

**San Diego County
Survey and analysis
of the pet
population**

**Karen Johnson
and
Laura Lewellen
For National Pet Alliance**

SUMMARY

The following survey was performed in San Diego County, California to evaluate the dog and cat population for possible management considerations. The survey was a scientific, demographic, and comprehensive study on owned and unowned dogs and cats in the county. The results were particularly examined as how to reduce the number of animals euthanized in the shelters. Specific groups were identified as particularly well-suited to programs shown effective elsewhere in reducing euthanasias. Unowned, roaming cats comprise over a third of all the known cat population, and are the greatest numbers euthanized. Owned pets are likely to be spayed or neutered, and unlikely to be handled by Animal Control or humane shelters. Purebred animals are not a problem population. Several solutions to fit the particular needs of San Diego County are cited, including: trap, alter and release programs, spay/neuter vouchers, renter-landlord incentives and continued educational programs.

INTRODUCTION

In the past few years, national concern has grown regarding the number of animals euthanized in shelters. Because of this interest, many communities—including San Diego County—are considering various actions to manage their dog and cat populations. Well-directed, enforceable proposals require a firm knowledge of the community and specifics of its population—both human and animal. Lack of such information, however, has been a stumbling block with many proposed solutions. Data, when available, is often incomplete and inconclusive.

Hastily enacted proposals, driven by emotions, can cause harm to the very animals they seek to protect. Emotions flare over animal issues. Media sensationalize images of animals behind bars or dead from euthanasia to fan these emotional fires. Thoughtful topics regarding pet ownership rarely make the news.

The lack of reliable information stems mainly from many humane societies across the country not keeping detailed records. There are no central clearing houses for data collection. Numbers conflict even to the country's number of **shelters**, and what data there is regarding the number of animals being handled varies by several **million**.

In order to truly solve a problem, it must first be carefully defined. To solve an animal control problem, there must be adequate knowledge of what kind of animals are being discussed, where they are coming from and in what kind of numbers. Without this information no effective solution can be presented.

National Pet Alliance (NPA), a San Jose based, nonprofit organization was hired to conduct a comprehensive survey on the nature of pet ownership in San Diego County (SDC). Karen Johnson and Laura Lewellen recently completed a similar survey and analysis on pet ownership for Santa Clara County on behalf of NPA.¹

This study was conducted to examine several important and diverse questions concerning animals in SDC, both owned and unowned.

The following report is based on a telephone survey of a cross-section of San Diego County. The independent firm, Nichols Research of Sunnyvale, CA conducted the phone survey. Johnson and Lewellen performed the statistical analysis. The methodology is given at the end of this report, along with a sample of the survey form and the results for each question.

SURVEY RESULTS

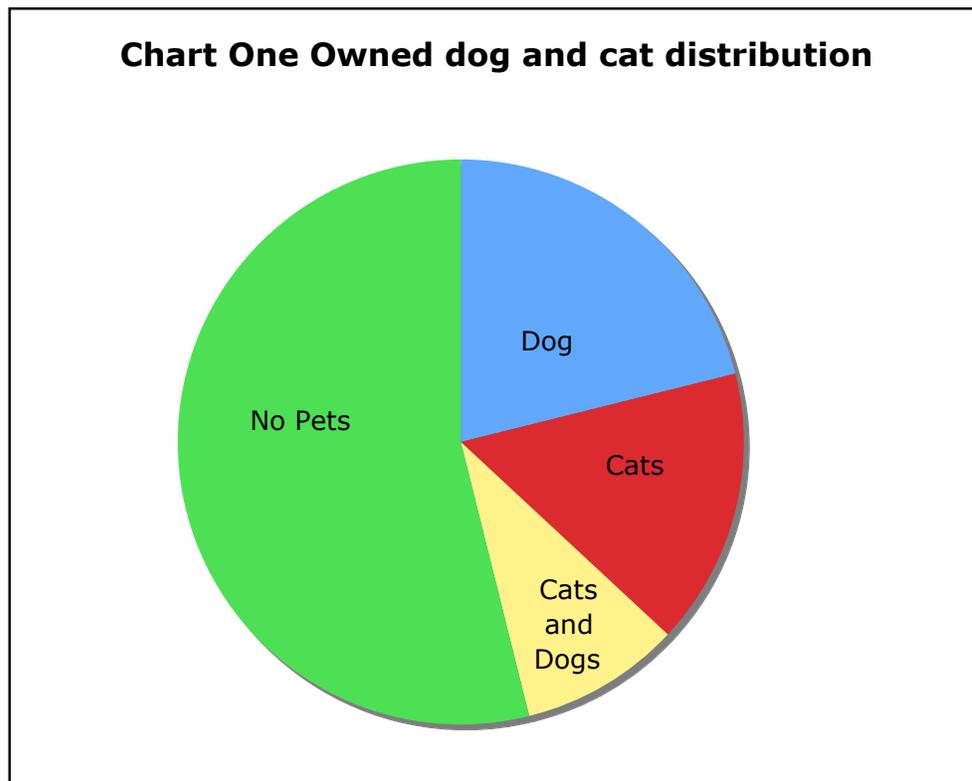
Pet ownership distribution

Over half (53.9%) of SDC households do not own dogs or cats. The pet owning households break down as follows: 21.3% own dogs only, 15.5% own cats only, and 9.2% own both dogs and cats.

8.9% of all SDC households feed cats they do not own. This includes those who own pets and those who do not. These households feed an average of 2.6 roaming* cats each.

Chart One shows these four main population distributions.

Based on the survey results, and given 887,403 households in SDC,² the owned animal population was determined. The owned dog population of SDC is 374,732, with 30.6% of the county owning an average of 1.4 dogs each. The owned cat population is 371,928, with 24.8% of the county owning 1.7 cats.



Similarly, the number of known, unowned, roaming cats is calculated to be 205,345. This is based on the number of households feeding cats they do not own. **Roaming cats make up at least 35.6% of the entire known cat population in the county.** $(205,345 / (205,345 + 371,928) = .356)$ It is important to stress the word “known” here. This percentage (35.6) can be considered the minimum number of roaming cats, as many cats are not actively fed by humans. Many more live wild in the countryside or forage in city alleys.

Homeowners made up 70.6% of cat owners and 84.6% of dog owners. Not surprisingly, far fewer renters own pets. Renters comprise 29.4% of cat owners and 15.4% of dog owners.

Gender distribution of pets

The dog population was found to be 51.4% female and 48.6% male. The cat population, however, changed dramatically over the age of the animals. The gender ratio starts out equally, but by the time the cats are in the five-year-old age group, 60% are female. By the age of ten years, 70% of the owned cats are female.

