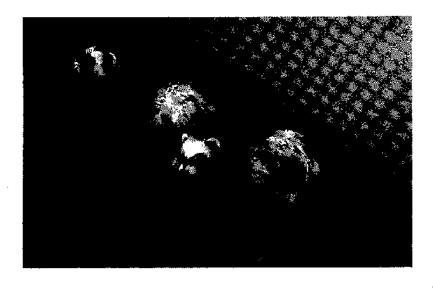
California Domestic Ferret Association

1990 Public Information Manual



Written and Assembled by William B. Phillips, Esquire & Fara Shimbo

Produced in Cooperation with the Ferret Unity And Registration Organization Inc.

Why Ferrets?

When asked to justify the HSUS's otherwise objectively indefensible position against companion ferrets, Paula Jewell of that organization replied, on January 9, 1990, simply that "We don't need another pet."

The obvious ripost to this amusingly elitist remark is, of course, the old cliché, "What you mean 'we,' paleface?"

It is vitally important and germane to comprehend the fact that almost 4,000,000 people already own ferrets. Also germane is the fact that with the possible exception of the horse (who has genuine size and space limitations), no other domestic species has come close to inspiring the absolute devotion which one sees even in "first time" ferret owners. Individuals all over North America have been prompted to start clubs, magazines, telephone hotlines and even shelters for homeless ferrets based entirely on the friendship and sense of well-being they have recieved from just one animal.

So it's obvious that for many people, the need for ferrets exists—and exists in a big way.

By why for ferrets, specifically?



California Domestic Ferret Association 1990 PUBLIC INFORMATION MANUAL

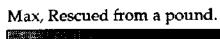
TABLE OF CONTENTS

| WHY FERRETS? What Do People See in Ferrets? Why Do People Choose Ferrets as Companion Animals? Opinion: Columbine Psychological Services | 1 4 5 7 | | |
|--|------------------|--------------------------------------|----|
| | | A Short Course in Ferrets | 8 |
| | | Who Are the Ferret Owners? | 10 |
| | | Are Ferrets Replacing Dogs and Cats? | 13 |
| THE POLITICAL USE OF "WILD" AND "DOMESTIC" | 15 | | |
| Who Says the Ferret is a Domestic Animal? | 16 | | |
| Ferrets in Britain | 19 | | |
| THE RABIES MYTH | 20 | | |
| How the "Rabies Scare" Was Manufactured | 21 | | |
| A QUESTION OF AUTHORITY | 26 | | |
| Ferrets and the New Inquisition: A Rebuttal to the California | 30 | | |
| Department of Health Services Report of 1988 | | | |
| FERRET CLUBS AND ORGANIZATIONS | 66 | | |
| 50 STATE SURVEY: FERAL POPULATIONS | 71 | | |
| 50 STATE SURVEY: FERRETS AND AGRICULTURE | 101 | | |
| WHO WINS? | 134 | | |
| FERRETS IN BIOMEDICAL RESEARCH | 135 | | |

What Do People See In Ferrets?



Champion TJ June







Peter the Great After a Bath



Why do people choose Ferrets as Companion Animals?

Why do people choose ferrets as companion animals? While almost all ferret owners also own cats, and half own dogs, ferrets are welcomed into the family for a variety of reasons. Below are just a few:

1. Ferrets maintain their gregarious and playful nature throughout their lives.

Ferrets are often described by ferret owners as "kittens who never grow up." Cats are well known to typically lose their playfulness upon reaching puberty, becoming aloof and independent. Dogs retain their gregariousness but gradually become less and less playful as they age. Ferrets, on the other hand, play like kits and kittens even when they are well into old age and are provide humor and active companionship until they die.

2. Ferrets are not "ioners" (i.e., solitary/territorial)

Ferrets do not resent the presence of other animals of their own species in the household as dogs and cats often will. They do not become jealous of members of their own or of other species and except for breeding hobs who, like un-neutered dogs and tomcats, will fight other breeding hobs, ferrets actually welcome additions to their numbers and do not require elaborate "introduction schemes" needed with dogs and cats.

3. Neither are they "pack animals."

Unlike dogs, ferrets will not go out of their way to join strange ferrets, nor do they become overexcited and difficult to manage when they are in the company of new or visiting ferrets. As they do not feel an inherent need to either test the "dominance hierarchy" of the household nor do they feel any need to "maintain the peace," they do not predispose themselves to situations where they are likely to be abused or made neurotic by inept or novice handling.

4. They are not territorial.

They do not become defensive of the house or its inhabitants in the ways dogs will (mailmen have nothing to fear from them). Nor they object to the presence of guests or their pets. Unlike dogs and tomcats, even adult breeding males do not "spray" their households (or surrounding neighborhoods) with offensive odors. And they do not object to frequent moving (which has made them especially popular with career military).

Ferrets are small enough to make ideal travelling companions (which has made them

popular with truckers).

They do not equate their owners with food.

Thus, unless specifically trained to do so, they do not beg at table as dogs will, nor do they demand attention only when hungry as many cats will. Much unlike dogs, they do not become aggressive if disturbed while eating (many savagings of children by dogs were reported to have occurred when a child either tried to take away a dog's food or tried to caress it while it was

eating).



Cats and dogs are somewhat of a disappointment for many people on exactly these grounds. It is extremely disheartening for cat owners to realize that their cat, who walks up to them and rubs against their leg, is not expressing affection, but merely scent-marking them—so that other cats will know that this particular food provider is this particular cat's property! No one who has ever owned a dog or a horse has to be reminded of the consequences of being a few minutes late with breakfast. It is extremely gratifying to many people to know that their pet really and truly does love them for themselves, and not for what they can get.

They are more intelligent than cats or dogs.

