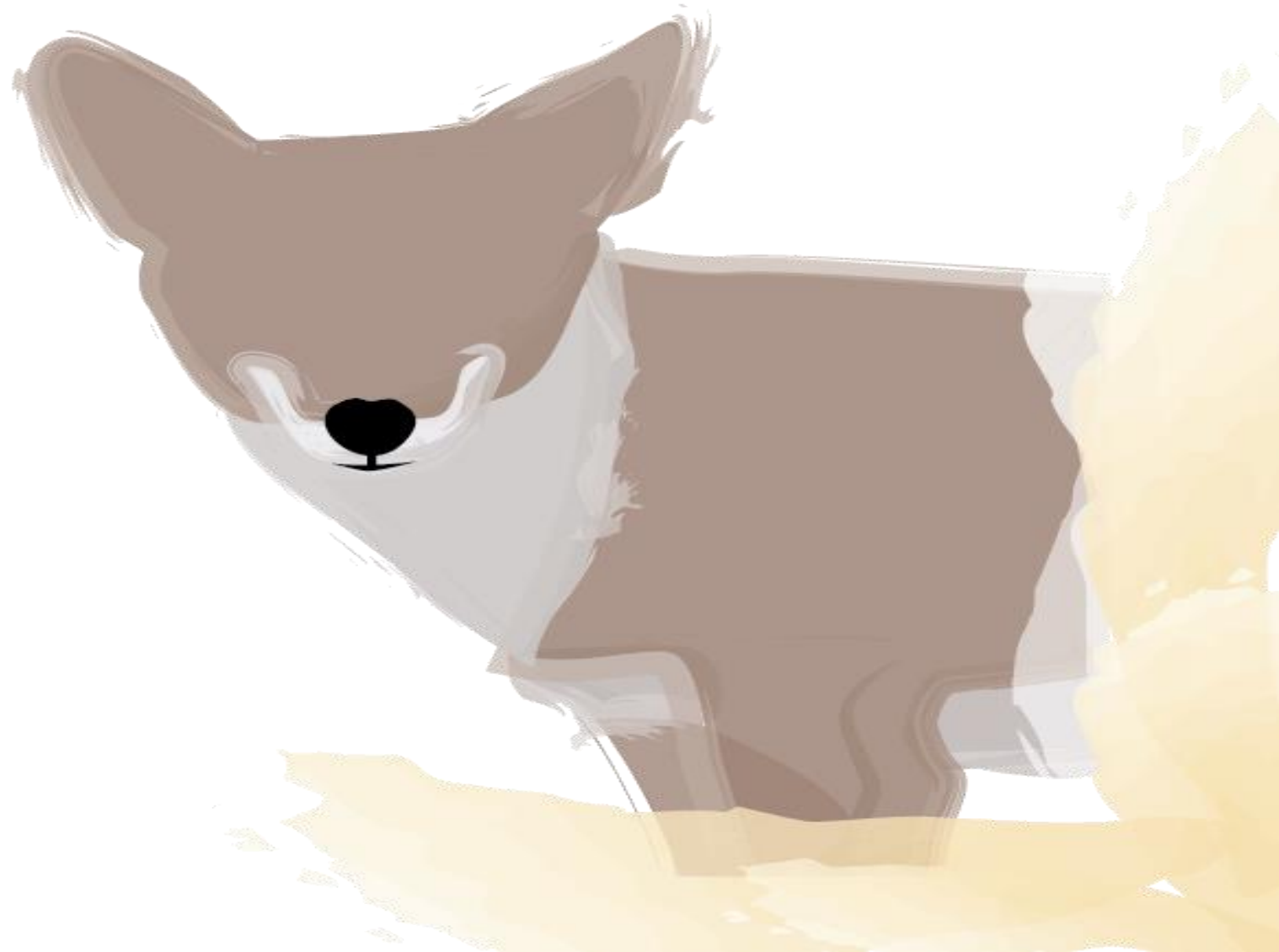
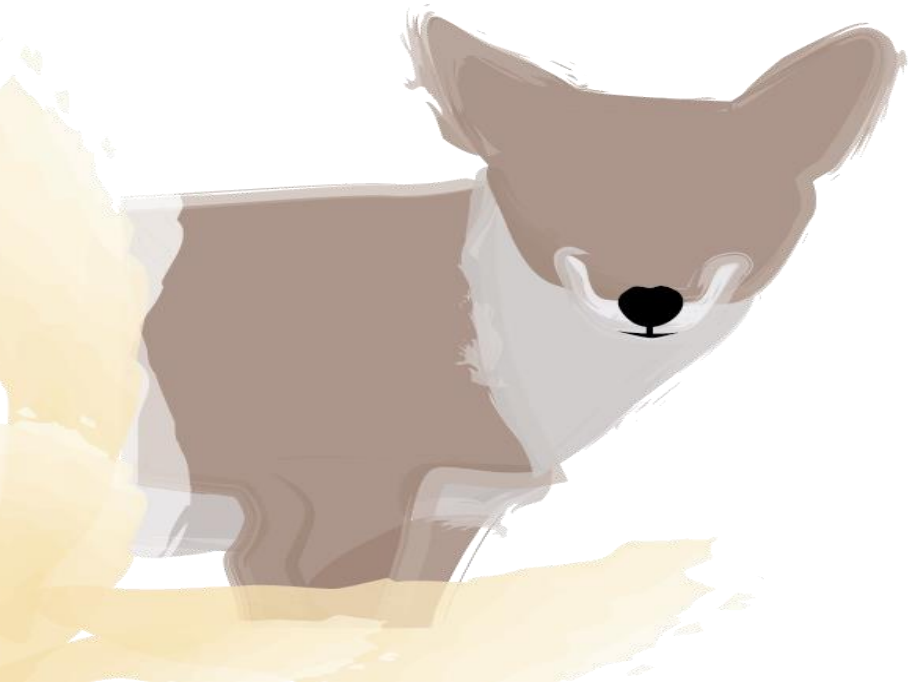


Coyote Ecology in Your Community



Coyote Social Organization and Behavior



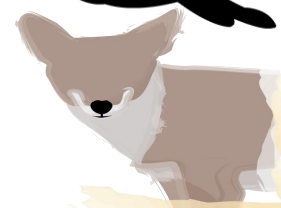


The pack



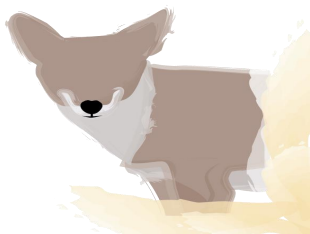
- Typically composed of an alpha pair
 - Male
 - Female
 - Not closely related
- Pack members are generally related to each other

- Coyotes born into the pack either
 - Stay as an associate
 - Leave to become a local
 - Solitary nomad
 - Or completely disperse from the area