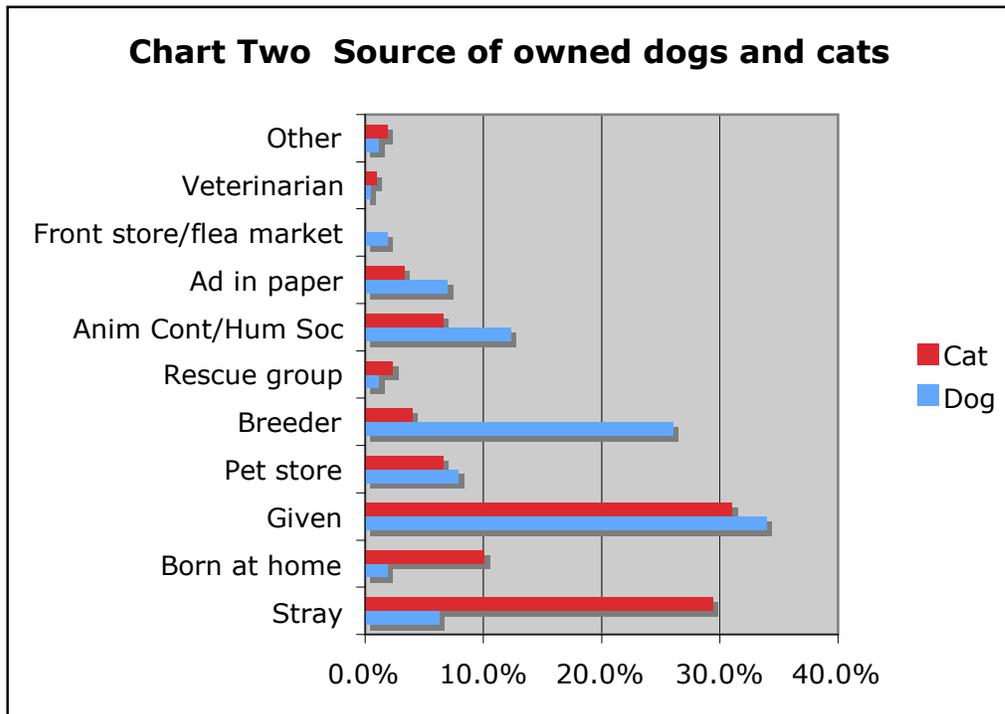
Purebred population

Of the owned SDC cats, 5.6% are purebred with registration papers, while another 3.5% are claimed to be purebred but do not have registration papers.

Owned dogs are much more likely than cats to be purebred. In SDC 38% of owned dogs are purebred with papers, and 20% are claimed to be purebred without papers.

Source of pets

Only 4% of SDC's owned cats are obtained from breeders, whereas 26% of dogs come from breeders. Pet stores account for 6.6% of cats and 7.9% of dogs. Over 60% of owned cats are obtained either as strays or were gifts. Only 6.3% of dogs are obtained as strays, but a sizeable 34% were gifts. See **Chart Two**.



Responsible pet ownership

The percentage of cats kept indoors only was 37.2, compared to 17.4% which were kept outdoors only. The remainder were indoor-outdoor cats.

Residents of SDC are spaying and neutering their pets. **Owned cats are altered at 84.2%**. Intact female cats, old enough to breed, comprise only 3.3% of the owned cat population.

Only 1.2% of the cats were kept intact for planned breeding purposes.

Of all owned dogs, 67.7% are altered—58.9% of the males, and 76.0% of the females.

The distribution of spayed and neutered pets was fairly constant throughout the county. No area stood out as having a significantly higher or lower percentage of unaltered dogs or cats.

Lost Pets

In 1993, 3.3% of SDC dogs disappeared for a day or more. Of these, 42.9% returned on their own and 7.1% were never found. Most of the owners checked at humane shelters, where 21.4% of the lost dogs were found. The number of permanently missing dogs, with no hint as to their fates, accounts for only 0.2% of the dog population. Less than one percent (0.9%) either were, or could have been, handled by Animal Control.

During the same time, 6.4% of owned cats disappeared for a day or more. Most (74.1%) returned on their own. Of the missing, 14.8% were never found. None were found in humane shelters, although all of the owners of the permanently missing cats did check with shelters in search of their lost pets. The number of permanently missing owned cats accounts for less than one percent (0.9%) of the entire owned cat population. Calculating from these figures, roughly 3,500 of the cats handled by SDC Animal Control and the shelters are owned, stray or dead, pet cats.

ANALYSIS AND DISCUSSION

The purpose of this survey was to see if San Diego County has an animal population problem and, if so, to pinpoint the source(s). This done, it is then possible to target solutions.

In addition to learning from the survey of this community, it is possible to learn from national trends and from successes and failures of other communities.

Pet Ownership Distribution

Nationally, 31.7% of households own cats, 37.7% own dogs and 15.3% own both dogs and cats. There is also a national trend of increasing cat ownership and decreasing dog ownership.³

San Diego County has a lower pet owning population than the national projections would predict, with half of the County owning no pets at all. The NPA survey of Santa Clara County (SCC) also showed pet ownership lower than the national projections, with 51.3% owning no pets, 19.4% owning cats, 18.5% owning dogs and 10.8% owning both.⁴

Good Samaritans, those households which feed cats they don't own, comprise a sizeable 9.0% of **all** households in SDC. This was very similar to the finding in SCC, where 10.0% of all households fed roaming cats.

As stated in the previous section, these roaming cats make up 35.7% of the entire known SDC cat population. That number itself is enough to bring pause, but when it is realized this percentage must, by its very nature, represent the lowest end of the population, the significance becomes staggering.

Roaming cats are generally not spayed or neutered. They reproduce at will. They do not have medical care and do not get vaccinations of any kind.

Gender distribution

In a general discussion of an animal population, one would assume 50% males and 50% females, with perhaps a small deviation to more females. The dog population fell into this pattern.

However, as discussed above, the cat gender ratio changes over time. By the age of ten, 70% of the owned cats are female.

To look for a possible explanation, the ratios of sexes were compared to how the cats were obtained. The theory was, perhaps some of the stray females were finding owners. There was no significant difference.

Purebred population

According to John Mandeville, Vice President of the American Kennel Club (AKC), there are twelve million AKC registered dogs, and about another twelve million that are eligible for registration. AKC accounts for about 65% of all purebred dog registrations. Eleven other dog registries hold the additional six to eight million registrations. The total purebred dog population is between 30 to 32 million dogs. Mandeville states the Pet Food Institute estimates there are a total of 50 to 52 million dogs in the USA. Purebred dogs make up 60% of the country's dog population.

