

BUILDING INVOLVEMENT IN A NORTHERN CALIFORNIA  
COMMUNITY ON A TARGETED PUBLIC HEALTH ISSUE:  
A SERVICE ANNOUNCEMENT ON THE FERAL CAT  
PROBLEM IN CHICO

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A Project  
Presented  
to the Faculty of  
California State University, Chico

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Social Science

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by  
Christine Ann Lando

Summer 2016

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DEDICATION

*To Tracy Mohr, City of Chico Animal Shelter Manager,  
for her patience in answering  
my endless questions*



(“The Wise Cat,” 1904, Henriëtte Ronner-Knip)

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## ABSTRACT

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The primary purpose of this study is to examine the health and environmental issues caused by feral cats and to offer solutions to control the growth of feral cat colonies in a Northern California community. Research supports the claim that feral cats, or community cats are a community problem and a community's responsibility. Therefore, the local government, local animal welfare groups, and concerned citizens need to work together to find viable solutions.

Furthermore, the City of Chico's Animal Control Officer estimates there are approximately 14,000 feral cats living on the streets and in the parks of the city of Chico. Several animal welfare organizations have worked to reduce this number through adoption, offering permanent housing, or trapping, vaccinating, neutering and returning

cats to their colonies. The city's euthanasia policy is only in effect for sick animals brought into the shelter by citizens. Due to budget cuts and lack of space, the city cannot house abandoned or surrendered animals. Therefore, the city refers calls about feral cats to one of the other animal welfare agencies.

The results of this project have shown that a collaborative organization consisting of members of concerned citizens and animal welfare groups can offer the best solutions to the feral cat dilemma. Accessing information about the ways other communities have addressed the feral cat problem is helpful. Working together individual organizations can share strategies for implementing fundraising activities, publicity, grant writing, and other issues such as purchasing pet supplies and food.

In addition, California State University, Chico, needs to take a more active role in disseminating information to its students about not releasing cats at the end of the school year. This information should be provided during orientation and through the university's newspaper. Research has shown that an ongoing public service announcement through television and radio is one of the best ways to reach the most people. Public service announcements offer information and resources available to citizens for assistance with a feral cat problem.

## CHAPTER I

### INTRODUCTION

#### Background

Feral cats have long been a part of Chico's history. The issue of feral cats became prominent when an increase of cats was noticed in Bidwell Park. There was concern that these cats were preying on the bird population as a main source of food (Mohr, personal interview, November 8, 2012). It is known that feral cats will continue to hunt even when well fed (LaCroix, 2006). Without being spayed or neutered, the cat population grew quickly and became a concern to naturalists and members of the local chapter of the Audubon Society (Mohr, personal interview, November 8, 2012).

Feral cats, also known as community cats, are cats that are no longer considered domesticated. A feral cat has no known owner, lacks identification, resists contact with people, and shows extreme fear when approached by humans (California Agricultural and Food Code Section 3175). First generation feral cats are still considered "strays." It is subsequent generations that have little or no contact with humans which are classified as feral (LaCroix, 2006).

Domesticated cats, as pets, lived in fields and cities around the world and continue to do so today. In this context, cats also have a long history interacting with humans dating back as far as 10,000 years ago (Dale, 2009). Cats have been acknowledged as pets as far back as ancient Egypt (Smith-Strickland, n.d.). They were

considered a link to the gods and given a special place of honor in Egyptian households (Holton, 2007).

In 1665, during the Great Plague in England, 40,000 dogs and 200,000 cats were destroyed as they were thought to carry the fleas infected with the disease that caused the plague (Ross, n.d.). It wasn't until later that the people realized that cats would actually help rid London of the rats carrying the disease (Ross, n.d.).

Cats were taken aboard ships during the Age of Discovery beginning in the 15<sup>th</sup> century. They were useful in keeping down the rat and mice population on board the ships (Smith-Strickland, n.d.). Cats were then released on islands by the explorers to control the rabbit population. Unfortunately, the cat population increased and preyed upon local species of animals and birds. The native species were easier to hunt as they did not have the appropriate defense mechanisms for dealing with cats as predators (Collar, 2001). Cats were blamed for the decimation of native bird populations throughout the world (Barcott, 2007).

Cats are not considered wildlife, but many cats are free roaming and spend most of their time out-of-doors (Mohr, personal interview, November 8, 2012). A pair of cats that have not been spayed or neutered may reproduce having as many as forty to fifty kittens a year (Jones, 2012). Solutions to the feral cat population problem have been sparse. Becky Robinson, president of Alley Cat Allies, states that seventy percent of cats turned into animal shelters are killed, and virtually one hundred percent of feral cats are euthanized (Robinson, 2013). She notes that this has done little or nothing to stop the growth of the feral cat population.

Cats that are surrendered to animal facilities are usually held for five days before being euthanized (California Food and Agricultural Code Section 31752, n.d.). City and county shelters have struggled with limited shelter space and resources to provide adequate care for animals (Hurley, 2012). The City of Chico stopped accepting feral cats in 2011 (Mohr, personal interview, November 8, 2012).

New data shows the decrease over the last four years in euthanizing cats at the Chico Animal Control facility (see Appendix A). It should be noted that the decrease can be credited to the fact that the animal shelter no longer accepts feral cats and only takes in those that are sick, hurt, or surrendered by citizens (Mohr, personal interview, November 8, 2012).

### Significance of the Project

Feral cats and free-roaming cats are a concern to the public for causing property damage and for health reasons. Complaints common amongst community members center on damage to private property and the environment (Mohr, personal interview, November 8, 2012). These cats are responsible for killing birds, small mammals, reptiles, amphibians, and fish (State of New Jersey Department of Public Health, 2012).

Feral cats pose a low but important threat to human health (State of New Jersey Department of Public Health, 2012). There are some diseases that can be transmitted from cats and other animals to people. These diseases are called zoonoses. Zoonotic diseases include such transmittable diseases as rabies, distemper, ringworm, cat scratch fever, and toxoplasmosis. Toxoplasmosis can be transmitted through the feces of

an infected cat, undercooked meats, or unwashed vegetables and fruits (State of New Jersey Department of Public Health, 2012). According to Shane Romain with the City of Chico's Parks Department, there have been no reports of toxoplasmosis or any other infectious diseases transmitted to humans from the use of sandboxes in the city's parks and playgrounds (personal interview, February 4, 2016).

Feral cats can also cause environmental damage to yards and can be considered a nuisance. Farmers and wildlife preservationists perceive cats as vermin (State of New Jersey Department of Public Health, 2012). Cats that have not been neutered or spayed display unwelcome behaviors. The males spray strong-smelling urine to mark their territory. During mating season, the females and males whine and emit loud noises that are disturbing to people and excite other animals (State of New Jersey Department of Public Health, 2012).