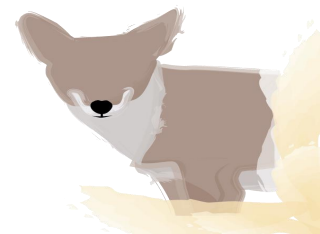
The transients (nomads)

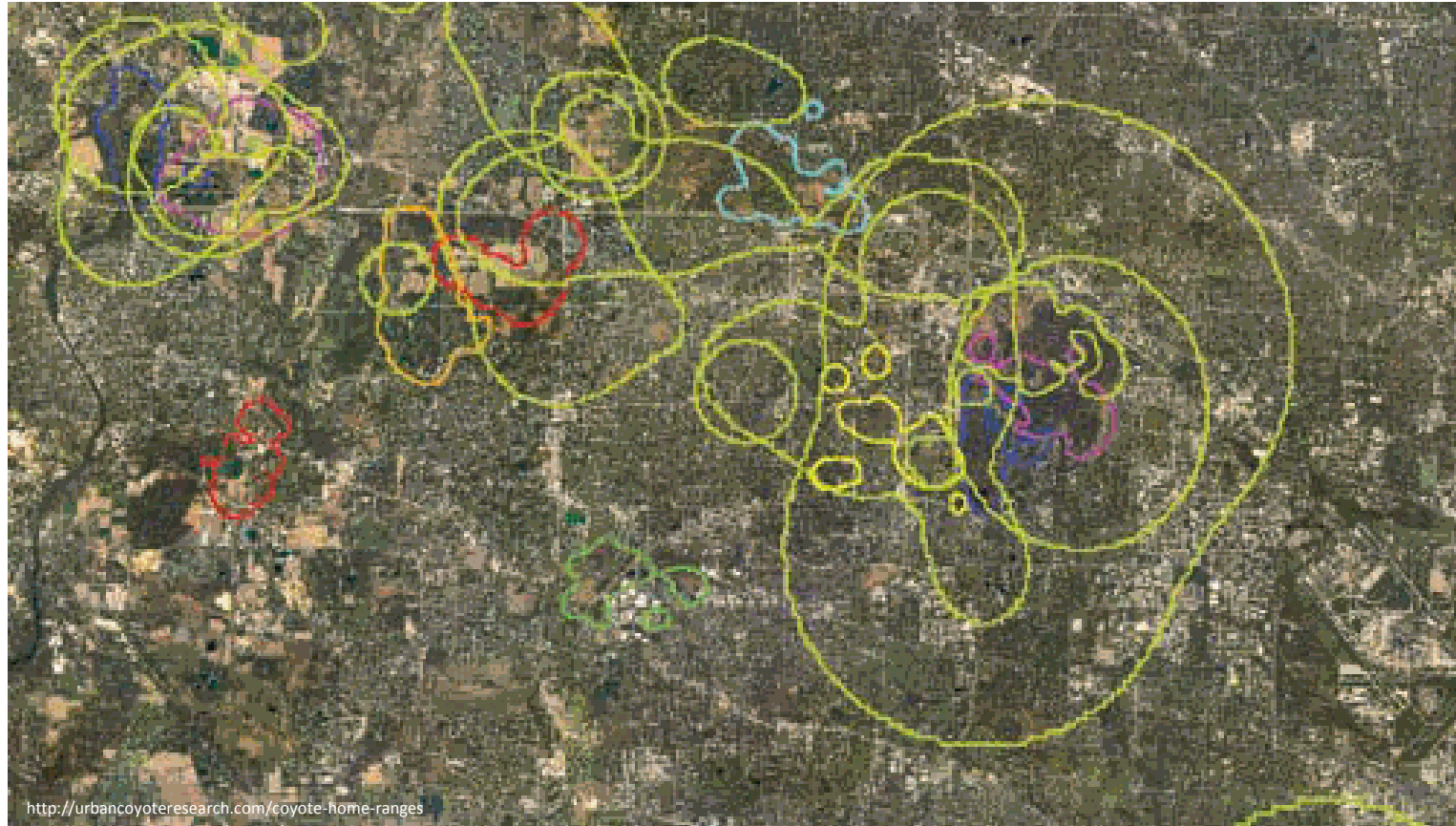
- Can replace residents that were killed or removed
- Establish new territories with another nomad
- Occasionally, older residents can leave packs and become nomads



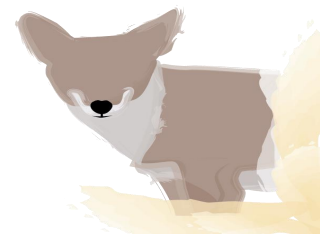


Colored lines represent several different packs



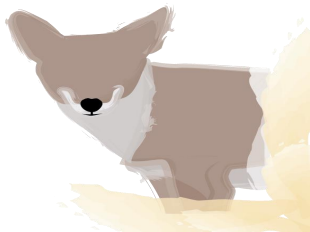


Yellow lines represent home range of solitary individuals



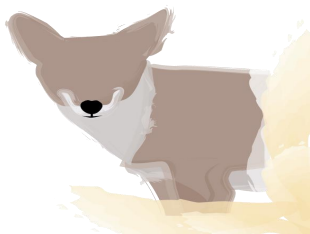
Social organization and behavior

- Formed for territory defense
- Pack size is generally affected by
 - Food abundance
 - Mortality rates
 - Population density



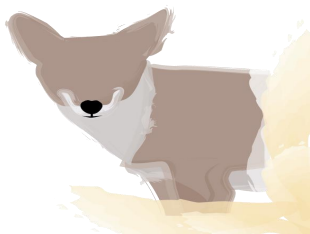
Reproduction

- Coyotes can mate for life
- Raise pups together in pack
 - Non breeding pack members may assist
- Breeding starts in January and February
- Gestation last about 63 days
- Pups born late March to May
- Pups emerge from dens at about 2-3 weeks of age
- Six months start to hunt with mother



Reproduction

- Juveniles will generally disperse at 6-8 months
 - In groups
 - Individuals
- Distance dispersed can be dependent on local resources



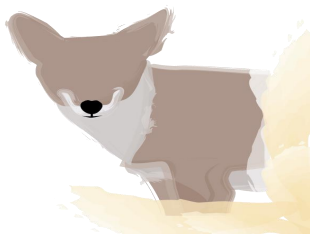
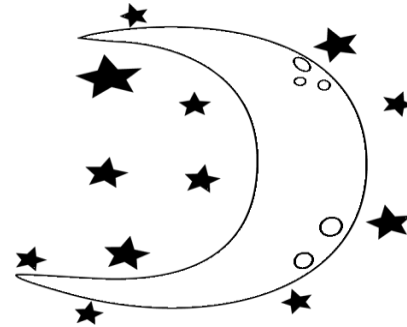
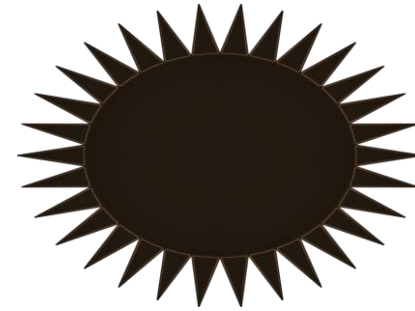
Density