One study has equated their problem-solving ability to that of primates. Ferrets learn with amazing facility by watching the other members of their household, regardless of species, and very much unlike dogs and especially cats, the behavior of ferrets remains flexible and malleable well into extreme old age.

7. They are small enough and quiet enough to be welcome in apartment buildings where dogs and cats are banned.

Many ferret owners originally chose a ferret because their landlords would not allow them dogs or cats. Ferrets do not howl or bark, nor do they become anxious when their owners leave their company; they do not rend drapery or upholstery, and do not need to

be "walked" outside creating a nuisance for pedestrians and landlords whose gardens and lawns become soiled or dug up by dogs and cats respectively. The very presence of a ferret, whose smell mice and rats instinctively recognize as that of a predator who could easily follow them into their own lairs, is enough to rid an apartment or building of mice.

Ferrets are easily litter-trained, and unless ill, their droppings are without odor, making

"accidents" a very minor problem.

During the breeding season, un-neutered animals do not spray territory, nor do they howl or break out of apartments to find or attract suitors. The vast majority of ferrets sold today are neutered before sale anyway.

8. Ferrets are extremely easy to maintain.

Ferrets are not plagued with the congenital abnormalities one sees in purebred dogs and cats (e.g., hip dysplasia, respiratory problems resulting from "peke-faced" traits, etc) which predispose them to extensive veterinary expense. They eat about as much as a small cat, and thrive on high-protein cat foods, making them very easy to feed. When they do need medical attention, veterinarians extol their easy-going, quiet temperaments which make them excellent patients.

9. Ferrets do not "go wild" and damage agriculture and wildlife.

On the other hand, damage done by stray or loose dogs (e.g., recently burrowed under a fence and killed almost the entire breeding herd of pronghorn antelope at the Denver Zoo, killed two draft horses in Nederland in 1987) and cats (one study in Britain showed that the 5,000,000 British house cats kill 70,000,000 birds and small mammals) is phenomenal. "Loose" ferrets typically die of starvation (they have no instinctive knowledge of what is food and what isn't), exposure (they cannot tolerate temperatures above 90^ or below freezing) or attacks by dogs or cats within three days.

10. Ferrets are hypoallergenic.

Persons who are allergic to cats and dogs report no such problems with ferrets; thus persons who would otherwise be denied a companion animal through no fault of their own can now own one.

COLUMBINE PSYCHOLOGICAL SERVICES R.A. YARDUSH 1353 FRONTIER STREET LONGHONT CO. 80501 (303)678-9025

To Whom It May Concern:

I am writing at the request of the group, FURD, to help provide information concerning the versatility, adaptability and productive uses of the domesticated ferret, m. putorius, as a pet and companion animal.

I am a practicing clinical psychologist who specializes in the evaluation and treatment of children. I am licensed and have been working in this field for ten years. In my work, I get many requests for help with children who have many unique and difficult problems, emotionally and behaviorally.

I have found that, in certain cases, I can achieve a therapeutic alliance with a problematic child when I make use of pet therapy which in my case involves my pet ferrets. Children respond readily to animals, as you undoubtedly already know, but the extraordinary ferret appears to make treatment progress more quickly. This appears to be for a number of reasons: the animal is small-just child sized even as a full grown adult; the ferret is cuddly and cute; ferrets enjoy human contact and respond to it; the ferret is unusual in the experience of most children. I find that even the most resistant of children cannot avoid responding to my Riki.

Besides using ferrets to foster a therapeutic alliance, I have also used my animals to de-condition children who have become phobic to all animals because of attacks, mostly dog bites. One child was able to progress through treatment so well that he became the happy owner of a ferret. Several years later, the family contacted me again with the hopes of helping another child who had been similarly traumatized.

We are gaining more knowledge about the important bonding that occurs between humans and companion animals. The therapeutic effects cannot be denied. Knowing the special experiences of children, I find that much can be accomplished to ease the pain of the child by using companion animals. I find that the ferret captures the best of all worlds and will continue to make this treatment modality available to my patients.

R.A. Varoush PhD January 11, 1990

A Short Course in Ferrets



Taxonomy:

The ferret is one of only three carnivores (the dog and the cat are the others) to have been known to have been domesticated since in those times and places where written records were kept. It is a member of the family *Mustelidae*, which includes the Otters and Martens, and the sub-family *Mustelinae*, the "True Weasels," which includes the Mink.

Linnaeus, when he made up the system of taxonomic classification around 1758, named the ferret Mustela furo. "Mustela" was the Latin name given to all the Weasel tribe; some contended this name came from "carrying off mice (mus)," and others because "She is a mouse (Mus) shaped like a spear (tellum)." (This last remark dates from Medieval times; yet there are even today many people who upon seeing a ferret for the first time automatically assume it is a rodent.) "Furo" is Latin and Italian for "thief." The name was changed, according to the scientific fashion of the day, several times; Griffith decided on Putorius furo in 1843; in the early and mid 1900s, when the fashion was to lump together (where formerly it had been to set apart), the ferret became Mustela putorius furo. Now the fashion is changing again, and the ferret is once again most often referred to as simply Mustela furo.

The immediate ancestor of the ferret has been lost to history; just as you will with the dog and cat, you will get a different answer depending upon whom you ask.

Further Reading:

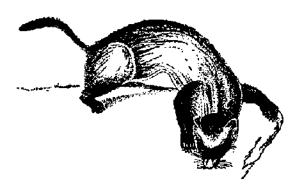
Corbet, G.B. and Southern, H. N. *The Handbook of British Manunals*. Second Edition, Oxford, Blackwell Scientific Publications, 1977.