On the other hand, according to the Cat Fanciers' Association, Inc. (CFA), three percent of the nation's cats are purebred. CFA is the oldest and largest registering body of purebred cats in the United States. Their estimate is based on CFA registry alone. There are, however, other cat registering associations, and many cats are registered in more than one association. Because CFA is by far the largest registry, it can be safely assumed that its numbers represent at least half of the purebred cats. Therefore, it would be reasonable to estimate of **no more than six percent** of owned cats are purebred.

This assumption is born out by both surveys of SDC and SCC. In San Diego, 9.1% of the owned cats are claimed to be purebred, with or without papers. Santa Clara claimed 10.7% purebred. (The owners were not questioned as to the possession of registration papers in SCC.) At first these numbers would appear to be much higher than the 3% to 6% projections expected from CFA's report. However, when questions regarding **origin** and **registration** are examined, the answer to the discrepancies appear.

The general public has problem identifying cat breeds. Purebred dogs generally have very distinct physical characteristics—ranging from the tiny Chihuahua to the large Irish Wolfhound. The characteristics which distinguish purebred cats from domestic varieties are much more subtle. All cats are roughly the same size and shape. Coat colors and lengths of purebred cats can be found, to some extent, in the natural population of domestic cats. To the uninformed, if the cat has long, soft fur it is a Persian; if it is slate gray it is a Russian Blue; if it is a big, brown tabby it is a Maine Coon Cat. If people admit their cat is not purebred, they often will say it is “part” purebred.

Two reliable sources of true, purebred cats or dogs are breeders and pet stores. Animals with registration papers can safely be assumed to be truly purebred. If the animal is without papers, the source of the animal may indicate if it is a purebred. The animal is much less likely to be a purebred if it is found or bought from a source other than a breeder or a pet store.

Of the owned SDC purebred cats, 5.6% came with papers. “Purebreds” without papers accounted for the other 3.5% of the total 9.1%. However, of the cats without papers, only one cat came from a breeder and none came from a pet store. From reliable sources, 6% of the animals can be considered purebred. The other 3.6% are dubious.

The likelihood of a dog being purebred is more than six times higher than for cats. There may be several reasons for this occurrence. Because of the widespread, stringent and enforced leash laws, roaming and free breeding dogs are relatively few. Dogs are much less likely than cats just to show up stray at a house and be adopted. So, to get a dog, people have to make some effort to go somewhere to get one—breeders and pet stores with purebreds being two common options.

Furthermore, dogs are bred to specific purposes, such as hunting, guarding and herding. There is a certain status symbol to owning purebred dogs, which can be walked in public or taken for rides and displayed in

the owner's car. (Purebred cats are usually indoor only pets, who retaliate against leashes for public walks, are distressed at car rides, and too short to see out of the windows anyway; and so, they are less on display for the owner's ego gratification.) Purebred dogs are also more familiar to people than purebred cats, as purebred dogs have been recognized and bred for centuries. The Western cat fancy is a relative newcomer. All of these factors can help explain why owned dogs are more likely to be purebred animals. Cats, on the other hand, have a large population of free roaming, free breeding animals producing a ready supply of litters. Potential cat owners are not required to see a breeder to obtain a cat. Leave a dish of food on a front porch and it is easy, and probable, to be adopted by a cat. With a large, free of charge, at-your-doorstep population of cats, there is no need to look any further for another cat, let alone spend several hundred dollars on a purebred.

In many regards, cats are not as highly "valued" as dogs are in this society. Some of this bias is based on long-standing prejudice and superstition. Cats also have the stigma of being "aloof" (think Garfield) whereas dogs are "man's best friend" (think Lassie). Cats are becoming more popular pets, and so are slowly rising in perceived value to the society. However, with the ever present supply of roaming cats, it is unlikely the percentage of purebred cats owned will reach the rate of purebred dogs.

Whenever discussions of animal regulation occur, suggestions for restrictions on purebred animal breeding usually follow. The surface rationale is, "If there are too many animals in the shelters, it is because too many animals are being bred. Purebred animals are purposely bred. Therefore, breeders must be the problem, and we must regulate them."

This reasoning does not hold up under scrutiny, as this survey clearly shows. At most, purebred cats make up 6% of owned cats, which is 3.8% of the entire known cat population. Purebred cats are much more likely to be indoor-only cats, and less likely to be randomly bred. Roaming, free breeding cats, on the other hand, make up well over a third of the known cat population. It is clear where the problem lies. Cities are not being overrun by herds of wandering Himalayan and Devon Rex cats.

There is also no evidence that purebred dogs are a problem. While it is possible to find purebred dogs in the shelters, the shelter population would need to exceed 60% purebreds to have them be over-represented. The percentage of purebred dogs in the shelters is estimated to be 25%. Stray dogs do not produce enough randomly bred litters to supply the dog owning population. Beside providing animals bred for specific tasks, breeders of purebred dogs are a necessary source of planned, wanted pets for the public.

Responsible Pet Ownership

People are altering their pets. A very high percentage of all owned cats and dogs are either spayed or neutered in San Diego County.

San Diego is following the national trend in regards to spaying and neutering pets. Five studies from 1981 to the present,^{5,6,7,8} in various areas of the country, show the vast majority of owned cats are altered. See **Chart Four** (next page). Female dogs are altered in greater number than male dogs, although there appears to be a growing acceptance of neutering males.

Owned cats are altered at the rate of 84.2% in SDC. This is a few percentage points lower than in other areas of the country. But intact females, old enough to breed, comprise only 3.3% of the SDC owned cat population. Only 1.2% of this county's owned cats are kept intact for planned breeding.

Even the most negative of nay-sayers must admit public education is working as to the benefits of neutering pets. To have so many pets "fixed" in such a large and diverse community as San Diego County is tremendously positive. The community should be proud of its achievements.

While the spay rate is high, especially in owned cats, all is not wonderful. Roughly 19% of the female cats had a litter prior to being spayed. This falls in line with the 16-20% of females which had a litter prior to being spayed found in other studies.^{9,10,11} Far and away these were accidental

pregnancies, which NPA dubbed the “oops factor.” The oops factor accounted for 58.3% of the pregnancies before spaying.

Chart Four Alter status of owned dogs and cats

	San Diego Calif 1994	Santa Clara County, CA 1993	Las Vegas Nevada 1981	Tufts MA 1991	MSPCA MA 1991
Female Dogs					
Spayed	76.0%	-	77.2%	87.8%	
Whole	23.3	-	22.8%	12.2%	
Male Dogs					
Neutered	59.9%	-	26.4%	45.0%	
Whole	40.0%	-	73.5%	55.0%	
All Dogs					
Altered					73.0%
Female Cats					
Spayed	82.8%	86.9%	85.7%	91.5%	
Whole	17.2%	13.1%	14.3%	8.5%	
Male Cats					
Neutered	87.1%	85.9%	78.9%	90.3%	
Whole	12.9%	14.1%	21.1%	9.7%	
All Cats					
Altered					87.0%

Typical responses to the question, “Why did your cat have a litter?” often began with, “Oops,” followed by, “I didn’t know the cat could get pregnant so young” or, “I didn’t realize the cat was in heat when she went out.” Many of these owners had planned to spay their cats before the cats became pregnant, but once they were, they did not want to abort the litters.

