Access







Habitat Modification

- Removal of Attractants
- Limit Shelter
- Sanitation





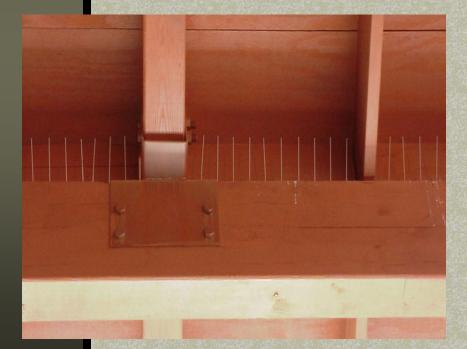






Exclusion

- Fences
- Barriers



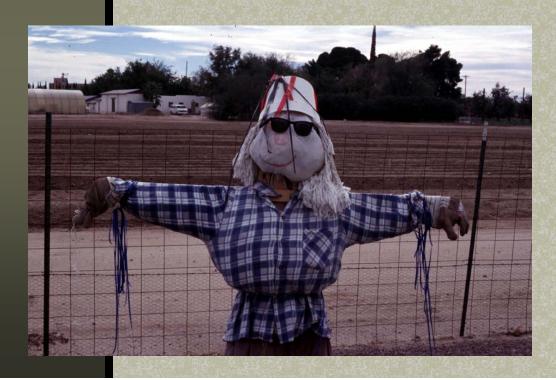


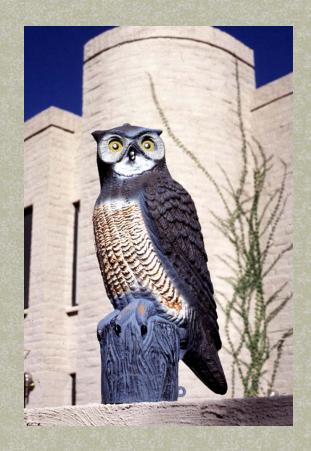




Frightening

- Sight and/or Sound
- Habituation









Repellents

- Odor
- Taste
 - Pain
 - Malaise
- Touch







All repellents work some of the time

No repellents work all of the time





Population Control Measures

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









Trapping

- Non-lethal
- Lethal



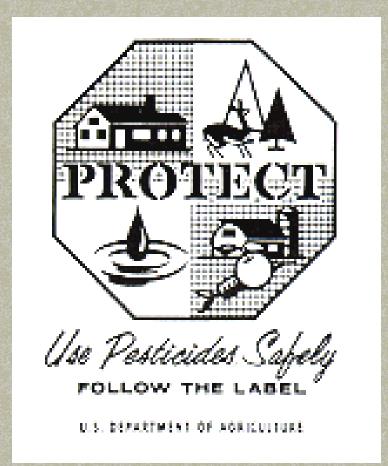






Toxicants

- General or Restricted Use
- Read Label
- Hazards
 - Non-Target
 - Primary
 - Secondary
 - Environment







