

## Key point:

- Fencing is often the best long term solution to multiple health problems as well as local overpopulation

Fencing deserves its own 3 page chapter, simply because this one simple solution deals with almost all of the problems created by free-roaming status in dogs, everything from overpopulation to disease to trauma.

The easiest solution to population control within a household is simply to have a fenced household that does not have both intact males and females, only one or the other. There are the occasions where an in heat female will successfully get out of the yard, but in most cases having a unisex dog household with a secure fence will stop not only unwanted litters but prevent TVT transmission, tick borne disease (both for dogs and humans living with these dogs), and the myriad of causes of injury and death that account for the short lifespan of free-roaming domestic animals on the reservation and throughout the Third World. In a study of free-roaming dogs in an Australian Indigenous community, similar to that encountered on rural Native American reservations in the United States, the authors noted that "the observed combination of unrestrained dogs and high contact rates suggest that contagious disease would likely spread rapidly through the population" (82).

The other major advantage to the use of fences is that a secure fence will last decades, effectively precluding the need for repeat spay / neuter year after year. There are millions of non spayed dogs in rural and urban areas of the USA for whom unwanted litters are no issue, simply because of good fencing and the decision to have only males or only females, but not both.

Fencing is an excellent option on reservations, which lack urban centers (i.e. multi story apartment buildings / flats), and at the time of this writing (2022) only costs \$150 in materials for a 100 foot length of dog proof galvanized wire fence and associated posts. In one hour, 2 people can fence a 20' X 60' area of backyard that will not only last decades, but is a humane alternative to the CDC's recommendation to chain up dogs for life in order to reduce the tick borne transmission of Rocky Mountain Spotted Fever.

Certain members of tribal governments may express cultural opposition to the idea of fencing but may change their minds with the understanding that fences can minimize the possibility of zoonotic disease transmission as well as dog attacks on people. Dog packs can and do attack and kill people (often children) (83, 84), and this risk can be minimized by the limitation of free-roaming of household pets. Additionally, perceived cultural opposition is not uniform and tribal community members frequently welcome the idea of a fenced yard for personal reasons as well as a general reduction in household crime.

Given that a one time \$150 investment per household can preclude many generations of future litters amongst household animals, animal welfare groups with limited budgets should weigh the possibility of financing this option instead of returning for spay / neuter events year after year. At the very least, the positive effects can be directly borne out year after year, as opposed to "spayathons" in which any forward progress is undone on a community level within two generations of dogs or cats (i.e. one year).

Obviously, fencing may not be an option in Third World urban areas, will not be effective for cats, and will not address the problems of feral dogs. Additionally, with the reduced competition from owned animals, community and feral animals may temporarily increase fecundity, but resource limitations will reduce this in a generation back to carrying capacity. In remote areas of reservation with a handful of homes many miles from the next community, fencing may limit animal reproduction within the home enough that the continual influx of new litters will slow to the point that TNR efforts could actually reach 70% or more if a major, concentrated effort is made.

Finally, most types of fencing will not limit cats from roaming, but making cats “indoor only” will achieve the same benefits towards minimizing within household pregnancy, as well as effectively eliminating virtually all of the non-age related causes of morbidity and mortality common in free-roaming cats.