An even closer look at the 19% of female cats who had litters prior to being spayed revealed only 5.6% of these were adopted as strays. A shocking 14.3% of the cats were adopted from a humane society or animal control. Cats given away to new homes accounted for another 15.2%. Cats born at home were responsible for another 20.9%, but these were usually planned breedings. The survey also showed that 10.7% of pet store acquired cats, 11.8% of cats bought from breeders, and 7.1% of cats found through ads had litters prior to being spayed.

Lost Pets

The number of permanently missing dogs accounted for only 7.1% of the 3.3% of the owned dogs that went missing for a day or more. This is only 0.23% of the entire dog population to disappear without a hint of their fates. Most of the owners of missing dogs contacted humane shelters, and 21.4% of the missing dogs were found at shelters.

In 1993, only 0.94% of the owned cat population disappeared with out a trace. This closely compares to SCC’s 0.58% permanently missing pet cats. Most of the lost cats came back on their own and none were

found at humane shelters.

These numbers indicate that only a minute percentage of the animals handled at local shelters are missing, **owned pets**.

Euthanasias

Communities and their local governments, including San Diego County, have been deluged by the cries of, "Huge numbers of animals are killed in our shelters! It is out of control! Do something!" While these may be emotionally satisfying statements, they do not actually solve anything.

Are huge numbers of animals killed in the shelters? National figures have shown euthanasias dramatically decreased in the last decade. While animals are euthanized, it is not in the out-of-control, upward spiral of which we often hear.

In the late 1980's, nationwide reports of euthanasias were estimated to be in the range of twenty million annually. In 1991, the estimate was thirteen million. Current projections, by the Humane Society of the United States, put the number somewhere between five and eight million. A 1990 Tufts University study projected the number at 2.3 to 3.0 million.¹² By either estimate, there has been a tremendous drop in the number of animals euthanized nationwide.

Apply these numbers to any other social problem facing our country, and the 30-50% drop in incident rates in a decade would be heralded a tremendous success. No doubt such efforts would be linked to expensive, government programs.

There are no such government involvements for lowering the number of animal euthanasias. However, various private organizations promote spay/neuter programs and provide public education as to responsible pet ownership. These organizations raised public awareness. Additionally, leash laws for dogs reduce the number of roaming, and possibly breeding, dogs. Societal factors may be partially responsible for the lower number of animals being euthanized. For example, it is possible the increase of families in which both parents work outside the home may be lowering the number of families letting their pets have a litter for fun, since these litters require a large amount of time and care.

The Humane Society of Santa Clara Valley (HSSCV) is the third largest Humane Society in the country based on the number of animals handled. As is typical of many shelters, the number of cats euthanized is far more than the number of dogs. At HSSCV they are euthanized at four times the rate of dogs.

A study of HSSCV shelter statistics from January 1 to November 30, 1994 revealed interesting information regarding their cat population. Cats that are sick, feral and "too young" amount to almost two-thirds of the total number of dogs and cats euthanized during this time period. Overall, euthanized cats represent 81% of the dogs and cats euthanized. Kittens under the age of four weeks, which would be unweaned, account for 14.4% of the all euthanasias. Sick and injured cats were another 36.6%, feral (wild and therefore not adoptable) cats comprised 16%. Only 2.4% could be categorized as adoptable but euthanized because the shelter ran out of time and space to keep them.

The same study found sick or injured dogs accounted for 50% of the total dog euthanasias at HSSCV, which is 9.5% of the total euthanasias. Behavior problems in dogs accounts for another 8.6% and dogs that are euthanized because the shelter ran out of time and space are only 1.7% of overall euthanasias.

For fiscal year 1992-93, San Mateo County's Peninsula Humane Society (PHS) showed similar numbers for cats euthanized: 38% unweaned kittens, 27% feral, and 24% sick or injured.

Locally

SDC Animal Management Information System reported nearly a 10% annual increase in the number of cats

handled from 1988 to 1992. The increase peaked at 13% from FY91 to FY92, with a total of 19,077 cats. The figures then reversed to an overall drop of 35% from 1988 to 1993.

SAN DIEGO ANIMAL CONTROL CAT STATISTICS 1988-1994

	Total	Claimed	Adopted	Euth.	Research	Other*
88-89	13929	202	2130	10976	7	614
89-90	15394	230	2224	12349	-	591
90-91	16849	238	2426	13561	7	617
91-92	19077	248	2577	15525	6	721
92-93	14143	180	2297	11121	-	545
93-94	12446	223	2386	9269	-	568

*Other includes: return to wild, transfer to correct jurisdiction, wildlife rehab, stolen, escaped, DOA, died in kennel, died in truck, died at contract vet, misc.

This sharp decline will be discussed further in the following section, “Proposed solutions, Feral Cat Coalition.”

Animal Management Information System’s report for dogs during the same period shows a different pattern. The number of dogs handled and euthanized has been steadily decreasing since 1988, following the national trend.

SAN DIEGO ANIMAL CONTROL DOG STATISTICS 1988-1994

	Total	Claimed	Adopted	Euth.	Research	Other
88-89	24070	5147	4355	13313	526	729
89-90	24177	5213	4540	13215	324	885
90-91	22549	4749	4357	12155	320	968
91-92	22707	4847	4493	12216	233	918
92-93	19544	4342	4385	9791	239	787
93-94	18275	4014	4721	8592	159	789

Stringent, punitive legislation, such as mandatory spay and neuter laws, do not reduce the number of euthanasias. In some cases, enactment of such laws result in increasing the euthanasia rates.

San Mateo

San Mateo County made national news when its controversial mandatory spay/neuter legislation went into effect in March 1992. Many communities quickly followed suit, without waiting to see if the new legislation was effective or even enforceable. It was neither. A 1991 analysis of historical trends in San Mateo, predicted that without the new law the Peninsula Humane Society would handle between 12,400 and 13,500 animals in 1993. During that time the PHS would have euthanized between 7,100 and 7,500 animals.¹³

The actual number of animals handled in 1993 by PHS—with the new legislation—was 13,379 with 7,479 euthanized.