- Density of coyotes in CA is currently unknown
- However, pack occupies $\sim 2 \text{ mi}^2$
- Pack includes at least two breeding adults
- $\frac{\text{number of square miles in your city}}{2} = \sim \text{numbers of packs in your city}$

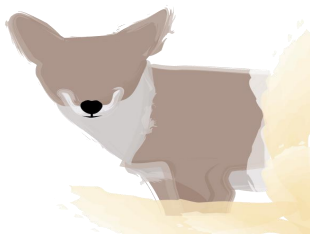
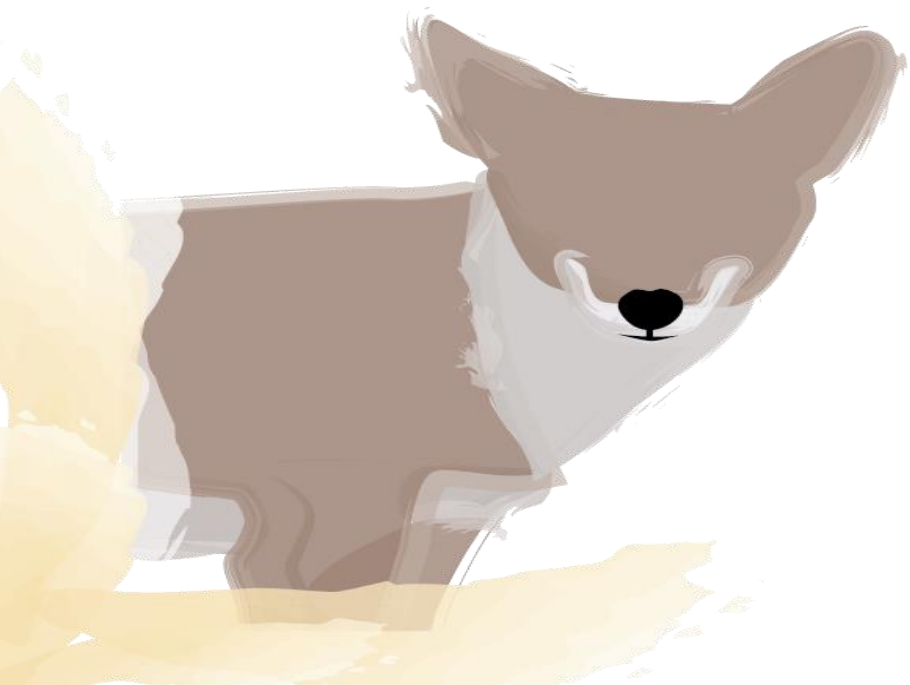


Activity patterns

- **Coyotes are not nocturnal!**
- However, studies have shown that there is an increase in nocturnal activity with an increase in
 - Development
 - Human activity

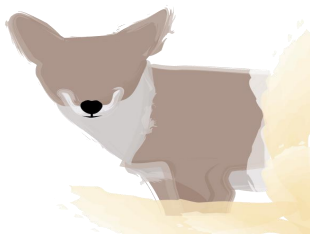


Coyote Diet



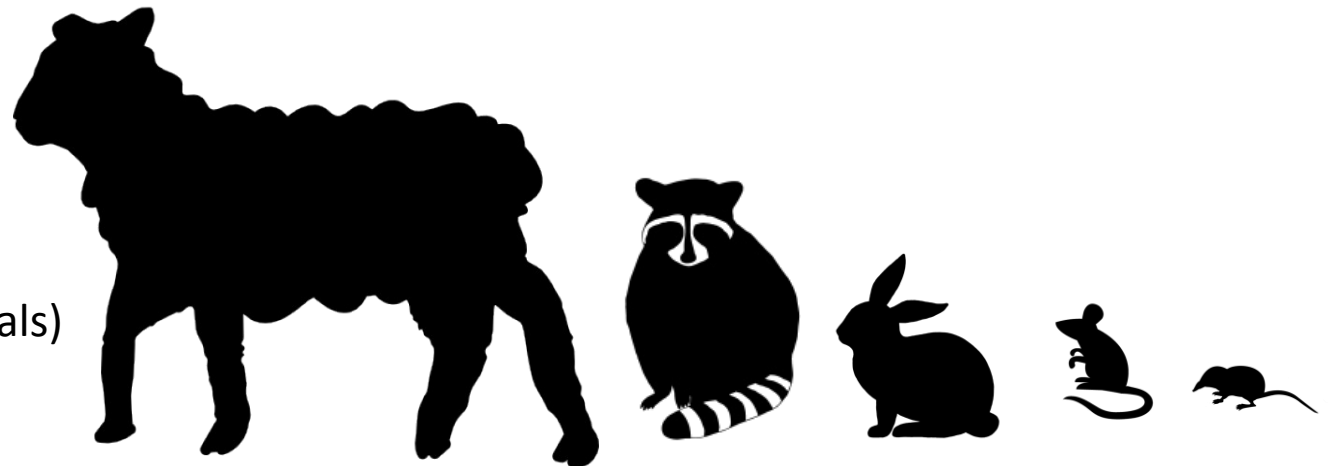
Diet and feeding ecology

- Opportunistic hunters and scavengers
- Extremely varied
- Content
 - Fruit and seeds
 - Invertebrates
 - Birds