Zeuner, F. "The ferret." A History of Domesticated Animals. New York, Harper & Rowe, 1969

History

No one knows exactly where the ferret was first domesticated, but the general consensus of opinion was that it was probably somewhere in the Near East or in Northern Africa. An animal which may have been the ferret but might also have been any of the mustelids is mentioned in Leviticus (XI:29-30). Historical references otherwise start with Aristophanes. Aristotle mentioned that the "rubicund-eyed" ferret "becomes very mild and tame." Strabo, a contemporary of Augustus Caesar, maintains that the ferret is Libyan in origin and was bred specifically for hunting the European Rabbit which had been imported there from Spain. (It had also been imported to the Balaeric Islands, where, as it has everywhere it has been introduced, it soon became a plague; Strabo's account of ferrets is in connection with ferrets Augustus ordered sent to these islands to control the rabbits.)

Ferrets were kept both as companion animals and as "kitchen ferrets" (often with "kitchen hawks") to keep the pantry filled with rabbits throughout the Middle East, where Roman soldiers evidently took up the sport as a pastime. They, in turn, intro-



duced ferrets to the rest of Europe. By 1221 they had reached the Danube, and also Ghengis Kahn, who evidently became quite enamored of them. By 1245 ferreting had spread to the north of Spain, and a century later it was well established in Britain, but with a twist; they were not used specifically for the larder but by ladies of the period to hunt rabbits for their fur.

By 1390, poaching in the King's Woods be-



came so out- of-control that a law was passed in England restricting the ownership of ferrets to only those persons whose annual income was 40 shillings or more; quite a sum in those days. Ferrets often wore collars with the same type of bells attached to falcons.

By 1551 the ferret was almost uniformly albino, and at point around this time at least one woman was burned alive for the heresy of owning "a dun-colored ferret" and another hung for keeping a ferret, a

frog, a cat and a goat, all of whom were tame.

Ferrets appear to have entered the United States in 1690, and by the early 1900s were bred en masse in several places, most notably New London, Ohio which was once known as Ferretville. With the advent of underground telephone wiring, they were often used to tow wires through pipes (a rat was put in the pipe and a ferret with a wire tied to it sent after it). At about the same time, sport hunters began to complain that un-licensed, non-tax-paying ferreters were taking "too many of their rabbits," and as a result, ferret ownership was banned in many states (on the feeling that it was easier simply to ban the animal than to try and regulate ferreting). With the advent of chemical rodenticides, the use of ferrets for rodent control declined sharply, and most major ferretries closed.

By the close of the 19th century, the European Rabbits which had been imported to New Zealand and Australia had become such a "plague of rabbits" that it was decided to import ferrets to New Zealand with the idea that they would, once loosed, form feral populations and wipe out the rabbits. To this end, they were brought over and bred on a gigantic scale—3,000 in a single year (1884). But the plan did not work; the ferrets did not control the rabbits, rather, the rabbits controlled the ferrets. As a result, Stoats and Weasels were imported to take over where the ferrets left off in such large numbers that, at the demand of British farmers, Parliament put a stop to it. Unlike the ferrets, the stoats and weasels thrived.

In 1926, Duncan and Laidlaw discovered that ferrets can become infected with canine distemper, and as a result, in the 1930s a vaccine was developed for that disease. At that point, the ferret began a slow but steady "gain" as a laboratory animal, and in the 1980s, when the public began to complain about the "use" of more familiar (or simply "cuter") companion animals in experimentation, the use of the "less popular but more cost effective" ferrets as substitutes ballooned.

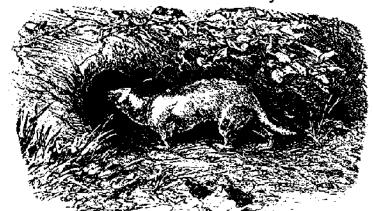
While ferrets have been kept as simply companion animals throughout their history, it was only in the 1970s and 1980s that they suddenly began to become extremely popular for this purpose. The estimated U.S. population of ferrets in 1990 is somewhat over 5,000,000 ferrets. As a companion animal, the ferret is here to stay.

Further Reading:

Fox, James G. *Biology and Diseases of the Ferret*. Philadelphia, Lea & Febiger 1988.

King, Carolyn. Immigrant Killers. London, Oxford University Press, 1984.

Owen, Clifford. "The domestication of the ferret." The Domestication and Exploitation of Plants and Animals. UK, Ucko and Dimbley 1969.



Who are the Ferret Owners?

In their attempts to disenchant the public with the ferret itself, many organizations, including the California Department of Fish and Game and the CDHS, the Humane Society of the United States and the American Veterinary Medical Association have attempted to present the average ferret owner as anything from a misguided boor (harboring neurotic wild animals out of sheer selfishness ("No Merit in Owning Ferrets," HSUS, 1986), crazy people out to destroy their own families ("Pet European Ferrets..." CDHS, 1988), or uneducated and antisocial types risking rabies to appear macho ("Council Concerned about Pet Ferrets," AVMA, 1986).

Not a single one of these agencies has ever attempted to ascertain exactly who the people where whom they wished to damn. The statistics on the following pages were compiled from the demographics data base of the Ferret Unity and Registration Organization, Inc., the largest international reserach and service organization for ferret owners, and represents the membership of that club as well as demographics from marketing surveys done by ferret-oriented manufacturers and publishing companies.