### Purpose of the Project

The purpose of this project is to examine the health and related environmental issues dealing with feral cats. Topics explored include:

1. How extensive are the feral cat colonies and where are they located in Chico?
2. What steps have been taken to ensure public safety based on the knowledge we have of diseases spread through feral cats?
3. Are there communities who have successfully addressed the feral cat problem including any laws, codes, or ordinances dealing with feral cats?

4. Can the local government, nonprofit agencies, and concerned stakeholders work together to develop a common and workable solution to the feral cat population in Chico?

Feral cats are a part of the Chico landscape. They may spread contagious diseases and can be a nuisance. It is important to find a solution that is acceptable to animal activist groups, the City of Chico, the Audubon Society, and the residents of the city. This thesis seeks to help groups and government agencies work together to make decisions concerning feral cat populations by looking at how other communities have dealt with this issue. With more information, these groups can find common ground and achieve a successful method for management of the feral cat colonies. The project culminates in a public service announcement focusing on the plight of feral cats, offering possible solutions for the feral cats in Chico.

#### Limitations of the Project

General information about feral cats is abundant. Research shows that there has been little disagreement over how cats spread throughout the world (Smith-Strickland, n.d.). There is also no disagreement over the existence of feral cats.

The data collection for this study was challenging in that there is no accurate account of how many cats live in the wild in the Chico area. The estimate puts the number at 14,000 (Mohr, personal interview, November 8, 2012). Independent of that figure, opinions vary greatly on how to control the feral cat population here and whether cats are to blame for the decimation of bird and small animal populations.

Although there is data to show the number of rabies cases in Butte County, there is a lack of data to show if other common diseases have been spread by cats or if diseases could be attributed to other sources (Butte County Health, 2015).

### Definitions of Terms

#### Transmittable Diseases Attributed to Cats

- ❑ **Campylobacter:** a bacterial disease usually found in food (National Center for Emerging Zoonotic Infectious Diseases, 2012).
- ❑ **Cat Scratch Disease:** also known as Cat Scratch Fever (*Bartonella henselae*) usually a benign infectious disease caused by the bacteria, *Bartonella henselae* (Centers for Disease Control and Prevention, 2014).
- ❑ **Cryptosporidium:** a bacteria associated with gastrointestinal illness (Mayo Clinic, 2015).
- ❑ **Giardiasis:** parasites called protozoa causing a parasitic disease (Health24, 2015).
- ❑ **Hookworm (zoonotic hookworms):** blood sucking parasite (Health24, 2015).
- ❑ **Plague:** a zoonotic disease circulated by fleas on small rodents (Centers for Disease Control and Prevention, 2015c).
- ❑ **Ringworm (Dermatophytosis):** a fungal infection of the skin (Centers for Disease Control and Prevention, 2015d).
- ❑ **Roundworm (Toxocariasis or Visceral Larva Migrans)** found in cats called *Toxocara cati* (Health24, 2015).

❑ Salmonella: a parasitic disease most often associated with undercooked food (Centers for Disease Control and Prevention, 2015e).

❑ Scabies: caused by mites under the skin.

#### Definition of Terms Applied to Cats

❑ Domestic cat: (*Felis catus*) is a small, typically furry carnivorous mammal kept as a pet (“Domestic cat,” n.d.).

❑ Feral: used to describe an animal (such as a cat or dog) that has escaped and become wild (“Feral cat,” n.d.).

❑ Stray: an animal (such as a cat or dog) that is lost or has no home (“Stray,” n.d.).

#### Government and Nongovernment Agencies

❑ Butte Humane Society (BHS): A 501c3 nonprofit agency in Butte County, California with a Limited Admissions shelter that strives to make animals as comfortable as possible during their stay (Butte Humane Society, 2016).

❑ Chico Cat Coalition (CCC): A 501c3 nonprofit organization that rescues abandoned domestic cats within the greater Chico urban area (Chico Cat Coalition, 2016).

❑ City of Chico: The city was founded in 1860 by John Bidwell. It has over 33 square miles with a population of 88,634 (January 2015). The great urbanized area has a population estimated at 100,000. It is located in the Northern Sacramento Valley of California, 90 miles north of Sacramento, on Highway 99 in Butte County, and east of Interstate 5 (City of Chico, 2016).

□ Companion Animal Welfare Alliance (CAWA): A 5013c nonprofit agency located in Chico, California it operates in veterinary services, specialties businesses and industry within the Agricultural Sector (Buzzfile, 2016).

□ Neighborhood Cat Advocates (NCA): A 5013c nonprofit agency advocates on behalf of Butte County's free-roaming stray and feral cats, educates the public and performs Trap-Neuter-Return with homeless cats (Neighborhood Cat Advocates, 2015).

## CHAPTER II

### LITERATURE REVIEW

#### Public Health Issues

Feral cats are felines that are no longer considered domesticated. According to the State of California's Agriculture and Food Code, feral cats have no known owner, and lack identification of any kind, resist contact with people, and show extreme fear when approached by humans (Calif. Agricultural and Food Code, Section 3175).

Feral cats and free-roaming cats are a concern to the public for causing property damage and for health concerns. Complaints common amongst community members center on damage to private property and the environment. These cats are also reportedly responsible for killing birds, small mammals, reptiles, amphibians, and fish (State of New Jersey Department of Public Health, 2012).

#### Contagious Diseases Associated with Cats

There are few diseases that can be spread from cats to humans. These disease fall into two main categories: parasitic infestations and bacterial or viral infections (Health24, 2015). The two with potential serious or fatal consequences would be toxoplasmosis and rabies (Health24, 2015).

It would be difficult to determine if a feral cat was once a domesticated pet that has been vaccinated against diseases. Although feral cats pose a low threat to human health, there are diseases which can be transmitted from cats to other animals and people.

These diseases are called zoonoses (State of New Jersey Department of Public Health, 2012). Zoonotic diseases include such transmittable diseases as rabies, distemper, ringworm, and cat scratch fever (State of New Jersey Department of Public Health, 2012). Most of these diseases are transmitted by bites and scratches, but some may be transmitted by touching the feces of an infected animal.

Cats play a very minor role in the transmission of rabies (Hartwell, 2012). A person needs to be bitten by a rabid animal to contract rabies. However Anthony LaCroix (2006) notes that cats are the companion animal most commonly infected with rabies in the United States.