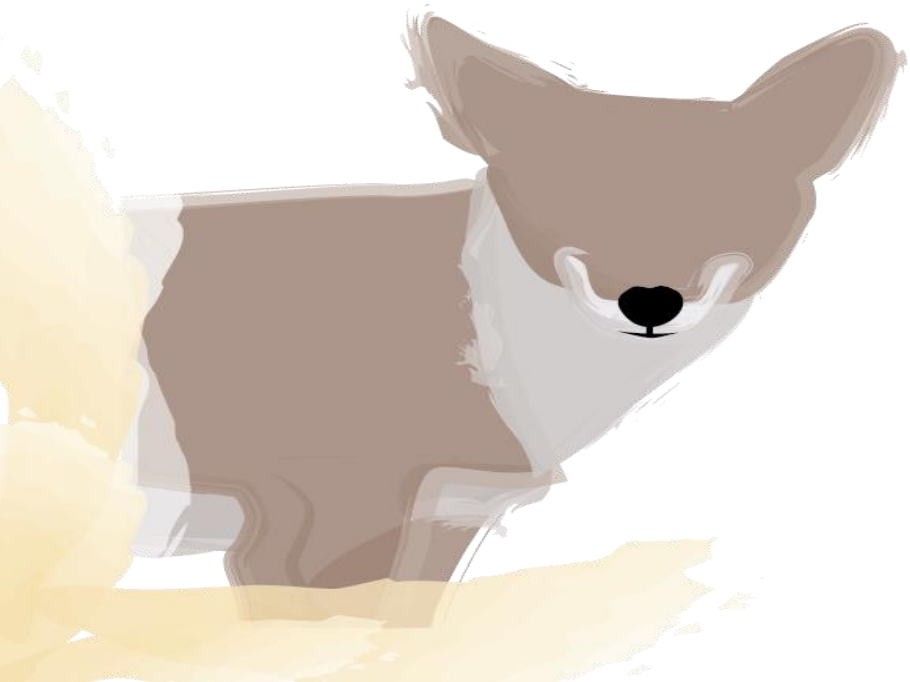


Diet and feeding ecology

- Shrews and moles
 - Rodents
 - Rats, mice etc
 - Squirrels
 - Gophers
 - Rabbits
 - Carnivores
 - Mustelids (weasels/otters)
 - Skunks
 - Raccoons
 - Artiodactyla (Cloven-hooved mammals)
- Anthropogenic food
 - Domestic pets
 - House mice
 - Trash
 - Pet food