Who, exactly, are the ferret owners? A summary of the data:

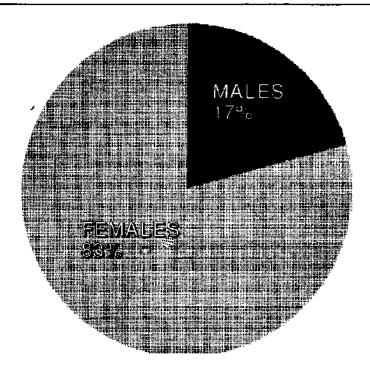
- They are of a markedly higher educational level than members of the population at large, with more than twice as many holders of advanced academic degrees than the public at large and 12 times as many doctors, lawyers and PhDs than the public at large among their ranks.
- They most typically hold high-paying professional or research jobs, making an average of over \$40,000 per year.
 - Over 80% are women.

Statistics appear in more detail on the pages which follow.

Who Are The Ferret Fanciers?

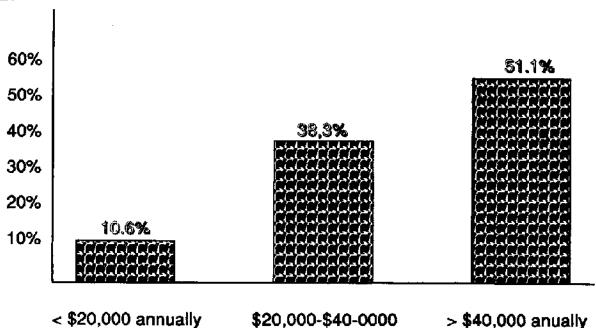
The figures below were provided courtesy of the FURO Inc. Registrar, and reflect the combined demographics of the FURO Membership and a poll sponsored by *American Ferret Magazine*.

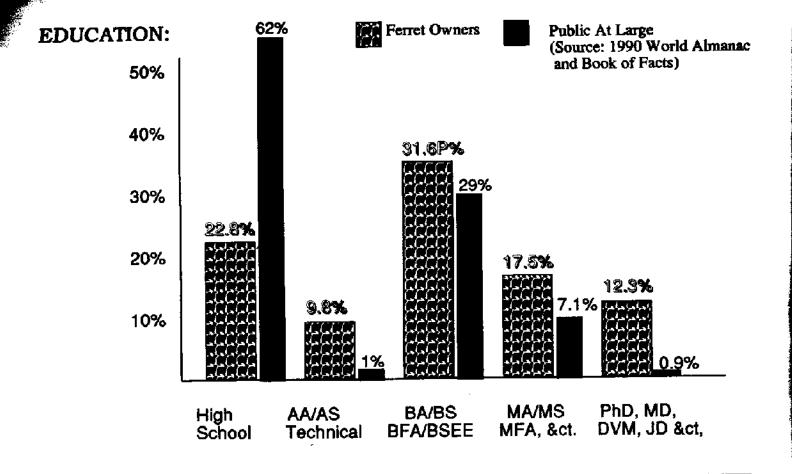
GENDER*:



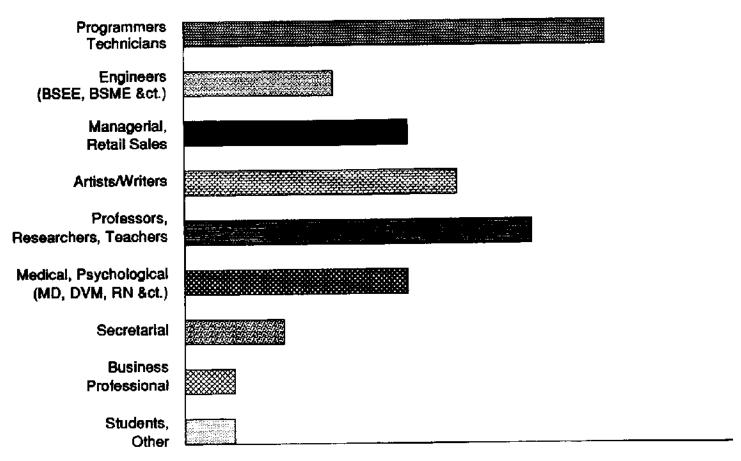
^{*} Ferrets listed as owned by "Family" are categorized as owned by the gender of the person who signed the ferret's registration forms, and otherwise comprise only 5% of total owners, mostly males.

INCOME:





OCCUPATION:

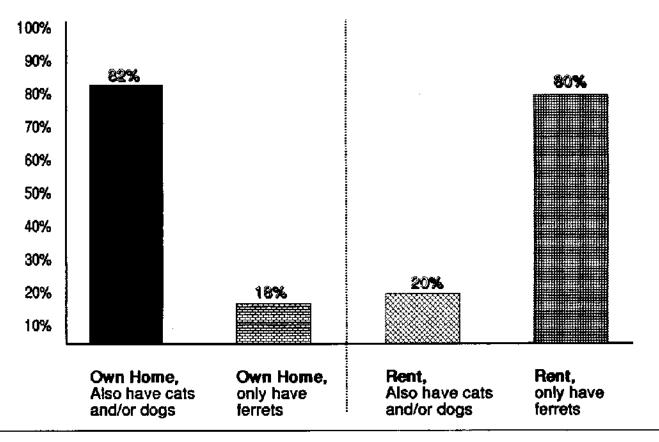


Are Ferrets Replacing Dogs and Cats?

One of the more ludicrous claims made by those who have set themselves against ferret fanciers is that by choosing a ferret as a companion, one is denying a home to a "more deserving" cat or dog. Notice the hidden assumptions in this "reasoning"—that love comes only in limited amounts ... that "All Animals are Equal—But Some Animals Are More Equal Than Others."

When ferrets are owned to the exclusion of other animals, it is only rarely that their owners simply prefer their company to that of other species; when such owners are asked why they have only ferrets, a few cite the ferret's hypoallergenic nature; most, however, note that their landlord simply will not allow other species. It is shamefully elitist to deny such a person the only interactive pet available to them; those who worry about homeless dogs and cats could much better serve them by seeking an end to discrimination against pet owners by landlords.