Another disease found in feral cats is toxoplasmosis. It can be transmitted not only to people but to other animals. Toxoplasmosis is a parasite found in cat feces, undercooked meats and unwashed fruits and vegetables (Center for Disease Control and Prevention, 2013). The symptoms may include swollen glands, muscle aches, and flu-like symptoms, but usually there are no symptoms (Center for Disease Control and Prevention, 2013). Pregnant women and those people with a compromised immune system should avoid cleaning litter boxes. However, the Center for Disease Control and Prevention states that it is more likely to contract toxoplasmosis from gardening than it is from direct contact with cats.

Cat-scratch Disease, also known as cat scratch fever (*Bartonella henselae*) is another disease transmitted by cats. About 40 percent of cats carry this disease. This disease is more likely to infect children under the age of fifteen and is transmitted by a scratch from an animal with infected fleas. It is noted that feral cats are more likely to carry this disease than domesticated cats (Center for Disease Control and Prevention,

2014). Cat scratch fever can cause swollen lymph nodes around the head, neck, and upper limbs. Other symptoms may include headache, fever, fatigue, and loss of appetite (Centers for Disease Control and Prevention, 2014).

Other diseases or illnesses that can be passed on to people from cats would include hookworm, roundworm, and ringworm (Centers for Disease Control and Prevention, 2015b). Hookworm and roundworm are parasites, but ringworm, is actually a fungal infection of the skin, hair and nails. It is highly contagious and causes flaky bald patches that may look like dandruff (Badash, n.d.). It is spread through contact with infected animals, their bedding, dishes, and other materials. It may also be spread through the shedding of animal fur with the spores surviving more than a year (PetsWebmd, n.d.).

Salmonella is a parasitic disease most often associated with undercooked food. Although most commonly transmitted through contaminated food, it is one of the zoonotic pathogens that may be transmitted from animals to people. It is found in the feces of infected animals. It can also be found in dry pet foods and pet treats (Centers for Disease Control and Prevention, 2015e). The symptoms may include diarrhea, fever, or stomach pain (Centers for Disease Control and Prevention, 2015e).

The Campylobacter bacteria is another disease that can be passed from infected cats or dogs through their feces. It can also be carried by birds who show no symptoms and may not be sick. It is more likely to be transmitted by raw poultry meat. It is a mild infection of the gastrointestinal system and usually lasts no more than a week (National Center for Emerging Zoonotic Infectious Diseases, 2012).

A Mayo Clinic study reports that Cryptosporidium is the most common gastrointestinal disease and is highly contagious. It can be passed to humans through the

infected feces of an animal such as a cat or dog, but it is usually transmitted through contaminated food or water. Freezing or boiling meats will kill the infection. The illness itself usually lasts no more than one to two weeks with symptoms of fever, abdominal cramps, nausea, and vomiting (Centers for Disease Control and Prevention, 2015a).

Plague is a rare bacterial disease. It is passed on through infected fleas on animals including cats. The latest data shows there have been no reported cases of the plague in Butte County as of June 2015 (Butte County Public Health, 2015). Cats are particularly susceptible to the type of plague known as *Yersinia pestis* (California Code of Regulations, n.d.). This form of the plague is transmitted via oral contact with infected rodents. Cats can contract the disease by eating rodents who are infected and humans from handling or eating an infected animal (Lifescript, n.d.). The section of the California Code of Regulations dealing with the plague, suggests keeping cats indoors or on leashes to limiting their ability to hunt. Another preventative is to treat dogs and cats for fleas and to avoid handling dead animals (Centers for Disease Control and Prevention, 2015c).

As noted previously, the Center for Disease Control states that some people are more likely to get diseases from cats depending on a person's age, health, immune system, infants and children under five, organ transplant patients, people with HIV/AIDS, those with certain forms of cancer, and people using immune suppressant medicines are particularly susceptible. Other contagious diseases are passed on not only by cats but by dogs and farm animals. Most of these disease cause symptoms such as low-grade fever, headache and fatigue (Centers for Disease Control and Prevention, 2015b).

It is not always possible to avoid being bitten or scratched. The Center for Disease Control recommends that people who have been bitten or scratched wash the

area thoroughly with soap and water. Since infected fleas are a major carrier of many diseases they also recommend controlling fleas on household pets (Centers for Disease Control and Prevention, 2015b).

In addition, it is important to note that the source of most of the infectious diseases listed here come from cat feces (Health23, 2015). Avoiding contact with possibly contaminated soil and used cat litter is recommended. It is important to wash hands with hot water, disinfectant or soap immediately after contact (Health24, 2015).

### Animal Control

Feral cats can pose a low but important threat to human health (State of New Jersey Department of Public Health, 2012). Euthanasia as a form of animal control does not seem to be working to mitigate the problem (Mohr, personal interview, November 8, 2012). Becky Robinson, president of Alley Cat Allies, states that seventy percent of cats turned into shelters are killed, and virtually one hundred percent of feral cats are euthanized (Robinson, 2013). She also notes that euthanasia not only costs tens of thousands of dollars annually, but has done little or nothing to stop the growth of the feral cat population (Schmidt, Swannack, Lopez, & Slater, 2009, p. 123). Since euthanasia does not seem to be a viable alternative to animal control in reducing the feral cat population, one of the most permanent solutions seems to be the trapping, neutering, and returning program now in place in many cities and states (Neighborhood Cats, 2015).

In the past little was done to curb the population growth of feral cats. Cats are not considered wildlife, but many cats are free roaming and spend most of their time out of doors (State of New Jersey Department of Public Health, 2012). A pair of cats that

have not been neutered or spayed may reproduce having as many as 40 to 50 kittens a year (Jones, 2012). Most cats are turned in to local animal shelters by individual citizens. City and county animal shelters have struggled with limited shelter space and resources to provide adequate care for the animals (Hurley, 2012). Because of the lack of space in government animal facilities cats that are surrendered are held for only five days before being euthanized (California Food and Agricultural Code, Section 31752, n.d.). In 2011 more than 1,200 cats were euthanized by the city of Chico's Animal Control Facility (Mohr, personal interview, November 8, 2012). Since that time the number of cats destroyed each year has decreased (see Appendix A). The decline in numbers of animals killed by the city's animal control department may be due, in part, to the City of Chico no longer picking up strays or feral cats (Mohr, personal interview, November 8, 2012).

It is not always easy to determine if a cat is a frightened domestic cat or a feral cat. The California Food and Agricultural Code states that a cat determined to be feral may be euthanized if not turned over to a nonprofit animal adoption organization. There is little hope for feral cats being adopted because of their temperament and fear of humans. Euthanasia was historically the only known way known to control the feral cat population.

Another method of animal control was the "shoot-to-kill" approach by the 2005 Wisconsin Conservation Congress. They suggested that any stray cat was to be considered an unprotected species. This proposed law was voted down by the citizens.