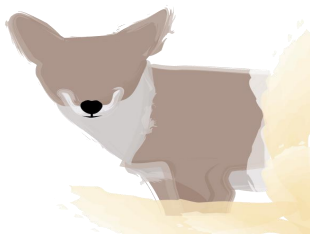


Coyote predation

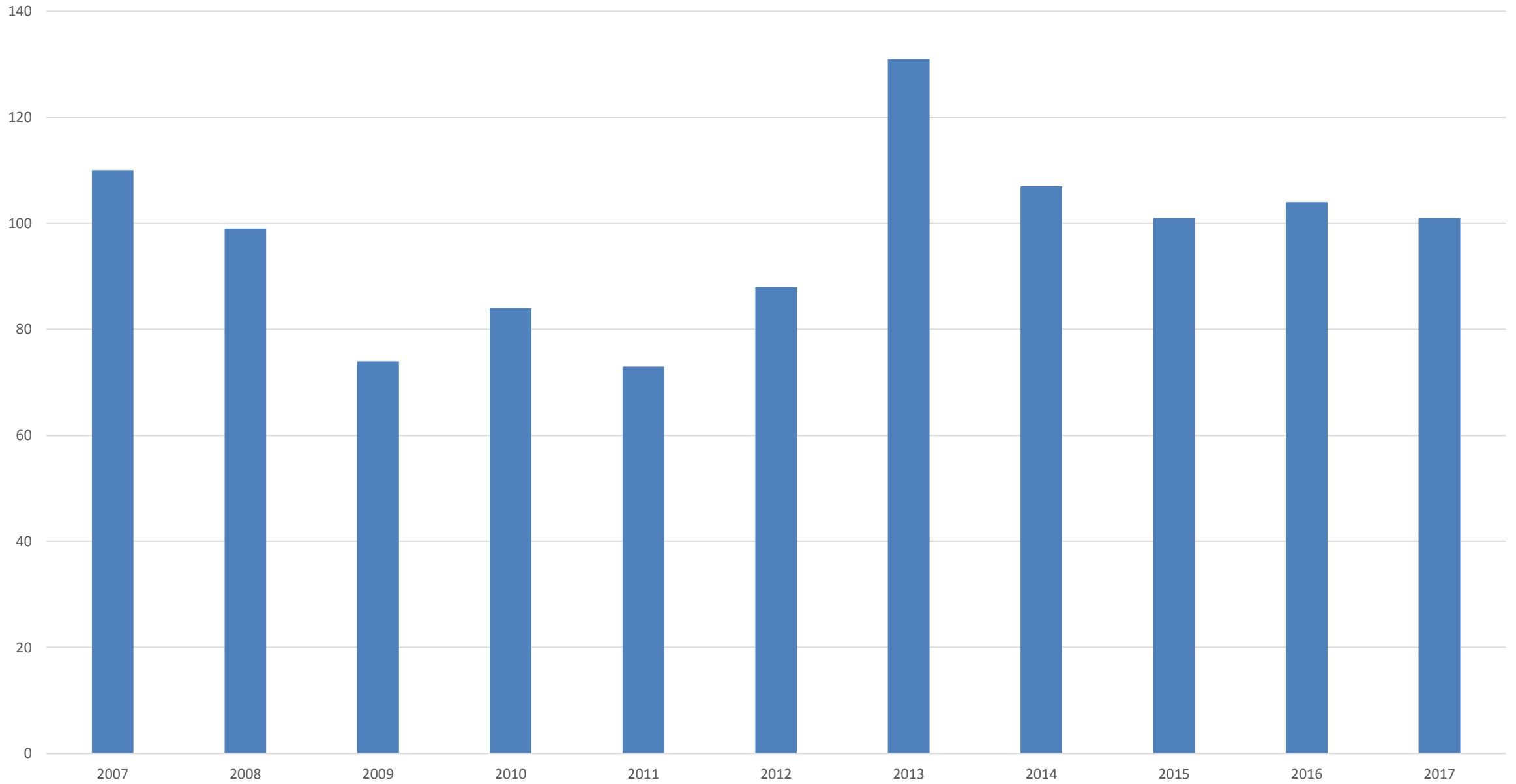


Predation

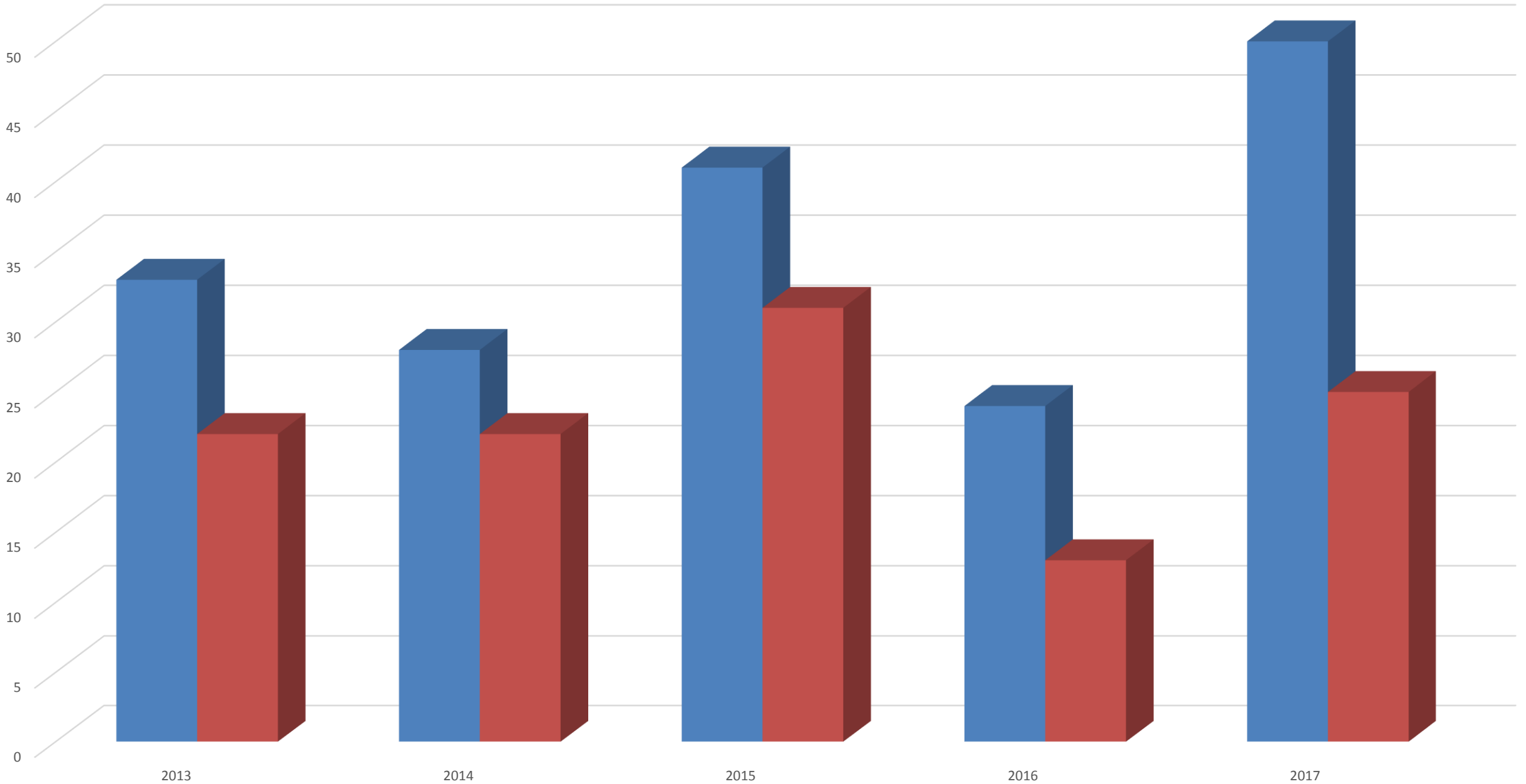
- Coyotes have few predators in urban ecosystems
- In ex urban areas, coyotes can be consumed by mountain lions
- Biggest predator → Car



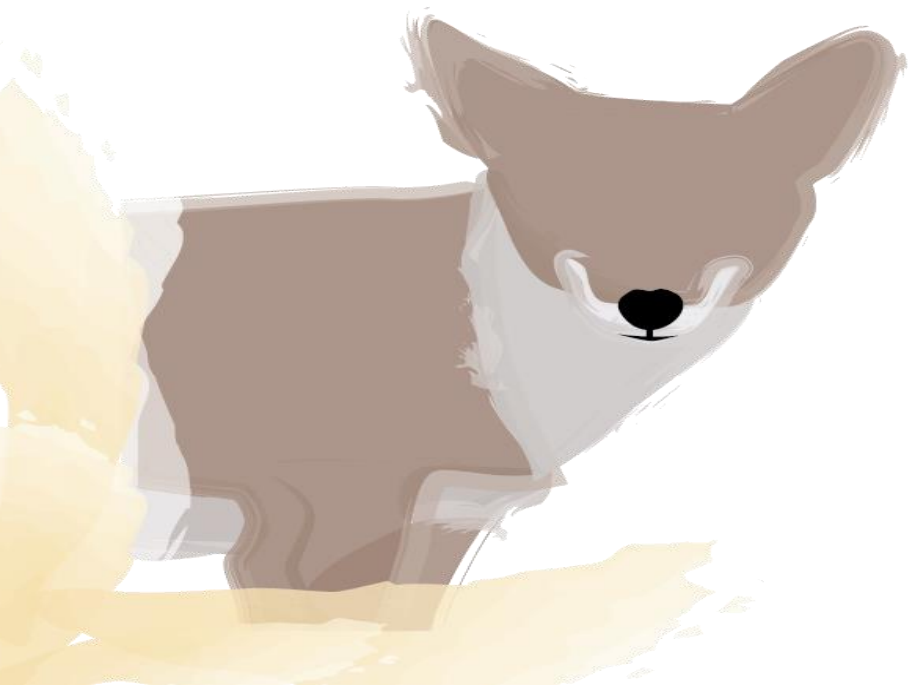
NUMBER OF RECOVERED ROADKILL COYOTE BY OCAC



Coyote Calls for Service in Fullerton

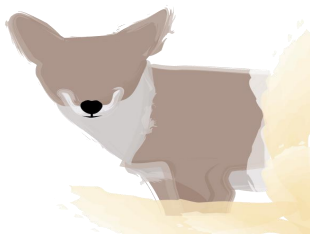


Coyote Management



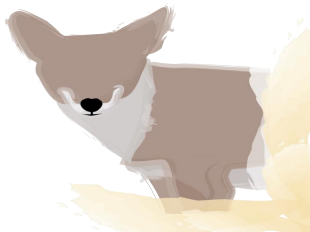
Management

- Be proactive. Not reactive
- Prevent Conflicts
- Current management strategies for nuisance and/or invasive animals
 - Cultural control
 - Mechanical and physical controls
 - Chemical control
 - Behavioral control
 - Lethal control



Management

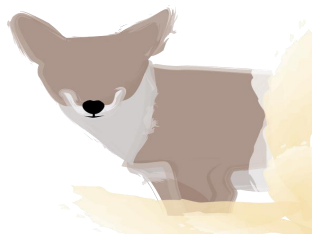
- Cultural control
 - Habitat modification
 - Removal of food sources
 - Direct
 - Indirect



Management

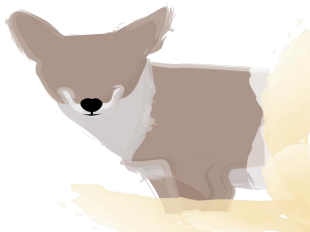


- Mechanical and physical control
 - Fencing
 - Coyote roller
- Chemical control
 - Repellants
- **Behavioral control**
 - **Hazing**
- Lethal control
 - Trapping (Fish and Wildlife)