COMPANION ANIMALS IN HOMES AND APARTMENTS:

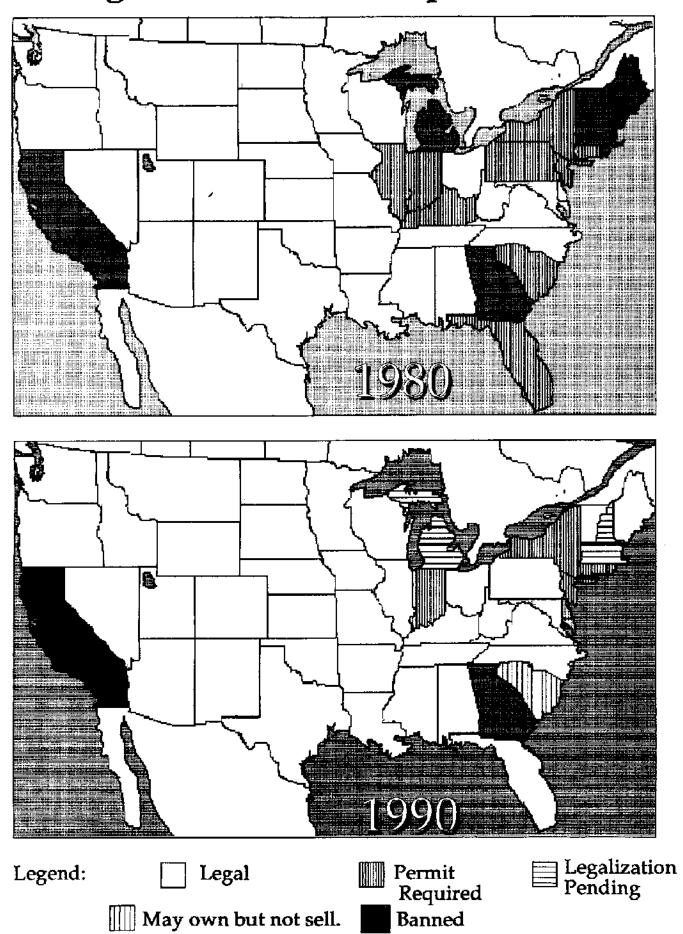


In addition, the following should be noted:

- 63% of ferret owners also own dogs/cats regardless of where they live.
- The average dog owner owns 2.4 dogs.
- * The average cat owner owns 3.9 cats.

With many municipalities limiting the numbers of dogs and cats (or of pets overall) which can be kept in one household regardless of whether one owns or rents, it is obvious that ferret owners are doing more than their share for homeless dogs and cats, as well as providing for their ferrets.

The Legal Status of Companion Ferrets



Alaska's ban was overturned by the state district court, 11 May 1984.

The Political Use of "Wild" and "Domesticated."

That the ferret is and has always been a domesticated animal is so thoroughly documented that it would appear to a person of ordinary intellect a crime against science to refute it. On the following pages you will find excerpts from some of the literally hundreds of examples of scholarly references to the ferret, *Mustela* (putorius) furo, as being domesticated.

Yet all of those who have come out against the companion ferret claim to do so on the primary basis that ferrets are actually "wild animals." In order to do this, they have had to completely and deliberately ignore the scientific and historical literature, and, in the case of the Humane Society of the United States, even their own published definition of a wild animal, to wit:

The Humane Society of the United States believes that most wild animals make unsuitable pets under virtually all circumstances and very few people, adult or child, are equipped to properly maintain any wild animals in the home environment. We define wild animal as any animal not genetically controlled over a very long period of time and specifically, thereby, adapted to the human environment.

Obviously, by this definition, the ferret is most certainly domesticated, yet the HSUS has found it politically expedient to class the ferret as "captive wildlife." California Fish and Game, which claims the HSUS as "one of our constituents," certainly welcomed this "second opinion," and animal rights groups, most of whom are against companion animals of any kind, have run with it. The AVMA believed it on the demand of a single member of a single committee and made the ferret "wild" as a matter of policy for the entire organization, to the disgust of a great many members of its rank and file whose livelihood depends on ferrets.

It is curious that with a single exception, none of these organizations has had anything to say about the attempts to replace domestic cat and dog with the "wild" ferret in the laboratory, attempts instigated mainly as a way to negate the effects of animal rights activists on academic grantsmanship....

Who Says the Ferret Is A Domestic Animal? Well, don't just take our word for it....

The ferret is one of the domesticated species the history of which is not evidenced by fossil remains...

Frederick E. Zeuner A History of Domesticated Animals Harper & Rowe, 1963 page 401

The domestic ferret, sometimes given the name M. putorius furo, is thought to be a descendent ...

Ronald M. Novak and John L. Paradiso Walker's Mammals of the World Johns Hopkins University Press, 1983

The European Ferret, Mustela putorius funo, has been domesticated for over 2,000 years, although confusion exists as to its exact origin and early use ...

James G. Fox, D.V.M.
(Director, Division of Comparative Medicine, Massachusetts Institute of Technology)
Biology and Diseases of the Ferret
Lea and Febiger, 1988, pp. vii

Three lines of investigation used in studying domestication are archaelogical, zoological, and historical.

In studying the ferret, only the second two have been pursued ...

Clifford Owen
The Domestication and
Exploitation of Plants and
Animals, Aldine Co. 1969
p. 489

FERRET, a weasel-like, meat-eating animal, long used in Europe for hunting rabbits and rats. The ferret, Mustela putarius furo, is a domesticated variety...

Collier's Encyclopedia Volume 9, London, 1984

The domestic ferret, (Mustela putorius furo), is a fun-loving, gregarious member of the family Mustelid that has become increasingly popular as a household pet...