Even though feral cats are blamed for decimating native bird populations, people generally don't want cats trapped and killed (Dale, 2009). The Audubon Society

acknowledges that, in fact, it may not be the cats, but rather pollution, lack of habitat, and disease that may be the cause of declining native bird populations.

The issue of controlling the feral cat population may start with humans who are providing a food source for the cats (LaCroix, 2006). Anthony LaCroix has written articles about the plight of the feral cats. He has noted that feral cat colonies, also called clowders, form around food sources that are of human making. Cat colonies are found most often around dumpsters, apartment buildings, schools, and garbage cans. He also talks about the “vacuum effect.” Taking feral cats out of the colony simply means more cats will move in to replace those removed as long as the food source remains. Therefore, controlling feral cats may mean removing their food sources being provided by humans.

More recently animal welfare groups have taken on the plight of the feral cat in dealing with the animal control issue. One successful group is the Metroplex Animal Coalition in Dallas, Texas (Munch, 2013). Elaine Munch, the president of the organization in 2001 states that the mission of the organization is to put an end to killing unwanted animals.

The Metroplex merged with the Dallas Animal Advocates to form the Dallas Companion Animal Project. Along with help from the city of Dallas, they formed a 501c3 non-profit organization. Their goal is to end the killing of all healthy, adoptable animals in their community. They now have more than seventy partners working together to save animals by providing a variety of services such as low-cost neutering, vaccinations, adoption, and the Trap-Neuter-Return (TNR) program (Dallas Companion Animal Project, 2012).

Another successful animal collaboration was formed in New York City. The Mayor's Alliance for NYC Animals was formed in 2003. This collaborative was started by the New York Bar Association and quickly grew. According to their 2011 Progress Report, this nonprofit coalition works with more than one-hundred fifty shelters and rescue groups. Their mission is to make New York City into a no-kill community by 2015. The Mayor's Alliance for NYC Animals directs citizens to one of its many nonprofit organizations or agencies depending on the need. They provide animal shelters, abandoned animal care facilities, spay/neuter programs, as well as TNR for feral cats (Mayor's Alliance for NYC Animals, 2013).

The Animal Outreach Humane Society in Illinois was also formed to save the lives of abandoned or unwanted pets (Animal Outreach Humane Society, 2012). Their collaboration is made up of spay/neuter clinics, a foster home network, and the Feral Friends Group that trap, neuter, and return cats to feral communities. In addition, the McHenry County Animal Control program offers low-cost vaccinations and posts animals up for adoption.

Several cities in California are addressing this issue. The City of San Jose is one of the forerunners of the trap, neuter, and return program. The city-run shelter pays for the program and uses volunteers from other cat rescue groups for assistance. The community has managed to reduce the number of cats brought into shelters from 11,000 in 2009 to 900 in 2011 (Jones, 2012). Similarly, the City of Santa Cruz volunteers run a nonprofit organization for the rescue of feral cats. They collaborate with other feral cat advocacy groups and veterinarians to provide low cost neutering and spaying, vaccinations, and trap rentals. In 2011, they trapped, neutered, and returned 971 feral cats

(Project Purr, n.d.). The city of Santa Rosa, California runs a nonprofit feral cat rescue organizations (Forgotten Felines of Sonoma County, 2012). A paid staff runs the organization with volunteers who collaborate with local veterinarians, spay/neuter clinics, and other rescue groups. Their efforts in trapping, neutering, and returning feral cats saved the lives of 2,386 cats in 2011 (Forgotten Felines of Sonoma County, 2011).

San Francisco's Society for the Prevention of Cruelty to Animals (SPCA) began its no-kill policy in 1979. It ended its contract with the city in 1989. Their mission is to save dogs and cats and find homes for those that are healthy and adoptable (Avanzino, 2002). Working with San Francisco's Animal Care and Control Shelter the SPCA saves the city money by offering services the city cannot afford alone such as veterinarian assistance, medical, and rehabilitation for the animals, spaying, and neutering. In 2011 the SPCA trapped, neutered, and returned over 500 cats (Avanzino, 2002).

This overview of California cities and their approaches to the feral cat problem offers possible solutions applicable to Chico. Euthanasia, TNR (trap, neuter, return) and animal adoption are some of the ways communities and animal groups are working together to control the feral cat population.

### Historical Background

Cats have a long history with humans dating back over 10,000 years (Dale, 2009), and have been acknowledged as pets in ancient Egypt (Dale, 2009). They were considered a link to the gods and given a special place of honor in Egyptian households (Holton, 2007).

Feral cats were once domestic cats (“Feral cat,” n.d.). A domestic cat is one that is considered a household pet (“Domestic cat,” n.d.). Cats lived in fields and cities around the world and continue to do so today (Dale, 2009). According to Steve Dale, a writer for the Kansas City Tribune, they are also credited with killing the rats that spread the Great Plague. First generation feral cats are still considered “stray” (LaCroix, 2006). A stray cat is defined as an animal that is lost or has no home (“Stray,” 2015). It is subsequent generations that have little or no contact with humans that are considered “feral” (“Feral cat,” n.d.).

Cats were left behind by travelers during the Age of Discovery which began in the 15th century (Briney, 2016). Ships released rabbits onto islands as a future food source (Dale, 2009). Rabbits multiplied at an alarming rate and cats were brought in to control the rabbit population. They were also used to control the rat and mice populations. Unfortunately, the cat population increased and preyed upon local species of animals and birds. The native species were easier to hunt as they did not have the appropriate defense mechanism for dealing with cats as predators (Holton, 2007). Cats were blamed for the decimation of native bird populations.

#### Historical Background Specific to Chico

Feral cats have long been a part of Chico’s history. However, the issue of feral cats became prominent when an increase of cats was noticed in Bidwell Park in 1997 (Alberico, personal interview, November 8, 2012). Bidwell Park is one of the largest parks in the United States, with approximately 3,670 acres of land (Beach California, 2016). Bidwell Park is often described as having two parts: Lower Bidwell Park and

Upper Bidwell Park. Lower Park is within close proximity to neighborhoods and the Chico State University campus (City of Chico Parks Division, n.d.). It has been surmised that cats were often “dumped” in the park by college students who were leaving town and no longer able to care for their pets (Mohr, personal interview, November 8, 2012). Without being spayed or neutered, the cat population quickly grew. Feral and free-roaming cats will continue to hunt even when well fed (LaCroix, 2006).

The Chico Cat Coalition (CCC) came into existence in 1997 in an attempt to control the feral cat population in Bidwell Park. They asked for and received funding through the City of Chico to trap cats in the park (Alberico, personal interview, November 8, 2012). Trapped cats were taken to the Cat Coalition shelter where they were inoculated, treated for infections and diseases, and spayed or neutered. Their facility housed approximately sixty cats. Although the healthy cats were up for adoption, most of the feral cats were too wild to be adopted.