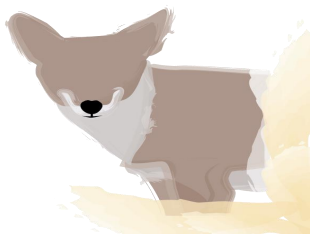
Cultural control- Habitat modification

- Remove cover
 - Reduce areas where coyotes could rest/hide
 - Harborage for other mammals that coyotes may feed on



Cultural control- Removal of food sources

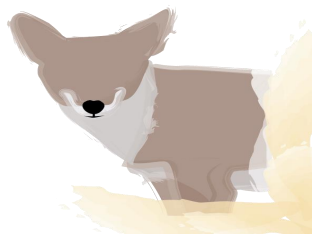
- The availability of anthropogenic food has been implicated in the occurrence of major conflicts
- Encourage people on how to reduce and completely remove supplemental food sources from coyotes in urban areas
 - Feed pets inside or remove uneaten pet food
 - Lids on trash cans
 - Try and limit access to compost



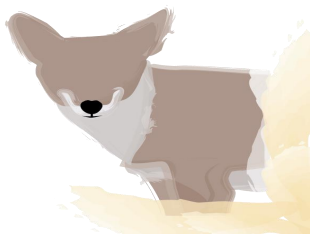
Physical control- Fencing



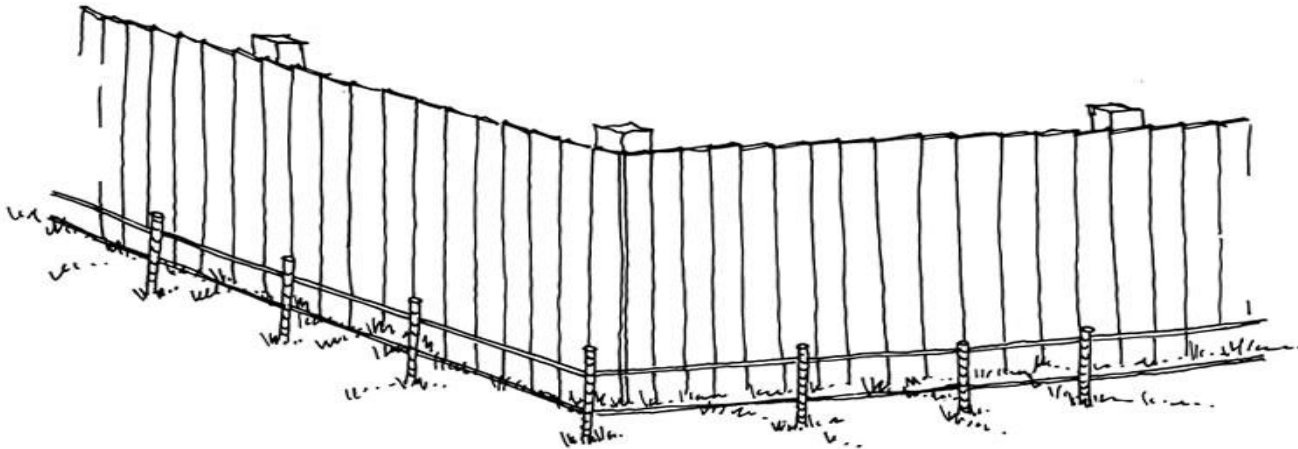
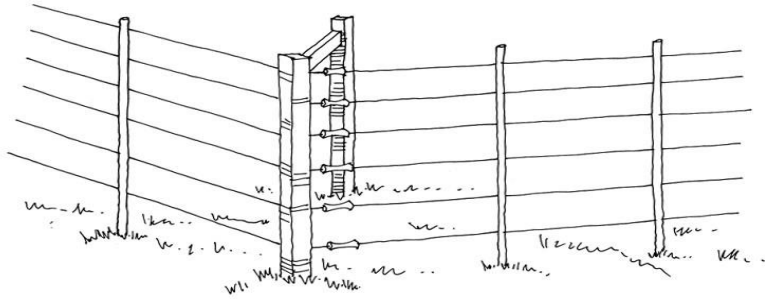
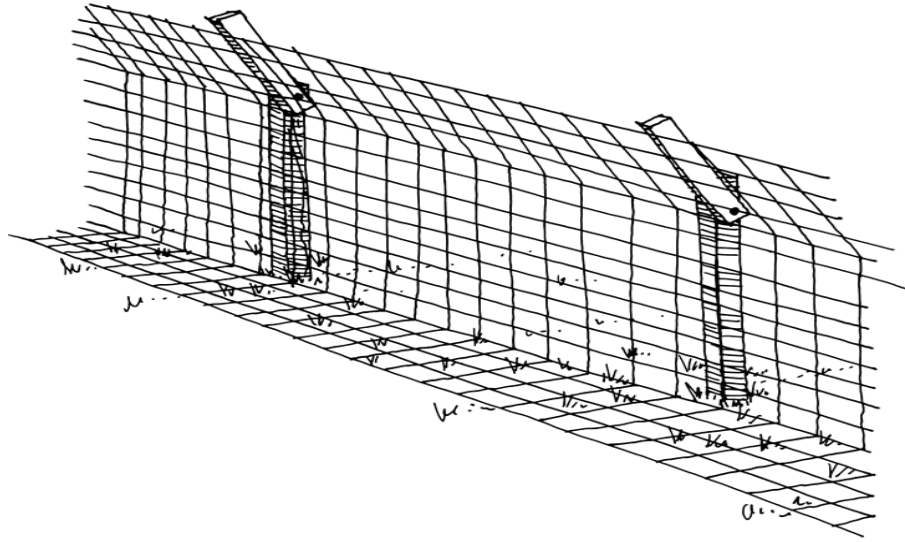
- Remember, coyotes can easily jump or scale a 6 ft wall



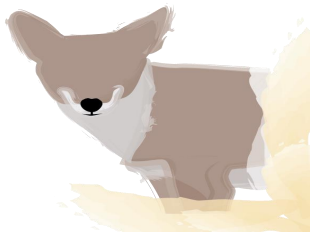
.....and they can dig!