R. Wayne Randolph
"Preventive Medical Care for the Pet Ferret."

Current Veterinary Therapy IX
Saunders Co, 1983 p. 772

The ferret, Mustela putorius furo, is a carnivore belonging to the family Mustelidae. The domestic ferret is believed to have been derived from the wild (European) polecat...

Moody, Bowman and Lang
"Laboratory Management of the Ferret for Biomedical Research."

Laboratory Animal Science, 35(3):227 1985

Discovery of the susceptibility of ferrets to canine distemper in the 1930s, initiated a series of events that changed the principle use of the domestic ferret from a hunting companion to a valuable model. Anon. "Ferrets in Biomedical Research." Laboratory Animal Science, 35(3):199 1985 And the wife public which the complete in the complete co

Encyclopedia Brittanica 15th Edition, Vol IV

for ps. 1. A would-like or musteline candyone, a domesticated usu.

albunistic variety of the European policat...

Funk & Wagnalls' New Standard Dictionary 1965

It represents a truly remarkable feat for man to have bred the domesticated type of polecat that we call the lerret... New Book of Popular Science Volume 5 Grollier, 1979

Domestic Animals

Among domestic animals employed to kill rats are the dog, cat and ferret.

Bureau of Biological Survey, United States Department of Agriculture U.S. Government Printing Office 1915

Herrels

Another domesticated pet becomes popular in the laboratory.

Anon, *New England Anti-Vivisection Society* April 1985 p. 8

(i) Retail Pet stores which sell non-dangerous, pet-type animals such as dogs, cats, birds, rabbits, hamsters, guinea piga, gophers, domestic ferreta... United States Department of Agriculture Federal Register
Volume 51 No 49, March 15 1989
page 10,833

The ferret (Fig 7-1_ belongs to the order Carnivora and the family Mustelidae. It has been domesticated in Europe for over 2,000 years and its origins are therefore obscure...

C.S.F. Williams A Practical Guide to Laboratory Animals C.V. Mosby, 1976 page 65

THE FERRET (Mustela putorius furo), a carnivore of the family Mustelidae, was domesticated from the wild European polecat ... Lennox M. Ryland & John R. Gorman "The Ferret And Its Diseases."

Journal of the American Veterinary

Medical Association
173(9):1154

Perrets have been domesticated to hunt rabbits since Roman times...

Daniel and Baker, Handbook of New Zealand Mammals 1986 page 81

The ferret is the domesticated version of the wild polecat.

Carol King Immigrant Killers Oxford University Press Aukland, 1984 page 84

FERRET (Mustela furo.)

Where Found—Domesticated.

George Jennison,
Natural History: Animals
A & E Black Ltd. London, 1929
page 106

Ferret (Mustela furo).

Domestic form of the polecat, used especially for catching rabbits...

Gordon Corbet, The Mammals of Britain and Europe Collins Ltd., London, 1980 page 68

Ferret *Mustela furo...* Taxonomic status: a domesticated form ... H. N. Southern

The Handbook of British Mammals

Second Edition

Blackwell Scientific Publications
Oxford, 1977 page 352

FERRET ...many regard it as a meer domesticated form...

New International Encyclopedia Cambridge, University Press 1917 page 484

ferret, also called prener ...a domesticated form of the wild polecat...

New Encyclopedia Brittanica Volume 4 1986

Additional references can be found in Ferrets and the New Inquisition, the rebuttal to the CDHS 1988 Report, in Section 9 of this Manual. The Authors were unable to find any zoological or other scientific reference in which Mustela furo/Mustela putorius furo was considered anything but domesticated.



ORMSBY

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Fara M. Shimbo,

F.U.R.O. Director of Information.

PO Box 11216 Boulder, CO 80301 U.S.A.

1st February 1990

Dear Ms. Shimbo,

Thank you for your letter dated 24th January 1990, in which you refer to statements made by the California Department of Fish and Game, regarding the legal status of ferrets in the United Kingdom. Their comments that the ownership of ferrets, together with polecats and their hybrids is illegal here, and that there is a bounty on these animals is in error.

I can state quite plainly, and am prepared to be challenged in law, that these statements are pure fiction - lies :

The ferret is regarded here as a domestic animal, as has been the case for several centuries. It is, and always has been, perfectly legal to keep, breed and otherwise maintain ferrets and polecats in all parts of the British Isles. Not only is it well within the framework of our laws to keep ferrets and hunt with them, it is also actively encouraged in wild-life preserves where rabbit populations are a problem. The 'near to nature' method of hunting in such places controls the rabbits without disturbing other wildlife, or their environment.

As to the suggestion that there is a bounty on these animals; there is no bounty system operating here for any animal. There are certain proscribed animals, such as the rabbit, grey squirrel and coypu but non of them have any price on their head. For a number of years following the end of the 1939/45 war the grey squirrel (introduced from the USA) had a bounty paid but that was dropped circa 20 years ago as it failed to act as a controlling influence.

My authority in this matter is based on thirty years of keeping and hunting with ferrets. I am a published author on the subject and have bred close to 2,000 ferrets. I hold a Doctorate in Zoology, based on prey/predator relationships, which involved polecats, ferrets and raptors. I am a regular guest lecturer at the internationally famous Game Conservancy whose Patron, and President are H.R.H. The Prince Phillip, Duke of Edinburgh and H.R.H. Prince Charles. The husband and son of our reigning Queen are hardly likely to condone the teaching of keeping and working an animal prohibited by law.

If any further proof or comment on the legal status of ferrets in the UK is required I will be happy to provide it.