Due to budget cuts in March of 2010, the City of Chico stopped funding the Cat Coalition trapping program and trapping by the CCC in Bidwell Park ceased. The City of Chico continued trapping until the spring of 2012 (Mohr, personal interview, November 8, 2012). Cutbacks in City staffing led to fewer employees available to trap, and consequently, there has been no trapping anywhere in the city unless done by private citizens. By 2012, the Cat Coalition shelter had reached capacity (Alberico, personal interview, November 8, 2012). Currently, cats continue to be turned in to the Butte Humane Society, which is partially funded by the City of Chico. Cats brought in outside the city limits are directed to the Butte Animal Control facility in Oroville (Mohr, personal interview, November 8, 2012). Organizations such as PawPrints of Chico, still

offers low cost neutering or spaying. Due to the severe financial cutbacks in city services, in 2012 the City of Chico stopped accepting and catching feral cats (Mohr, personal interview, November 8, 2012).

A new nonprofit organization was formed in 2012 to help with the feral cat problem in Chico. Armeda Ferrini and a handful of volunteers formed the Chico Animal Welfare Association (CAWA). This group is dedicated to trapping, neutering, and returning feral cats back to their cat colonies. The feral cats are also vaccinated. These feral cats will continue to protect their food source, not reproduce, and therefore new cats will not be moving in to take their place (LaCroix, 2006). The Neighborhood Cat Advocates, under the umbrella of CAWA, was founded in January 2013 (Ferrini, personal interview, September 10, 2013). This group of volunteers trap, neuter, vaccinate, and return feral cats to their colonies. In 2014, they trapped 1,065 cats and have returned or adopted out nearly 2,000 (Ferrini, personal interview, September 10, 2013).

#### Community Involvement in Dealing with Animal Nuisance Problems

Although feral cats are not considered wildlife, solutions may be found for the feral cat population problem by studying how other communities have dealt with their animal nuisance problems. In Massachusetts, communities have been addressing the problem of wild geese that no longer migrate (Siegel, 2008). Canada Geese are perceived to be a nuisance and a health hazard. Julianne Siegel came to the conclusion that regardless of the outcome, decisions could be made that would be acceptable to all parties involved. The local government needed to take an active role in the decision-making process. It needed to include the citizens in every step of the process and accept and

respect input from them. Siegel stated that the most important factor to consider when making a management decision was to minimize conflict and controversy (Siegel, 2008).

White-tailed deer are another wildlife animal that is considered a nuisance. These deer have adjusted to living in the suburban environment of Carboro, North Carolina. Deer are host for the black-legged tick which carries Lyme disease (DeNicola, VerCauteren, Curtis, & Hygnstrom, 2000). The Northeast Wildlife Damage Cooperative studied managing the deer population. Most government agencies already control a portion of the deer population through a hunting season. Many residents were opposed to harming the deer, but found them to be a nuisance when deer invaded their gardens and yards. In their report, DeNicola and colleagues stated that it is not always possible to reach consensus on how to control the deer population or to come to a single solution. As in Siegel's report on Canada Geese, the recommendation was to garnish approval and get consent from key stakeholders. The report also stated that hiring a professional facilitator would be helpful (DeNicola et al., 2000). A survey of the residents helped to determine the biases of the community. In dealing with an animal related health or nuisance problem, each community has the resources to work within the confines of already existing laws to find a solution that works best for that community. Transparency in the government decision-making process continues to be paramount in any solution proposed. Most communities lack the resources to tackle an animal nuisance problem without funding and government support. The individual groups need to see that a collaborative organization would better serve them (Strauss, 2002, p. 59). Not everyone agrees on how the collaborative would work. The agencies involved need to work together to establish a goal acceptable to each home agency.

### Community Involvement Specific to Chico

Funding plays an important role in any of the solutions proposed (Siegel, 2008). There is not a stable, reliable source of income for the agencies involved within the City of Chico. Lack of funds is a major hurdle to the success of finding a solution to the feral cat problem. The only agency with a stable funding source is the City of Chico's animal shelter. Their annual budget of \$500,000 is determined by the City Council and subject to change based on the city's revenues (Mohr, personal interview, November 8, 2012). It would seem, therefore, based on Siegel's research that the local government should play an important role in the decision-making process of the problems associated with feral cats.

The agencies and groups involved in the feral cat problem work together sporadically. Although Butte Humane, the City of Chico Animal Control, Chico Cat Coalition, and the Neighborhood Cat Advocates have met as a group occasionally, it does not seem likely that they have the time or manpower to meet on a regular, ongoing basis (Ferrini, personal interview, September 10, 2013). They do share a main concern for the humane treatment of feral cats. Calls that come in to one of the agencies will trigger a contact to the agency that is the most relevant to the situation.

### The Power of Public Service Announcements

The feral cat problem is not going to go away on its own. The agencies working on the problem continue to work independently or sporadically with each other, coming together on an as-needed basis. There has been little outreach to the community and little awareness of the extent of the feral cat problem. Cats continue to be "dumped"

in Bidwell Park or abandoned when residents move out of the area. People who abandon cats assume they will survive, being natural predators. In reality, feral cats have an average life span of two years (LaCroix, 2006). The City of Chico no longer helps animal welfare groups with funding to trap feral cats. The City no longer takes in feral cats. This leaves the plight of the cats up to the residents of the area where a colony of feral cats reside. Most people do not want to see cats killed, but also find feral cats to be a nuisance and to cause environmental damage as well as pose possible health risks. There are now ways to reach the public that were not possible in the past. These include Public Service Announcements in the form of commercials. This method reaches more people than prior promotional campaigns to raise awareness of issues such as the feral cat problem. Online sites such as the “Rock Your World” website show groups how the power of the PSA can get people to support their cause. PSAs are the last step in a long process of getting diverse groups to come together to achieve a common goal. PSAs in the form of commercials reach more people through any other media (TVB Media Comparisons Study, 2012). A study conducted by Ball State University’s Center for Media Design used a random ethnographic population sampling to determine which type of media, including mobile phones and print, reached the most consumers. The following graphics show the results of the study by Ball State University (see Appendix B). The research presents evidence that television reaches more viewers and more age groups than any other medium including newspapers, radio, magazines, the Internet, and mobile devices (TVB Media Comparisons Study, 2012).

The solution to the feral cat problem in Chico is dependent upon the agencies and the government’s willingness to work together. Bringing together the nonprofit

organizations and government agencies already involved in saving the cats would be the first step. The goal is to reduce the intake of healthy or feral cats, to curb the reproduction of feral cats through neutering or spaying, and to vaccinate cats to prevent the spread of diseases.