Further predictions, based on historical trends, estimate in 1995-96 euthanasias will be between 5,078 and 6,068, with incoming live animals between 8,976 and 11,354. For 1994, the actual total euthanasias performed by PHS were 6245, confirming the downward trend as predicted.

The law has no overall effect on the number of animals handled or euthanized by PHS.

The mandatory spay/neuter laws apply only to the unincorporated areas of San Mateo County, where an effect has been seen. Euthanasias have increased. In 1992, in unincorporated San Mateo County, the dog euthanasias were 53. In 1993 they were 78. For cats in 1992, 377 were euthanized, while 437 were euthanized in 1993.

New figures for the 93-94 fiscal year show the number of cats euthanized as “surplus” (out of cage space and/or time) by PHS for the

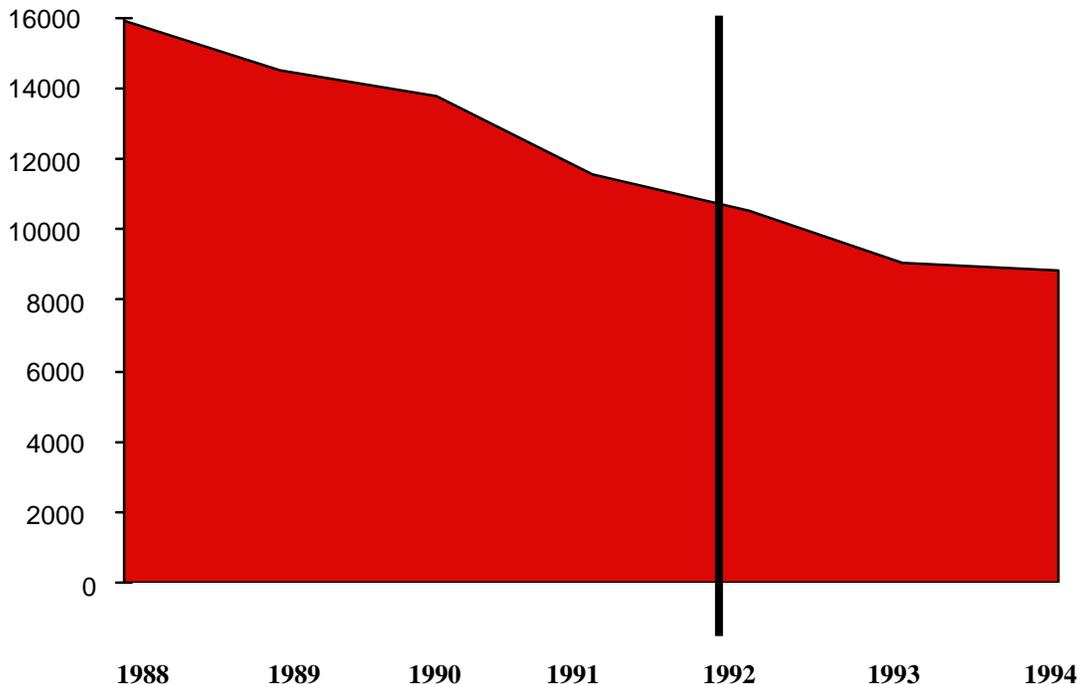
unincorporated county to have increased from 28 to 63 from the prior year. Surplus dogs euthanized for the unincorporated county increased from 39 to 66 during the same time.

The number of cats handled by PHS over the past year for the entire county dropped by 17%, yet at the same time the number of cats euthanized for medical reasons dropped by 48%. Either the cats which were previously being euthanized for medical reasons are now being treated in an attempt to artificially lower euthanasia numbers by changing protocol, or cats were incorrectly categorized previously.

The total net costs for implementing the new law were \$57,390 between 1992 and 1993.

King County

Chart Five King County, WA Euthanasia Rate



King County, Washington is another example of how punitive pet ordinances do not have the intended effect on euthanasias.¹⁴ King County’s 1993 ordinance is even more restrictive than San Mateo County’s. Before 1993, King County was following the national downward trend in euthanasia statistics since 1988. See **Chart Five**.

However, after their restrictive ordinance was implemented, it is significant to note their percentage drop in euthanasias from 1993-1994 was drastically curtailed:

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
DROP in # euthanized	2,181	1,074	1,478	187
% drop	15.8%	9.2%	14.0%	2.1%

Because of the difference between 1991 and 1992-93, it appears the ordinance may have been responsible for an initial increase in euthanasias in 92-93, as people turned over their pets to animal control.

Based upon the historical, steady decline of euthanasias prior to ordinance enactment, euthanasia figures for 1994 should have been around 7,800. If the ordinance was effective, the 1994 total should have been well below 7,800. Instead, after ordinance enactment, the 1994 total was 8,738. The new laws actually greatly increased the number of euthanasias.

DEFINING THE PROBLEM

When the pet population of San Diego County as a whole, and the animal population of the shelters are examined, the “problem” areas become clear.

Animals are euthanized in the shelters, that much is true. But dogs and cats are brought to the shelters for various reasons. They are euthanized for various reasons. Dogs and cats are euthanized at different rates, with cats being euthanized in far greater numbers.

This survey has shown the overwhelming number of owned pets, especially cats, are spayed or neutered. Lost, owned pets make up a tiny percentage of animals handled. Purebred cats are owned, and bred, by very few people. Purebred dogs have available homes and are under represented in the shelters when compared to their numbers in the owned pet population. Stray dogs are few due to stringent, enforced leash laws.

There will always be some animals euthanized in shelters. Animals too sick and injured to be treated will always be present, as will owner surrendered animals for humane euthanasia. Animals too young to survive without extensive, and expensive, hand-rearing will also generally need to be “put down” given realistic shelter budgets.

The general problem can be stated, “How can San Diego County reduce the number of animals euthanized at its shelters?” More specific aspects of this general problem can be identified as follows:

Roaming cats

The major animal problem that exists in San Diego County is the unowned, roaming cat population. With over a third of the known cat population being unowned, roaming, free breeding cats, and with the vast majority of animals being euthanized at the shelters being unowned cats, the direct cause and effect link is apparent.

Problem statement: **How can San Diego County reduce its roaming cat population effectively and humanely?**

Litters prior to spay

While SDC has a high percentage of altered pets, this survey also pointed out that (like other areas of the country) many of these cats had litters prior to their spay. These litters also contribute to the cat populations in the shelters.

Problem statement: **How can San Diego County prevent the unplanned litters of owned pets?**

Homes available for pet ownership

This survey revealed that most pet owners own their homes, while relatively few renters own dogs or cats. If more people are available to own pets, the numbers of animals adopted from shelters would increase (thus decreasing euthanasias).