Yours sincerely,

Frahan halle

19

The Rabies Myth

"Rabies" is probably the best scare word in the English Language. With the combined influence of the public's phenomenal ignorance about the disease and how it is transmitted, the sensationalist press that this ignorance generates and the zeal with which some health departments bandy the word about, a claim that any animal is or could be rabid is almost universally considered grounds for animal control pogroms and legislative hysteria. It also makes any person who is in any way con nected with the supposed "rabid animal" a pariah.

In the last decade, the carefully orchestrated "ferret rabies scare" was considered enough grounds to effect a ban on ferrets in several communities, even though there was and is an overwhelming amount of scientific literature and documentation to show that such a scare was utterly unjustifiable.

On February 14th, 1990, Pittman-Moore received AFIS approval and USDA licensing of a rabies vaccine especially for ferrets. Norden Laboratories expects their own ferret-licensed rabies vaccine to reach the market in April of 1990. Thus, the ferret rabies scare is no longer an issue. Yet a study of exactly how the scare came about is valuable because it shows conclusively the absolute groudlessness of the types of claims made by "ferret phobes."

How the "Rabies Scare" Was Manufactured

As mentioned elsewhere in this manual, the "ferret rabies scare" did not even exist until after it had been shown to be absurd. The first public blathering from health departments came in 1983—three years after the Centers for Disease Control in Atlanta published its now classic "Pet Ferrets And Rabies" in which it stated that:

"If in the investigation of a ferret bite, the investigator can be reasonably assured that the animal had no contact with indigenous rabies vectors, then the possibility of the ferret's having rabies seems extremely remote, and the antirabies treatment of the bite victim would not seem warranted."

While the original statement (dated October 1980) was published in the CDC's small newsletter, Veterinary Public Health Notes, (we have included a copy here) the statement was repeated in its entirety in a news article entitled, "Can you catch rabies from your ferret? Probably not," by Phil Gunby and published in the Journal of the American Medical Association in 1981.

In 1982, research at the French National Center for the Study of Rabies by Blancou and Artois showed that ferrets (and presumably polecats, as they are close relatives) are not only themselves remarkably immune to rabies, but that the virus was not shed in the ferret's saliva—making the possibility of contracting rabies from a ferret bite virtually nil. (It also explaining the phenomenally low incidence of "natural" rabies in wild polecats even in those places where rabies was epidemic among other mustelids and carnivores.)

With this data available, it is inconceivable that any responsible department of health would want to discourage the ownership of ferrets on the basis of their potential to transmit rabies; in fact, one would think that such a department would instead encourage such ownership in place of the ownership of the far more susceptible and often

constantly exposed dog and cat.

But such a move would have been politically unwise, and in fact, for reasons the current authors (despite years of research and many interviews) are at a total loss to explain or even understand, many departments of health did exactly this. Often cited as the official "problem" was that there was no rabies vaccine licensed for use in ferrets, even though, as ferrets are almost never exposed to rabies, vaccinating the entire ferret population for the disease is about as necessary as vaccinating the entire American

population for malaria.

The problem seems to have started with Dr. Stanley Deisch, who has for the last decade campaigned against the keeping of wild animals as pets. While it is obvious that lions, tigers and bears do not make good pets for the average household, Dr. Deisch went so far as to include species such as rabbits in his list of "wild-exotic" animals! His "Should Wild-Exotic Animals Be Banned As Pets?" is a wonderful example of Orwellian "news-speak." He mentions the London case where a child was left on an open cot within the reach of two starving polecat-ferrets (hybrids bred for hunting purposes) and a dog in a filthy house while her parents were spending several hours drinking at the pub—but according to him, the child was in a crib and was attacked by two "ferrets." The dog, the negligence, the fact that the parents had been cited by the London coroner as being guilty of "a great deal of irresponsibility and a great deal of negligence," seem to mean nothing to him-to him, the animals he dislikes are entirely to blame. He then mentions that the ears of a Colorado child were "40% chewed off," but examinations of photographs taken of the child show that they were simply "chewed on." Yet his statement that they were "chewed off" has been reprinted with relish by ferret detractors even when they also reprinted the photograph of the child, wherein anyone can see that the statement is a gross exaggeration.

Who would publish such a paper? It appeared in California Veterinarian (the journal of the CVMA, a recent head of which is also a Reserve Game Warden for the

California Department of Fish and Game) in December of 1981.

With the exception of a few internal memos, the issue of rabies in ferrets was virtually ignored for years. It was known and acknowledged that since even a ferret can only get rabies from being itself bitten by a rabid animal, and since almost all ferrets are kept indoors where such contact is impossible, ferret rabies was a non-problem. The CDC's original newsletter article was reprinted again from time to time (for example, it showed up almost verbatim as a Memorandum from the Virginia Health Department

supposedly authored by Susan R. Jenkins on July 5 1983.

The rabies issue then appears to have then come into the purview of Diesch's friend Dr. Denny Constantine, a California Veterinarian and an "expert" on rabies in bats (or, at least, someone who had published a paper on same when he was a veterinarian for the Navy). Constantine simply did not like ferrets to begin with and showed no hesitancy about saying so (and who admitted even after he and Kizer published "Pet European Ferrets" that he knew nothing about the animals, but wrote the book simply because the California Department of Fish and Game told him to). He passed his feelings on to his friend, Dr. Kizer, who then published a small article in his own department's newsletter (California Morbidity) entitled "Need for Data on Ferrets That Bite, Eat Human Flesh or Develop Rabies."