## CHAPTER III

### METHODOLOGY

#### Introduction

The purpose of this project is to contribute to a solution to the feral cat problem in Chico and the related health issues and diseases that may be spread by feral cats. The feral cat problem became apparent in 1997 when the Chico Cat Coalition began trapping cats in Bidwell Park. This organization provided vaccinations, neutering, and a permanent home for the cats that were not adoptable due to temperament or health problems. The funding was provided by the City of Chico for this program until 2010. Due to budget cuts and space constraints, the City and the Butte Humane Society no longer trapped or accepted feral cats into their shelters.

In 2013, the Neighborhood Cat Advocates (NCA) became a new nonprofit under the parent organization, The Companion Animal Welfare Alliance (CAWA). The NCA responds to citizen callers in the Chico area looking for help with feral cats. It will trap, neuter, vaccinate, and return feral cats to their colonies where they no longer reproduce or spread diseases. This seems to be a promising way to manage the future growth of the feral cat population.

Using the information gleaned from other cities and organizations, the City of Chico and interested parties should be able to find solutions to the feral cat problem not unique to Chico. Opening up lines of communication and sharing information is the first

step in setting up a collaborative (Munch, 2013). The city and local volunteer organizations occasionally have worked together to house cats brought in to the shelters, but never on an ongoing basis or with the intent of finding a permanent solution to the feral cat problem. The condition of mutual respect and trust creates an incentive for all parties to pursue collaboration (Strauss, 2000, p. 59).

The use of a knowledge base would allow the collaborative to quickly disseminate and analyze information (Repath & Foxlow, 1994). Participants would have equal access to information and discussions can take place in a safe and open environment. In addition to entering information from other communities, the knowledge base can be used to enter information from each of the participating agencies including number of staff, volunteers, and other resources needed. The formation of goals acceptable to all the participating organizations is imperative (Strauss, 2002, p. 82).

The next step would be for the collaborative organization to form committees. A core group would manage the process and oversee the work of the subcommittees (Strauss, 2002, p. 48). Once the committees are formed each would be assigned to a specific area of concern. It would be important to include all stakeholders and interested persons in the process. It should not be perceived as a closed or exclusive group (Strauss, 2002, p. 51).

Collaborations can accomplish what no one organization can do. As a collaborative, the independent groups have a collective voice (Munch, 2013). The collaborative group can share resources including donations of pet food supplies, veterinary assistance, volunteers, and legal help. Collaboratives can share the burden of fund raising and finding other revenue sources. Collaboratives can move from sharing

divergent thinking to finding new and innovative solutions (Kaner, 2007, p. 17).

Although the stakeholders may think they are working toward the same goal, their solutions and perspectives can vary greatly. A skilled facilitator would be helpful in navigating through a group's divergent thinking (Kaner, 2007, p. 34). Online research was helpful in collecting data regarding what other communities in the United States, in particular, communities in California are doing to curb the increase of feral cat populations in those areas. The Review of the Literature chapter cites many examples of how other communities work together to bring feral cat populations under control. Another step in the project was to research laws and policies regarding feral cats. The second chapter of this project notes that most state laws concerning cats deal only with rabies prevention. California has the most comprehensive section concerning domestic and feral cats, but even under California law there is no law requiring the licensing or vaccination of cats.

There are several inferences that can be drawn by studying the different projects other communities have tried. The communities with the highest success rate formed collaborative organizations that worked together to address the problems related to feral cats. Based on research findings, euthanasia does not seem to be the only viable solution to the feral cat dilemma.

### Conclusion

The need for community involvement became evident in interviews with the major stakeholders. They included the City of Chico's Animal Control Officer, Tracy

Mohr, the Butte Humane Society's Adoption agent, Trent Burnham, Armeda Ferrini of the Neighborhood Cat Advocates, and the volunteers with the Chico Cat Coalition.

Each of these organizations works to educate the public on the need to control the feral cat population through ads in local newspapers, brochures, flyers, and local media. Each organization works independently. The only contact between the nonprofits is during emergency situations. For example, discovering a house with a number of felines that are undernourished, not vaccinated, not neutered, or displaying health-related problems.

In addition, to getting the nonprofit groups to work in a collaborative, the need became apparent to find a way to reach the most people about feral cats and their health issues. Research included different ways to reach out to the public. Television seems to be the most promising avenue, having the greatest audience. This author worked with a local media production company, Half a Bubble Out, to produce a 30-second public service announcement about the concerns and problems related to feral cats. The public service announcement includes the phone number of City of Chico's Animal Control Department. When called, the dispatcher then directs the caller to the organization best suited to that need.

Tracy Mohr (personal interview, November 8, 2012), the City of Chico's Animal Shelter Officer (2014), sums up the feral cats situation in these words:

Feral cats are a part of our community, not unlike other wildlife. They have coexisted with humans for thousands of years, and have an important role keeping the rodent population in check (it's been documented that rats are a threat to bird populations by eating their eggs and hatchlings). There are ways to co-exist with community cats, whether you would like them to hang around or prefer they didn't.

## CHAPTER IV

### SUMMARY, RESULTS, AND RECOMMENDATIONS

#### Summary

This project is intended to help those interested in solving the feral cat problems in their communities. Through research and investigating what other communities have tried, there is the possibility of reducing the feral cat population. Major elements need to be addressed for any community to meet with success. The best and most successful communities have formed collaborative organizations or coalitions composed of government and nonprofit animal welfare agencies. Recommendations center around practitioners such as the Butte Humane Society, the Neighborhood Cat Advocates and the Park Department for the City of Chico working together.

This author undertook to research past practices involving the City of Chico and the local animal welfare agencies. Through interviews with the city's animal control officer, the Neighborhood Cat Advocates, the Chico Cat Coalition, and the Butte Humane Society, it became apparent that the interested stakeholders were working independently of each other and only interacting on an as-needed basis. In addition, there was no public awareness of the problem related to feral cats (Mohr, personal interview, November 8, 2012).

## Results

The purpose of this project was to examine the health and related environmental issues dealing with feral cats. There does not seem to be one best practice for eliminating feral cats other than neutering, vaccinating, and keeping domestic cats as indoor pets only. Through research and personal interviews, this author was able to identify where most of the feral colonies were located. In Chico, those sites were clustered around schools, apartment buildings, dumpsters, garbage cans, and Lower Bidwell Park (Mohr, personal interview, November 8, 2012).