Problem statement: **How can San Diego County increase the number of pet owning households?**

PROPOSED SOLUTIONS

Trap & Kill versus Trap, Alter, Release programs

As this study has shown, a minimum of a third of all known cats in San Diego County are free roaming. Address this problem and the general question of how to reduce the number of animals euthanized in the shelters is greatly answered.

There are several tried approaches to managing roaming cat populations. The most commonly preferred method put forth by animal control organizations for control of cats has traditionally been to capture and euthanize unowned, roaming cats.

Others, who refer to this as the “trap and kill” method, consider it inhumane and objectionable on several fronts. One objection is that it is ineffective.¹⁵ It has been shown as soon as a cat is removed, a new one will move in, assuming a steady food source.¹⁶ Another protest to trap and kill, less objective and more subjective—but still valid, is unless a cat is making a threat to human welfare or is causing unusual harm, it is worthy of life, even though it does not have a human address.

After a six-year study and daily observation of a feral cat colony, it was documented that stray female cats start having heat cycles when they are 4-6.9 months old, or as soon as daylight hours are plentiful.¹⁷ January and February are the start of the breeding season, with the litters born in March and April. Strays have an average of 2.1 litters per year of 4.25 kittens.¹⁸ By the age of two months, 42% of the kittens will die of natural causes.¹⁹ Of the kittens who survive, many go on to perish in the shelters. Those who escape early death and the shelter go on to be prolific bearers of kittens over their short life span of approximately three years.²⁰

Taking the mortality into account, along with birth and death rates, the average stray female will have 5.25 litters in her lifetime, encompassing 22.3 kittens. At age two months there should be 12.9 survivors, roughly six females and seven males. These six females will go on to have thirteen surviving kittens each. Realistically, over twelve years, one unspayed female, with all her unspayed female offspring can reasonably be expected to be responsible for over 3,200 kittens if there is no human intervention.

Cats are territorial. They don't allow other cats into their territory to steal their food. Altered cats will stand their ground and guard their food source, will not have kittens, and will die in a few years. To simply remove the cats from the habitat without changing the habitat will see other, reproducing cats move in.²¹

In 1994 the Humane Society of Santa Clara Valley found 37% of their cats euthanized over an eleven month period were either wild, or the unweaned offspring of feral and stray cats. Once these wild kittens are over six months of age, it is nearly impossible to socialize them to the degree necessary to be placed as house pets. An unsocialized cat is an unadoptable cat. Cities and counties pay for the handling of these stray cats and their offspring. Reducing the number of kittens born to these cats would substantially reduce the number of cat euthanasias, thereby reducing the costs born by the taxpayers.

Unowned cats are routinely euthanized at shelters. Even though the kittens can often be socialized for

placement, it takes a minimum of two to three weeks of intensive work. Shelters simply don't have the time, personnel or cage space to socialize kittens. Unweaned kittens are generally euthanized, again due to lack of time, funds and space.

Stanford Cat Network

In 1989, Stanford University officials announced a plan to trap and kill approximately 500 stray cats living on campus. In response to this drastic announcement, Stanford Cat Network (SCN) was formed. SCN was able to present an alternative solution to stop the progression of cat reproduction on the Stanford campus. They proposed a TTVARM program, (trap, test, vaccinate, alter, release and management), which they would organize.

Because of SCN's work, Stanford cats now have zero population growth and the population is declining through natural attrition. Over 60 kittens were caught, socialized and adopted out during the first season. By 1994, only **four** kittens were found on campus. The campus population is now estimated at approximately 300 cats. Stanford's current cat population is healthy and well-cared for, and its maintenance involves students, staff, and faculty.

SCN has accomplished all of this without financial support from the University. SCN's successful five year program with a very large cat population demonstrates that feral cat colonies can be managed and kept under control. Workable, viable alternatives to extermination do exist.

TTVARM programs

A typical TTVARM program works very simply and methodically. Cats are humanely trapped. The traps are monitored so the cats do not spend a long time in them.

The trapped cats are then tested for lethal diseases, most often Feline Leukemia Virus (FeLV) and Feline Immunodeficiency Virus (FIV). Both of these illnesses are common in feral populations, they are contagious to other cats, and are lethal viruses. (They do not pose a threat to humans, as these are species-specific viruses.) Cats which are found to have these diseases are humanely euthanized. Euthanizing FeLV or FIV positive cats is humane to the cat, as these diseases are always lethal and cause pain and suffering to the ill animal. It is also to the benefit of the originating colony, as these are contagious diseases. Removing sick animals increases the health of the colony.

Cats too sick or injured to be treated are also humanely euthanized.

If a cat is found to be negative for FeLV and FIV, it is then vaccinated for common upper respiratory illnesses and rabies. Minor cuts, abscesses, and parasites are also often treated. The cat is surgically altered. The cat's ear is notched for identification and monitoring.

The cat is then released back into its originating environment, providing it is a safe one. The colonies are managed by continued trapping and altering.

There are some variations on the TTVARM programs. Some groups do not test and vaccinate. Some do not mark cats. Management care varies. However, the most successful groups follow the plan as outlined above.

Feral Cat Coalition

In San Diego County, the non-profit Feral Cat Coalition has handled in excess of 3,100 cats over the past two years in its TTVARM program. In addition to these cats, which were over five months of age at the time of altering, an unknown number of kittens were also trapped, socialized and adopted into new homes.

Prior to this project, San Diego County Animal Management Information System reported an increase of roughly 10% per year in the number of cats handled by San Diego Animal Control shelters from 1988 to 1992. The increase peaked at 13% from Fiscal Year (FY)91 to FY92, with a total of 19,077 cats handled.

After just two years, with no other explanation for the drop, only 12,446 cats were handled—a drop of 35%. Instead of another 10% annual increase, euthanasias plunged 40% from 91-92 to 93-94.

Of the 3,153 cats trapped by the Feral Cat Coalition which were altered, 54% were female, 46% were male. Of the 1,639 females spayed, the following characteristics were noted:

453	Normal	28%
691	In heat	42%
218	Pregnant	13%
216	Lactating	13%
<u>61</u>	Post queening	<u>4%</u>
1639		100%

Only 3% were found to have been already altered. 17 cats were refused surgery for being under five months of age, or too ill. 18 cats died during surgery. 679 cats (22%) needed additional medical treatment—generally antibiotics and anti-parasitics. Cleaning and suturing of wounds and abscesses was also very common.

Of these stray female cats, 72% were either in heat, pregnant, or had recently had kittens. This is at least a three and a half times higher rate of pregnancy than found among owned cats.

Clearly, the project to trap, alter and release cats in San Diego County has had a dramatic effect on the number of cats handled and euthanized at their shelters, which even historical or nationwide downward trends cannot explain.