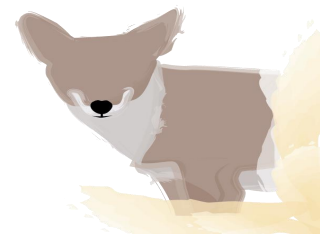
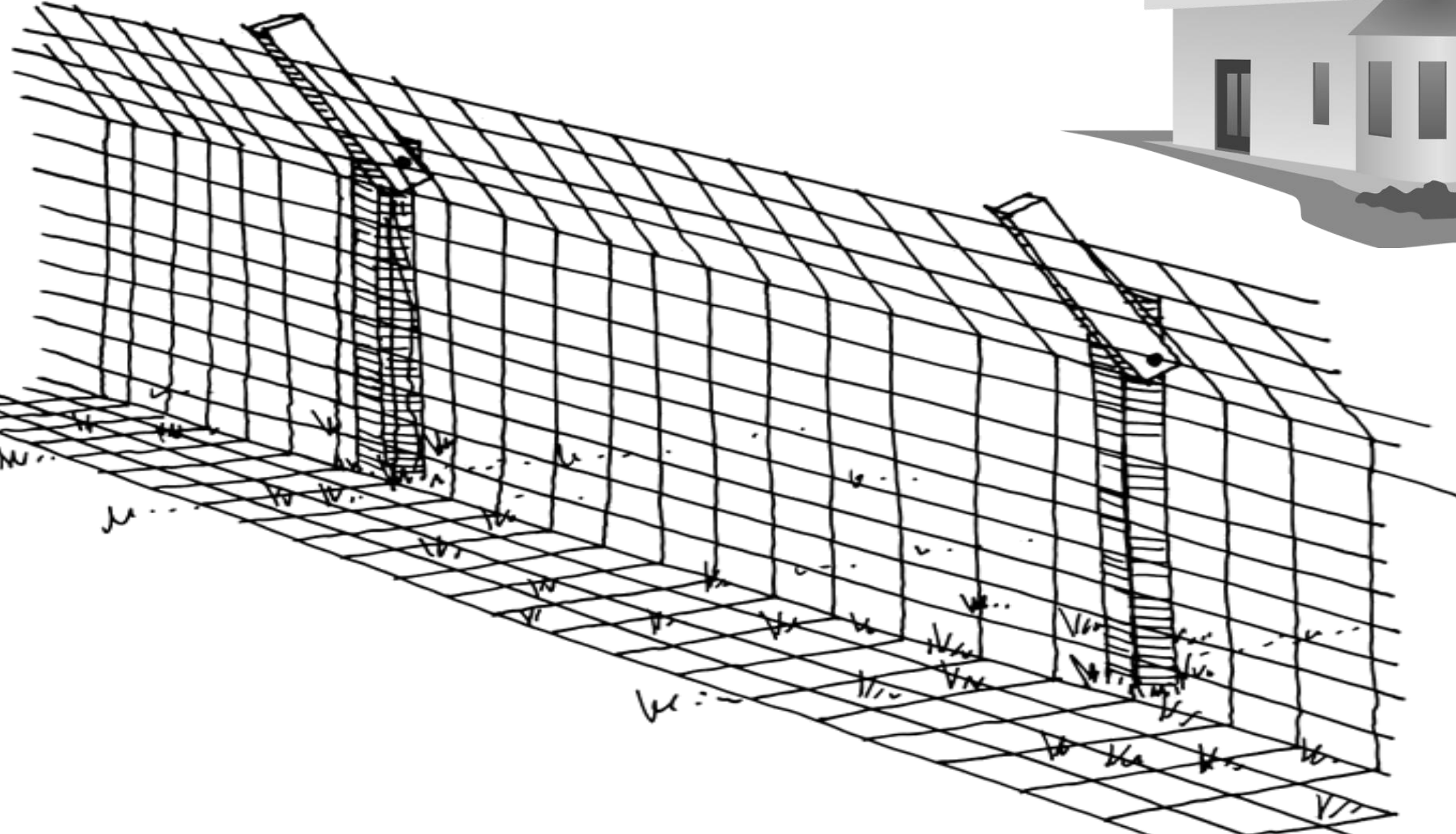
Fencing



- Many fencing options not viable in urban areas
 - HOA restrictions
 - City ordinances
 - Unrealistic

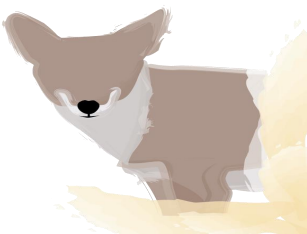


Fencing



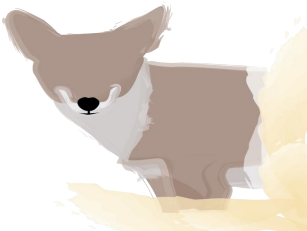
Fencing

- The Coyote Roller



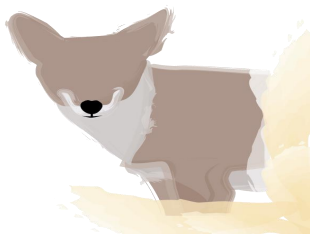


<http://blog.muttrópolis.com/2014/04/17/an-innovative-way-to-keep-coyotes-out/>

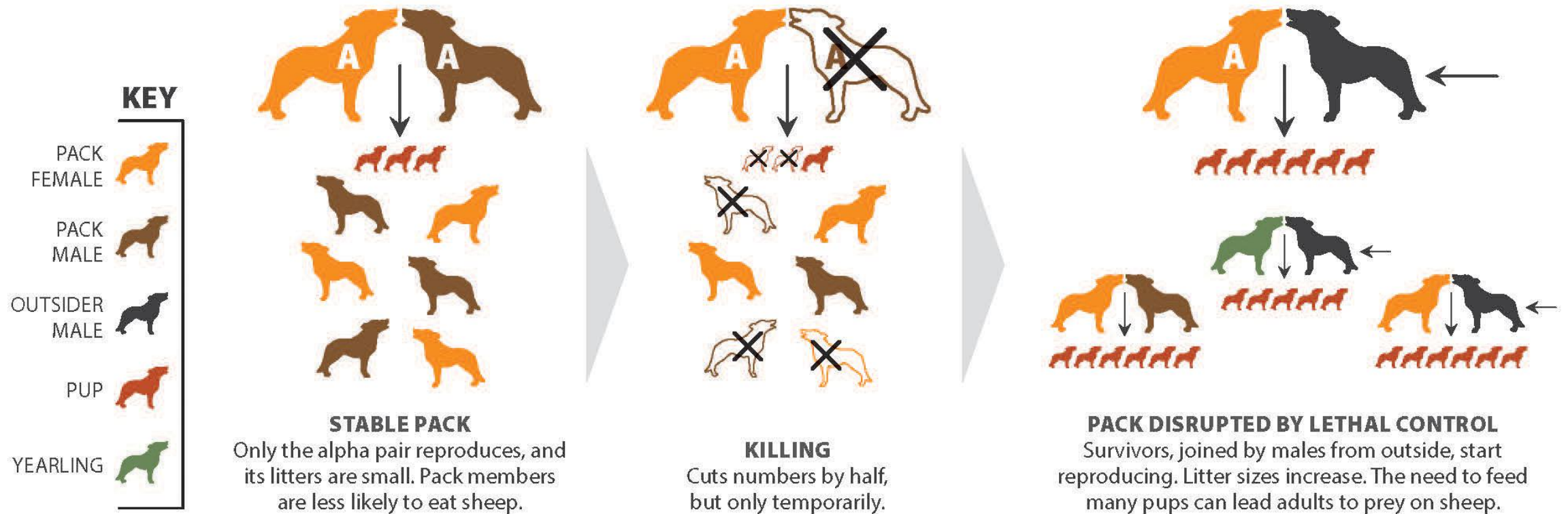


Chemical and behavioral control- Repellants

- Motion-activated lights
- Motion-activated sprinklers
- Motion-activated noise makers