Public safety based on the knowledge available was of little concern to citizens. The City of Chico's Park Department maintains the sand boxes in the park areas and no complaints of cat feces or diseases has been reported. Shane Romain, Park Services Coordinator for the City of Chico, notes that the sand boxes at Hooker Oak Park and Caper Acres, in Bidwell Park, are cleaned and raked daily (personal interview, February 4, 2016). Most communities have addressed the feral cat problem through a combination of government and nongovernment agencies working together. The more successful organizations formed coalitions or collaborative agencies. These are permanent ongoing groups with websites, veterinary support, and fundraising abilities. There have been no noticeable changes in laws, codes, or ordinances dealing with feral cats (Mohr, personal interview, November 8, 2012).

Chico has yet to form a group inclusive of government and nongovernment agencies that work together to solve the feral cat population problem in Chico. This is due, in part, to lack of volunteers and their limited time commitment.

The Public Service Announcement aired on three local stations, KHSL, KNVN, and the CW from February 23, 2015, until December 31, 2015. During that time it averaged two showings during a 24-hour period. The results were hard to quantify. The staff of the City's Animal Shelter and the City of Chico's Police Department were in favor of continuing PSAs to promote the public's awareness of the feral cat problem.

### Recommendations

The most promising method of controlling the feral cat population seems to be through the trap, neuter, and return program. There are numerous examples of the success of this program throughout the United States. Recommendations center on expanding this proven method and limitations which may encumber its implementation. This author recommends that practitioners work to strengthen their interdependence and promote public awareness while researchers explore methods found to be successful in other communities.

#### 1. Forming a Collaborative Agency

Research has proven that organizations forming a partnership have more clout (Kamensky, 2004, p. 12). The availability of new technology helps to keep stakeholders and animal welfare groups in contact with one another. In order to form the collaborative agency, a facilitator should be appointed. This agency does not take away the autonomy of the independent organizations. Each independent organization pursues its own mission and purpose while using the network to help with fundraising, publicity and recruiting volunteers. Collaboration encourages the sharing of resources which may include anything from pet food to legal advice. By sharing ideas, the collaborative agency can

offer new ways of dealing with the problems that have been plaguing animal welfare groups for years.

There may be some limitations that need to be addressed. A new collaborative organization requires a time commitment. This can be difficult when many nonprofits already have few volunteers and have a large turnover. There will always be conflicts that need resolution even among animal welfare groups working toward the same goals.

## 2. Continuing a Public Service Announcement (PSA)

The present 30-minute PSA ran from February 23, 2015 to December 31, 2015, on local channels. It is recommended to either renew this PSA or to produce a new one with updated information. Research has proven that televised public service announcements reach the most people. Another recommendation would be to produce a PSA for local radio stations. Practitioners, such as the Neighborhood Cat Advocates, should be working with the City of Chico's Animal Shelter Officer to continue producing public service announcements.

## 3. Recruiting Volunteers

The backbone of any nonprofit organization is its ability to attract and keep volunteers. The Butte Humane Society is a good example of how volunteers are recruited and trained. Through a collaborative agency the Humane Society can share its expertise in this area.

Volunteers are a forever changing entity. Any nonprofit must continually have the ability to attract volunteers through publicity and a show of enthusiastic dedication to its cause. The author recommends that the collaborative agency work to recruit more

volunteers through a variety of media such as social media, local and university newspapers, radio and television.

#### 4. Recruiting Veterinarians

At the time of this project, there are only two veterinarians in the Chico area willing to accept feral cats on an as-needed basis. Feral cats cannot be kept in cages for long periods of time. Vets must be ready to perform spay or neuter operations whenever cats are trapped. The advantage of recruiting more veterinarians would be to give those volunteering more time between calls. Pursuing new vets would be a difficult and time consuming endeavor for already struggling animal welfare groups with few volunteers. More research is needed to find how other communities attract the needed veterinary support.

#### 5. Involving Chico State University (CSUC)

It is worth noting that CSUC, through the efforts of the Neighborhood Cat Advocates, has trapped many of the feral cats on the university campus. It is recommended that the NCA actively recruit volunteers to help with trapping of feral cats throughout the Chico area. The author recommends that the NCA place ads in the university newspaper to attract volunteers or offer internships. Practitioners could also offer community service credit to students.

At the beginning of each school year, information should be included in the students' orientation packets about the responsibilities of pet ownership. An article in the Orion, the university newspaper, should include information about neutering pets and discouraging abandoning cats at the end of the school year. Most students are not aware that domestic cats will mate with feral cats, perpetuating the cycle of feral cats.

## 6. Studying Other Communities

The area of study for this project was specific to Northern California. Further study might investigate other similar communities for new, updated information for solutions to the feral cat problem.

## 7. Changing City Policies

The City of Chico does not allow the feeding of cats in Bidwell Park. In order to trap feral cats, there needs to be a food source. The author recommends that the Neighborhood Cat Advocates work with the City's Animal Control Department to obtain a waiver of the ordinance from the City to allow them to feed and trap feral cats in Bidwell Park. At the time of this writing, the NCA is working with the City's Park Department to allow the trapping of feral cats in Bidwell Park (Romain, personal interview, February 4, 2016).