Financial Feasibility

Financially, TTVARM programs make sense.

For the FCC program, veterinarians donated their services and supplies were purchased through donations. However, the cost of these services and supplies would average about \$52 per cat in a low cost clinic.

Looking at the figures from San Diego, for a cost of \$163,956 (3,153 cats x \$52/cat), the shelter numbers have dropped by at least 6,500 cats. The average three day stay for a cat in a California shelter is estimated at \$70 per cat. By reducing the number of cats handled by 6,500, San Diego saved \$455,000 over a two year time span. This successful track record shows that in actuality no additional funds need be raised—the program will pay for itself through less shelter costs. Additional funding for altering could be taken from the shelter budget.

Following TTVARM programs, mating behavior and noise associated with breeding are eliminated. The male urine spray smell is eliminated.²²

Disease transmission from cats to humans is a negligible factor due to the few diseases which are transmitted this way.

Other concerns

Disease transmission from cats to humans is a negligible factor due to the few diseases which are transmitted this way.

The human health risk of rabies is often touted as a concern in the management of roaming cats. In California the risk is nonexistent. There has never been a case of a human acquiring rabies from a cat in the recorded history of the state. There were only two case of cat rabies found in 1993 in the entire state of

California, out of a current population of some 13 million owned and stray cats. Skunks, bats, and rodents are more of a real rabies threat.

By removing roaming cats, vector problems should increase until such time as other rodent predators take

the place of the missing cats. Other predators are less desirable, as most of us would probably prefer to have a small, healthy feral cat population, rather than a larger Norway rat and seagull population.²³

In addition to TTVARM programs, the issuance of vouchers for residents to take their stray and “loosely owned” neighborhood cats in for free altering is another method which is proving to work.

Voucher programs

The city of San Jose has enacted a spay/neuter program beginning in October 1994. The program has so far been well-received, and while it is still early, the Humane Society is reporting an unusually “light” kitten season, with no other explanation other than the voucher program. HSSCV also reported they had an 11% decrease in the number of stray cats for the two month period of March-April 1995 compared to March and April 1994. At the same time, stray cat intakes for three surrounding cities to San Jose has increased 4% at the same shelter. A similar program for dogs was begun in San Jose on May 1, 1995.

San Jose’s program is simple and has a “no strings attached” approach. Even though the vouchers are issued by the licensing department, buying a license is not a requirement. The only requirement is participants must be residents of the City of San Jose. People request vouchers, either in person or by mail, and they take these to one of the 15 participating veterinarians. There is no limit to the number of vouchers a resident can obtain. The cat is “fixed” for free. The city reimburses the veterinarians at a set fee of \$25 per female and \$15 per male. If the female is pregnant the veterinarian reimbursement adjusts upwards to a maximum of \$50 for a full-term pregnancy. For males with anatomical abnormalities, the fee can be increased up to \$150 depending on the degree of surgery necessary to completely neuter the male. For the first six months of the program, the costs for all altering have averaged \$21.07 per cat.

The veterinarians have control over whether or not they will alter the animal. If an animal is too sick, or has other problems, the veterinarian can decline to do the surgery. Attached to the voucher is a short, anonymous questionnaire for the owner to fill out at the veterinarian’s. This form asks ownership questions useful to monitoring the program’s success and to determine who is using the program. The questionnaires are sent back to the department handling the program.

So far, the reports from San Jose have been all positive. The veterinarians have had no problems, the people redeeming the vouchers like the program, and the city department handling the program have reported that all is working smoothly.

For the first six months of the program, approximately 2,500 vouchers were issued. 2,000 have already been redeemed. As of May, 1995 the city is redeeming 150 per week.

San Francisco SPCA also has an active, successful, free altering program. Any feral cat brought to the shelter is altered free of charge year round. Owned cats are altered for free during May, June and July each year. The rest of the year owned cats are altered at a low cost. Starting in 1995, SF SPCA also started paying a \$5 “bounty” for every owned cat brought in for altering.

King County, Washington has recently passed some of the most stringent, punitive animal related laws in the country. This includes differential licensing for dogs and cats, where owners of unaltered pets pay a substantially higher license fee. They also have a voucher program. Instead of being an open program, as in San Jose and San Francisco, vouchers are sent to those people who have purchased unaltered animal licenses.

In 1993, 4,931 vouchers (worth \$25) were mailed to people who had purchased unaltered animal licenses—212 vouchers (4.3%) were redeemed. In 1994, there were 5,654 vouchers mailed and 633 (11%) were redeemed.²⁹

King County’s approach of sending out unsolicited vouchers to only those who purchase unaltered animal licenses is not a big success. Obviously those people who have purchased the more expensive, unaltered animal licenses are the very group of people who have chosen to keep their animals intact. Linking the licensing program to the voucher program also tends to make people wary of “the catch” in dealing with a

government program, even if there is no catch.

Reducing the number of owned cats having litters

As has been cited several times above, while most owned cats are altered in SDC, 19% of pet cats had litters prior to being altered. Are these owned cats causing an overpopulation crisis?

Assuming an average litter of 4.25 kittens per litter,²⁴ and assuming an average life span of seven years,²⁵ it turns out there are not enough owned cats reproducing to sustain a zero population growth among the owned cat population in SDC. See **Chart Six**.

Owned cats produce only 40.6% of the kittens necessary to sustain zero population growth of owned pets. (While a few may have a second litter, these are negligible.) Without the adoption of kittens from the roaming population into the ranks of owned cats, the owned pet cat population would decrease at a rate of 8.5% per year.

In a similar situation, the stray dogs have unplanned pregnancies at a substantially lower rate than unowned cats. This requires some dogs, some where, to reproduce in order to sustain the species. If every dog were altered, within ten years there would be few dogs left. The average dog lives 9.57 years,³⁰ and with no replacement puppies, approximately 10% of the dog population would die out every year.

Chart Six Are Owned Cats Causing an Overpopulation Crisis

ASSUME 1000 OWNED CATS 7 year life span

143 will die annually. To sustain zero population growth in the owned population, 13 cats will need to be replaced by new births.

500 will be female

500 x 16% will have a litter prior to being spayed

=80 litters over 7 years time

=11 litters per year

11 litters x 4.25 kittens

=47 kittens per year/per 1000 owned cats

143 for zero population, minus 47 born

=94 kittens less than the level needed to maintain the owned cat population

Owned cats produce 33% of the owned kittens necessary to maintain the owned cat zero population level

(A small percentage may have a second litter prior to altering)

ASSUME 1000 ROAMING CATS

3 year life span²⁶

333 will die annually

350 will be female²⁷

97% of mature (approximately 6 months or older) females are capable of reproduction. Some will be altered through trap/alter/release programs. A few will be stray, previously owned cats.