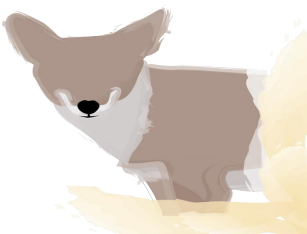


“Coyote trapping increases coyote populations”



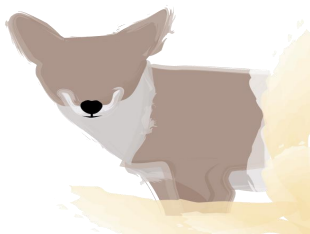
- Responsive reproduction can occur
- Rarely affects density
- Likely that impacts of cars is much greater than small scale trapping

The Golden Rules



- 1. Be vigilant with small children in areas where coyotes are frequently seen and heard**
 - Be aware near dense vegetation where ambush attacks may occur
 - Modify vegetation where coyotes may rest

- 2. Never feed coyotes**
 - Cover your trash
 - Harvest ripe and fallen fruit
 - Restrict access to compost
 - Feed pets inside or leave food out for limited periods of time
 - Don't feed feral cats



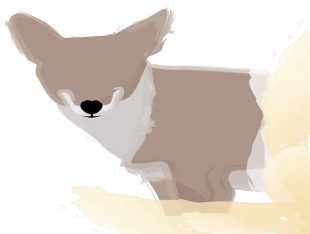
3. Keep dogs and cats indoors

- Particularly from dusk to dawn**
- supervise in yard**
- NEVER walk your dog off leash or on a retractable leash**
- Be particularly vigilant during pup-rearing season**

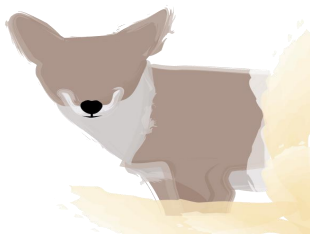
4. Build a coyote-proof fence (if possible)

5. Enclose backyard poultry, livestock or other small animals that live outside with secure fencing and a roof

- Remember, coyotes can dig and jump!**



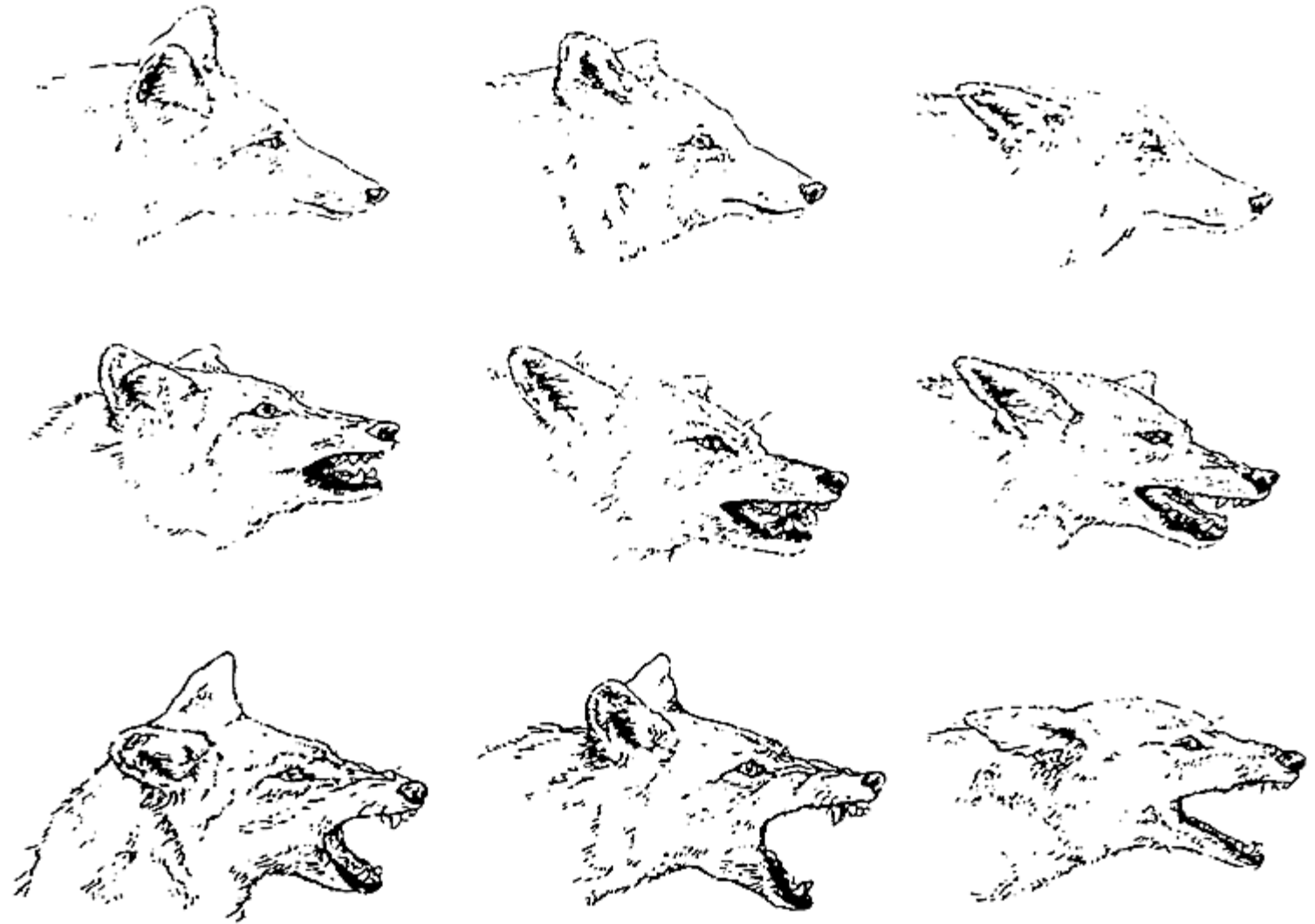
6. **NEVER** approach an aggressive, sick or injured coyote
7. **Be proactive, not reactive**
8. **Always educate**



Increased aggression



Increased fear



Contact Details.....

- OC Animal Care: Main Line (714) 935-6848
- OC Animal Care: After Hours (5pm-8am) (714) 935-7158
- CA Department of F&W: (Southern Region) (562) 598-1032