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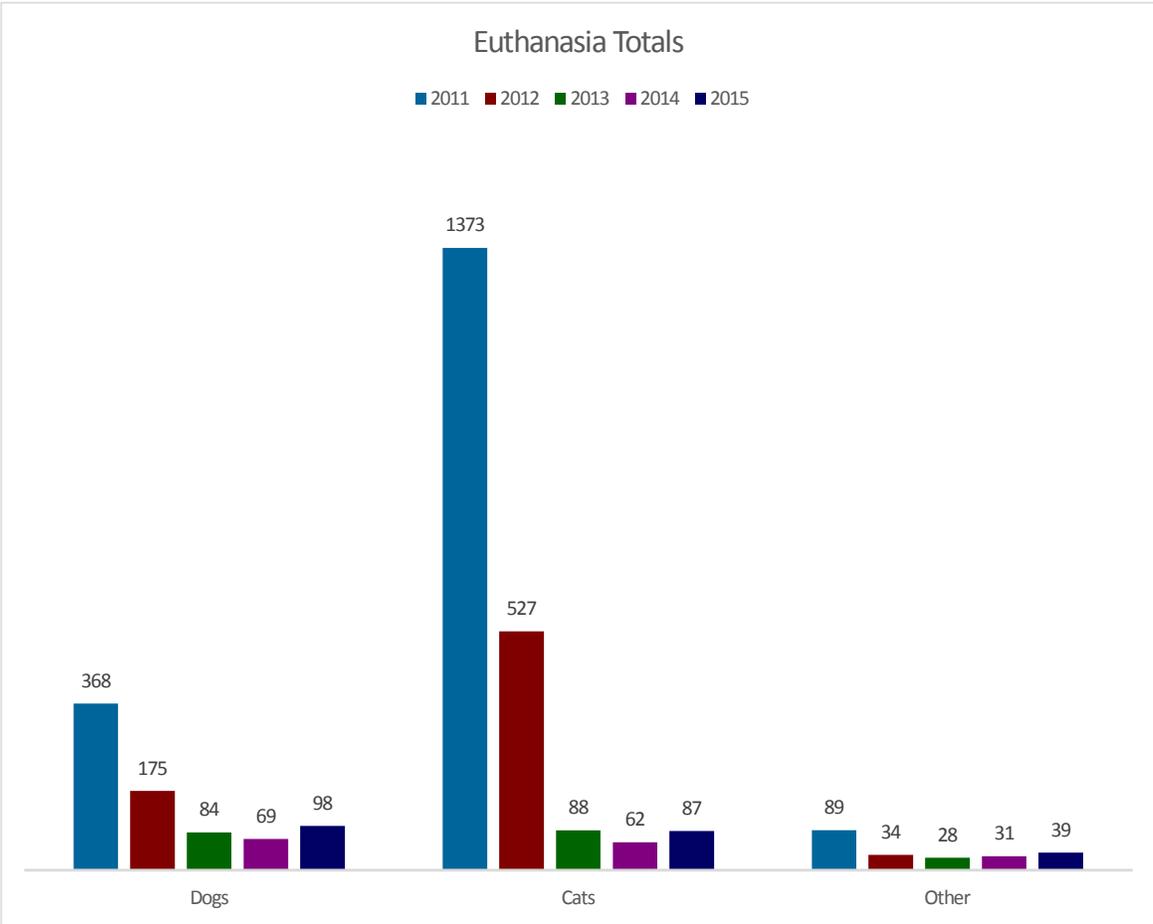
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## APPENDIX A

City of Chico Animal Shelter Statistics on Euthanasia 2011-2015



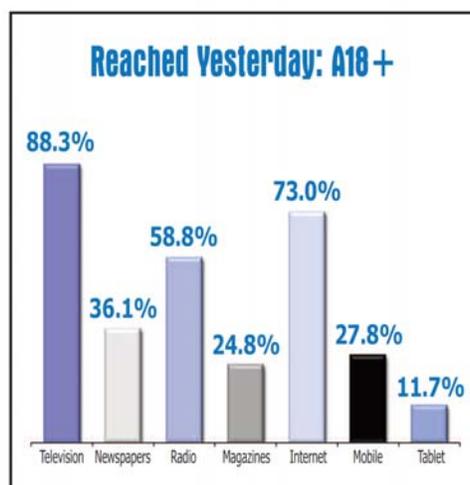
Source: Tracy Mohr, Animal Services Manager (personal interview, November 8, 2016)

## APPENDIX B

## Television Data

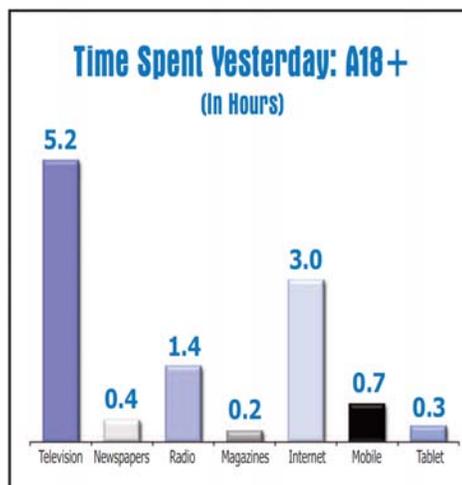
### Television Reaches More Adults Each Day Than Other Medium

Television reaches almost 90% of adults 18+ in the average day, while radio reaches approximately 60% and newspapers, 36%. The same holds true across all demographic groups.



### Adults Spend More Time With Television Each Day

In the average day, adults 18+ spend more time with television than with newspapers, radio, magazines, the Internet, and mobile combined. Similar dominance is seen across all demographic groups.



### TV Reaches More People Across All Major Age Groups (%)

Age	Television	Newspapers	Radio	Magazines	Internet	Mobile Phone	Tablet
18+	88.3	36.1	58.8	24.8	73.0	27.8	11.7
18-34	84.0	21.4	59.7	16.2	74.2	46.0	16.8
18-49	85.3	23.9	62.3	19.5	75.4	39.7	14.5
25-49	86.0	24.1	64.6	20.2	74.9	38.8	14.3
25-54	86.7	26.5	65.3	20.4	75.6	36.2	14.6
35-64	89.1	36.2	63.2	25.6	75.2	24.9	11.4
65+	93.7	61.3	44.1	37.4	64.3	4.8	4.1
13-17	76.6	14.4	56.9	24.2	76.3	21.3	17.1

### Time Spent with TV Tops Other Media Across Demographic Groups

Average Daily Time Spent (In Hours)

Age	Television	Newspapers	Radio	Magazines	Internet	Mobile Phone	Tablet
18+	5.20	0.40	1.42	0.24	3.01	0.68	0.31
18-34	4.46	0.23	1.34	0.20	3.50	1.37	0.50
18-49	4.62	0.24	1.53	0.19	3.34	1.05	0.42
25-49	4.75	0.26	1.63	0.20	3.10	0.89	0.37
25-54	4.69	0.30	1.68	0.20	3.12	0.80	0.38
35-64	5.24	0.38	1.58	0.21	3.01	0.48	0.27
65+	6.38	0.74	1.07	0.41	2.16	0.09	0.08
13-17	3.14	0.11	1.01	0.16	2.30	1.12	0.39

Source: TVB Media Comparisons Study 2012. Knowledge Networks Inc. Custom Survey.

## APPENDIX C

TELEVISION PRODUCTION SCRIPT

TITLE: "Stop the Cat Madness"

PRODUCED BY: Michael Redman

LENGTH: 30 seconds

Start: Chico has a wild cat problem. Every night over 14,000 wild, feral cats stalk the streets of our City.

They can spread diseases to our pets and our children. They spray our homes to mark their territory.

15 sec. How do you know they are wild, you ask? The biggest sign is they avoid human contact...unlike my friends here.

These wild cats need to be spayed, neutered and vaccinated so they don't turn into 28,000 wild cats.

30 sec. Stop the cat madness. Call Animal Control today to find out how you can help our city.

## APPENDIX D

STOP THE CAT MADNESS PUBLIC SERVICE ANNOUNCEMENT

To view this public service announcement online go to:

[www.youtube.com](http://www.youtube.com)

STOP THE CAT MADNESS-FUNNY FERAL CAT PSA