Fumigants

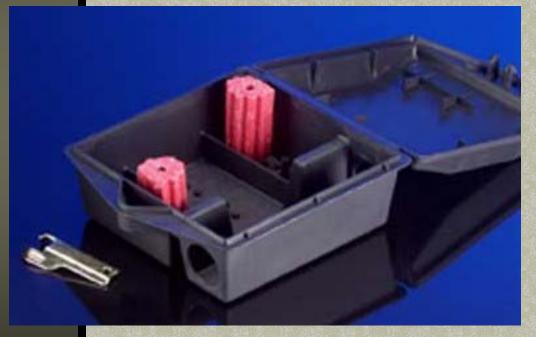


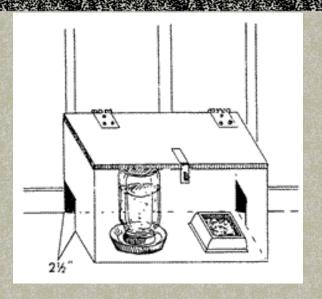






Bait Stations









Shooting

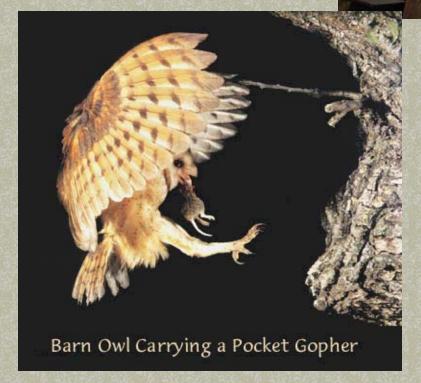






Biological Control

- Predators
- Diseases
- Birth Control







Health/Safety Concerns

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







Pocket Gopher

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







Rock Squirrel

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

Flood irrigation







Woodrat (Packrat)

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



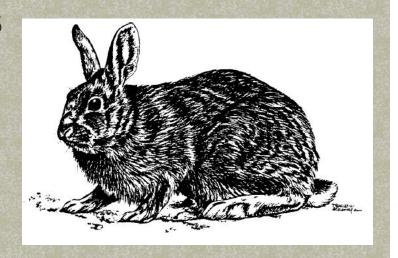


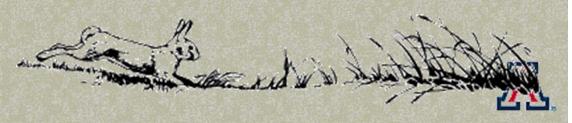


Cottontail Rabbit

Exclusion (1" chicken wire, 2 ft above and 1 ft below)

- Plant resistant plants
- Habitat modification
- Repellents
- Trapping
- Biocontrol







Beaver

Exclusion (low fence, wire or electric)

- Hardware cloth barriers around trees
- Live trapping



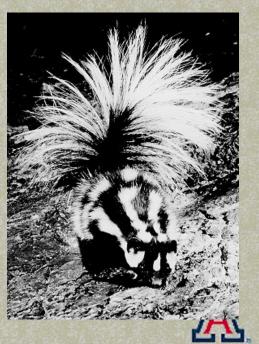


Skunk

- Exclusion
- Remove attractant
- Live traps
- Ammonia/moth balls?
- Skunk Deodorizer Recipe

- 1 qt 3% Hydrogen Peroxide
- ¼ cup baking soda
- 1 tsp dish detergent



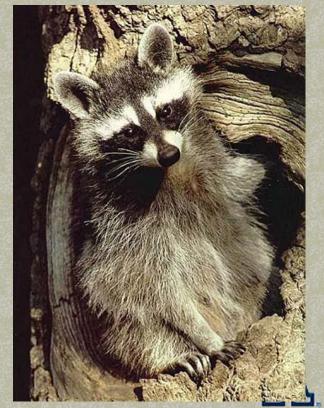




Raccoon

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







Javelina

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



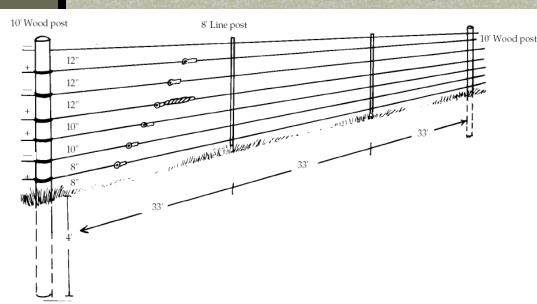
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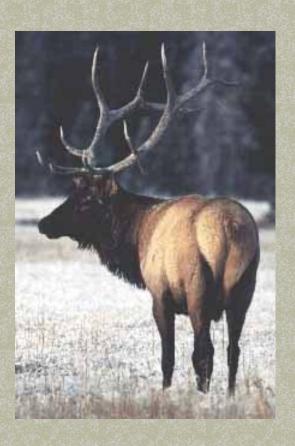




Deer/Elk

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









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





On-line Resources

Yavapai County Cooperative Extension extension.arizona.edu/yavapai/

UNL Wildlife Damage Management

wildlifedamage.unl.edu

The Mammals of Texas

www.nsrl.ttu.edu/tmot1/

