

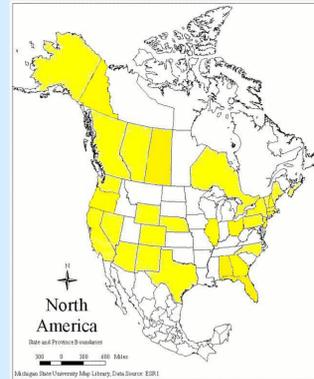
Coyote Attacks on Humans: Causes, Recent Trends, and Management Solutions

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Introduction

Over the past several decades, coyotes (*Canis latrans*) have adapted easily to the abundance of food, water, shelter, and prey (rodents, rabbits, house cats, and small dogs) found in residential areas, parks, cemeteries, greenbelts, and open space. In some localities they have reached population densities far in excess of those found in natural habitats. In suburban residential areas, where most residents either ignore them or are intrigued by their close proximity, some coyotes can become aggressive, attacking both adults and children.



States and Provinces in which coyote attacks have occurred.



West Hills, Los Angeles County, July 2002



AZ Dept. of Game & Fish

Habituation

Suburban residents' tendency to ignore coyotes, or to provide them with food resources (intentionally or unintentionally), facilitates habituation of these opportunistic canids, and some number of them become bold and aggressive toward people and pets. According to Geist (2005), habituation is "an unstable state of *unconsummated* interest... One day, unless negatively conditioned, the predator will, at some point, consummate habituation by testing if this strange animal is edible... Carnivores attack suddenly, and unpredictably."

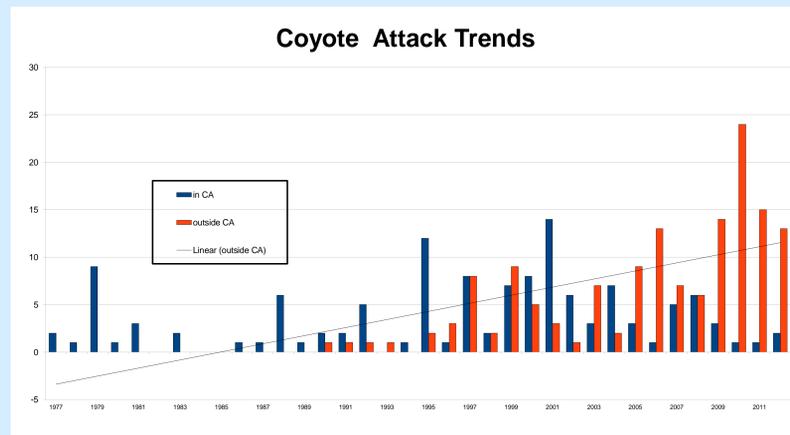
Predictable Sequence of Increasingly Aggressive Coyote Behaviors

(R. O. Baker, 1998)

1. Increase in coyotes on streets and in yards at night
2. Increase in coyotes non-aggressively approaching adults and/or taking pets at night
3. Coyotes on streets, and in parks and yards, in early morning and/or late afternoon
4. Coyotes chasing or taking pets in daytime
5. Coyotes attacking and taking pets on leash or near owners; chasing joggers, bicyclists, other adults
6. Coyotes seen in and around children's play areas, school grounds, and parks in mid-day
7. Coyotes acting aggressively toward adults in mid-day

Data on Attacks

More than 300 "attacks" by non-rabid coyotes are known to have occurred in North America since the mid 1970s, with about ¾ of these occurring in the last decade. While this phenomenon first occurred primarily in Southern California, it appeared in other states in the West within a decade, and we now can document coyote "attacks" from at least 26 states and 7 Canadian provinces. Of the persons injured in such attacks, approximately 59% were adults and 41% were children (age 10 or under). There appears to be a trend of an increasing number of such incidents, with the exception that "attacks" in California have decreased in recent years. These data, gleaned primarily from news reports and agency databases, are an underestimate of actual attacks, as some incidents are never reported to authorities, some agencies do not share this information with researchers or others, and some incident reports are discarded after a few years.



Trends in reported coyote attacks, California vs elsewhere, 1977 to present.

Additional Sources

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Management Recommendations

Solving urban/suburban coyote conflicts is best done through an integrated strategy of both preventive and corrective measures. Currently available tools and methods, as well as some currently under development, are discussed by Huot and Bergman (2007).

Experience gained by field personnel responding to such incidents, in Southern California during the 1980s and more recently, has shown that removal of a relatively small number of coyotes can significantly reduce the immediate risk of coyote attack. Such removal appears to re-instill in the remaining coyotes a wariness of humans that keeps them at a greater distance.

Successful reduction of citizens' complaints about coyotes, including attacks on pets, has been achieved in Austin, Texas, where aggressive coyotes are removed by trapping or shooting when they exhibit behaviors equivalent to stage 4 on Baker's scale. Concurrently, preventive measures must be applied to reduce the incidence of additional coyotes becoming habituated to the point of becoming aggressive.

Management & Education Needs

- Reduce resources in habitat (food)
- Reduce dense landscape habitat (prune & thin)
- Exclude coyotes where possible
- Maintain coyotes' "natural" wariness of humans
- Inform public about ways to discourage coyotes
- Educate responsible agencies concerning appropriate prevention and control strategies
- Centralize data on attacks / public safety incidents at one location
- Remove bold / aggressive individuals when necessary

It is the magnitude of pet losses, even more than human safety incidents, that is likely to cause demands for action to be directed at local decision-makers.



Debbie Field and her 3-year-old son, Weston, who was one of four children attacked by a coyote on June 6, 2004, Simi Valley, CA.