350 x 97%=340 litters born two times per year

340 litters x 1.4 kittens alive at 1 year²⁸
=476 kittens

476 kittens x 2 cycles per year
=952 kittens per year/per 1000 unowned cats

94 of these kittens are assumed to be adopted or obtained as strays to sustain the owned cat population

952 born-94 adopted=858 surplus/unwanted feral and stray kittens per year, per 1000 stray/feral cats

So, while the owned cat population is not vastly contributing to the euthanasias at the shelters, these numbers can be reduced. Unless animals are part of a planned, wanted breeding program, they should not be bred.

Most of the litters born to owned cats were from accidental breedings. People were simply not aware that cats can become sexually mature quite young. An education program targeted at this problem is in order. Education has already been shown to be effective in other areas of pet ownership. There is no legislation which is going to prevent well-meaning, but uninformed, pet owners from having these types of accidental litters.

Many studies³¹ have shown early surgical altering of pets is safe. Again, educating the public is the way to get this message across. The safety of early surgical altering and its procedures may not be well known to all area veterinarians. This group should also be targeted for education, and then be involved in educating their clients.

All dogs or cats should be altered before leaving the shelters. In SDC, 14% of the cats having litters prior to spay were obtained from shelters! Policies should immediately be enacted to bring this number to zero. In effect, the shelters are now providing some of the litters with which they must ultimately contend. This is unacceptable.

The spaying and neutering of dogs can be increased. Some may be reluctant to alter their pet dogs because of the close psychological extension some owners have toward their dogs. Some reasons for owners balking at “fixing” their dogs—especially **male** dogs—are historical and some are cultural. Most of these issues can be directly approached through education, sometimes targeting specific groups.

As shown, few people own or breed purebred cats. There is no animal control problem with this population of owned cats. In fact, purebred cats are **less** of a problem, as they tend to be indoor-only cats. If these cats are bred, they are planned, wanted litters. Even though the number of purebred dogs is substantial, there is no indication there is any animal control problem with this population either. No special action is needed regarding purebred animals, their breeders or owners.

Homes available for pet ownership

A renter-landlord adoption incentive program, such as the San Francisco SPCA has instituted, is recommended. This program provides landlords with bonds against pet damages caused by cats and dogs acquired from the SF SPCA. There are many potential pet homes in the rental community. Providing an open-door policy will result in more animals being adopted from the shelters, lowering the euthanasia rate of healthy, adoptable animals.

RECOMMENDATIONS—IN SUMMARY

- Continue, expand, and provide funds for the TTVARM program already started by Feral Cat Coalition.
- Create a county funded voucher program for free altering of “loosely” owned cats.
- Target educational programs to address the realities of early cat maturation, early spay and neuter benefits, and debunk myths surrounding the altering of dogs—particularly male dogs.
- Immediately enact shelter policies to ensure all adopted animals are altered prior to release.
- Create a renter-landlord pet adoption incentive program.
- Punitive, coercive, bureaucratic solutions are not appropriate for San Diego County, and they have been shown to be ineffective in other communities. Restrictions on breeders of purebred animals are unnecessary. These types of proposals should be rejected.

METHODOLOGY

Questions asked and methodology for the survey were developed under the guidance of Dr. Roger Nassar, a nationally known statistician, with many published pet populations studies to his credit.

Each telephone prefix in SDC was researched to determine the number of listed residential households within that prefix. The number of survey calls made within each prefix was based on the number of households in each prefix, in relation to the number of households in the county.

A list of randomly selected telephone numbers was then developed. Using this list, the research company (Nichols Research, Sunnyvale, CA) was instructed to attempt to contact a specific number of households within each prefix. If contact could not be made, the phone number was called at least four times before going to another number on the list. All calls to businesses were disconnected.

6346 calls were attempted. Contact was made at 1711 households. 659 refused to participate. 21 surveys were randomly discarded due to too many calls placed in Escondido. 1031 households completed the survey.

1. Johnson KJ, Lewellen L, Lewellen J. "National Pet Alliance's Survey Report on Santa Clara County's Pet Population." *The CFA Almanac*. Jan. 1994.
2. California Department of Finance, Population Research Unit. *California Cities, Towns and Counties*. Information Publications Palo Alto, CA.
3. The NPD Group. *Pet Incidence Trend Report*. Pet Food Institute March 14, 1994.
4. Johnson, et al.
5. Mosier JE, Williams LW, Nassar R. "Study of feline and canine populations in the Greater Las Vegas Area." *AmJ Vet Res*. Vol 45, No 2. 1984: 282-7.
6. Manning AM, Rowan AN. "Companion Animal Demographics and Sterilization Status: Results from a survey in four Massachusetts towns." *Anthrozoos*. Vol. V, No. 3.
7. Handy FL. "Measuring your community's pet population, owner attitudes." *Shelter Sense*. Vol 16. No 5. May 1993: 3-12.
8. Johnson, et al.
9. Manning, et al.
10. Mosier, et al.
11. Johnson, et al.
12. Clifton, M. "Network." *The Animals' Agenda*. Mar, 1992:10.
13. National Pet Alliance. *San Mateo Report Card*. NPA, 1993.
14. Animal Legislation Awareness Network. *An Analysis of King County, WA Animal Control Ordinance #10423*. 1995.
15. Zaunbrecher KI, Smith RE. "Neutering of Feral Cats as an Alternative to Eradication Programs." *JAVMA*. Aug 1,1993. Vol 203 No 3: 449-452.
16. Neville P, Remfry J. "Effects of neutering on two groups of feral cats." *Vet Rec*. 1984:144:447-450.
17. Jochle W, Jochle M. *Reproduction in a feral cat population and its control with a prolactin inhibitor (Cabergoline)*. 2nd International Symposium on Canine and Feline Reproduction. Liege, Belgium.
18. Pedersen N. *Feline Husbandry*. American Veterinary Pubs. 1991: 3-12.
19. Berkeley EP. *Maverick Cats*. New England Press. 1982.
20. Berkeley.
21. Zaunbrecher, et al.
22. Palo Alto Humane Society. *Non-Lethal & Non-Punitive Solutions to The Cat Overpopulation Problem at a Glance*. 1994.
23. Clifton Merritt, Ed. "Animal People." America On Line 12-1-94 *Animals and Society Board*.
24. Pedersen.
25. Mosier, et al.
26. Berkeley.
27. Berkeley.
28. Berkeley.
29. Animal Legislation Awareness Network.
30. Mosier, et al.
31. Hosgood G. "The Pros and Cons of Early Spaying and Neutering." *Breeder Forum*. Vol 2, No 1. 11:15.