Constantine got in touch with the CDC (as the original memo asked for those with information on ferrets to please contact them). And suddenly, it seems, the CDC changed its tune entirely. Where the 1980 article was factual for its time and extremely reasonable and intelligent in tone, its position in the 1985 Annual Summary of Rabies Surveillance (published in 1987) was plainly absurd. "Although reports of rabid ferrets are rare," it begins, "they are disturbing because they indicate that these animals are still being kept as pets despite their classification as wild animals [by the National Association of Public Health Veterinarians, of which both Constantine and Diesch are members]." No question was made of the authority under which Diesch's cronies had declared the long-domesticated ferret a wild animal. (Yet in a letter to attorney R. A. Phelps, dated January 28 1986 by CDC's Leigh Ann Sawyer, CDC itself considers the ferret a domestic animal ...)

Later in the same article, we are told that "The claim that ferrets are a source of a disproportionate number of injuries cannot be substantiated at present." The claim? What claim? What claim indeed! A search of the literature via the IQuest and BIOSIS databases done by one of the current authors on May 2nd, 1988, shows that no such claim had ever been made by any s scientific sources prior to the publication of this article. Apparently, someone wanted people to believe that such a claim had been made—that "someone else" supports the author's anti-ferret stance. Who? Sadly, the authorship of this article

is anonymous.

(But if you look, you can find these claims in two places. One is an article published in 1983 by *Outside* magazine, entitled "The King of the Ferret Leggers," a story about an Englishman who deliberately abuses and terrorizes his ferrets and then sticks them in his trousers to prove his manhood. The magazine's editor called the article "one of the more editorially challenging pieces in the history of non-porn magazines." The only other source is the article entitled, "The Jet Set Pet That Eats Kids" (furnished to the authors by Dr. Constantine himself) which was published in *The Sun*, then the *National Enquirer*'s black-and-white subsidiary which also published material like "Millions Hear Elvis Live on Radio From Beyond The Grave.")

The idea that there was no rabies vaccine licensed for use in ferrets sat very well with most public health departments which had anything at all against ferrets. In the meantime, veterinarians across the county had been vaccinating ferrets with killed vaccines such as Fort Dodge's Trimune, and encountering no problems. Then, in February of 1986, Drs. Matouch and Dousek came up with the tissue culture vaccine for ferrets.

Unfortunately they did this in Prague, so the vaccine could not be used here as it had no

Within a month, Denny Constantine published a list of 11 cases of rabies in ferrets, one crossed out by hand, one which lists Diesch and not CDC as a source, and 3 other non-CDC cases (odd because all rabies cases must be reported to the CDC). A month later, Alaska published its "Ferrets-A New Menace To Health" based entirely on Kizer, Constantine and Diesch's work, with absolutely no reference to anyone who had any genuine knowledge of ferrets at all.

The next year, the Texas department of health took up the cry in their own newsletter. Two months later, enter John Freeman, M.D., head of the North Carolina Department of Health, who has made North Carolina the only state in the Union to ban the keeping of pets in hotels and motels, because of their potential to spread disease, and who has stated on two occasions that his ongoing attempts to ban ferret ownership in his state are merely introductions to his plan to eliminate the ownership of cats. His department's newsletter, in its August 1987 rabies issue, vilified ferrets for attacking babies while the parents were absent and maintained that wild and now the child who had its ears chewed on, then chewed off, now has half of both ears missing.

In 1988, scientists at the Paul Erlich Institute in West Germany tested 7 existing rabies vaccines on ferrets and found that all of them produced excellent immunological results. The work was completely ignored in the United States. In the same year, killed vaccines were tested at the University of Oklahoma with the same results. Research at the Wistar Institute has shown that ferrets are virtually immune to all strains of rabies except the Northeastern Fox strain. So far, the anti-ferret forces have chosen to ignore

this as well.

Suffice it to say that the details and sources for existing research on ferret rabies vaccines is detailed in "Ferrets and the Rabies Scare," which you will find in Ferrets and the New Inquisition which is included as part of this manual. But one aspect of ferrets

and rabies needs to be repeated.

So far, everyone who has come out against ferrets makes one hysterical claim: "There have been 10 rabid ferrets since 1984," they say, (or x many since y) and we are all supposed to recoil in terror. (Of course, we are never told that at least one of these cases is listed as a "possible error in diagnosis" and that two are likely to be cases where "rabid" was declared on the basis that vaccinated animals tested positive on the fluorescent antibody test-which of course they would, as the entire purpose of a vaccine is to produce antibodies...) But is this really a problem? According to statistics published in the CDC's Annual Summaries of Rabies Surveillance, in the same period there were:

24 rabid humans 701 rabid horses 2,240 rabid dogs 2,310 rabid cats

3,395 rabid cattle.

So why the hysteria about 10 rabid ferrets? Partially because, as the total population of ferrets alive during this period (approximately 14,000,000) is never mentioned, the figure can be made to seem extremely high if it is allowed to stand alone (especially if one does not mention the false positives). Alert readers will immediately ask the salient question-what proportion of the population has been rabid: the answer is 0.0004%, or less than one in 3.2 million ferrets, compared to one in 467,000 for dogs.

In 1989, Norden Laboratories and Rhone Merieux submitted rabies vaccines targeted specifically for ferrets to the USDA for field trials. Rhone Merieux's IMRAB is available now. Norden's vaccine is expected to be approved in April. So of course, the

rabies scare is now a moot point.

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES
TUBLIC MEALTH SERVICE
GENTENS FOR DISCASE CONTROL
ATLANTAL BIOMBIA BENN

Veterinary Public Health Notes

Propered by the Bursey of Epidemiology, CDC, primarily for persons interested in problems of paintal diseases in human health, Some reports are preliminary in nature and should be so identified if quoted Anfithenduction of satures of articles from the literature should indicate the original published source.

October 1980

VIEAL DISEASES

Fet Errets and Rabies

The marked increase in quaries received by CDC and some state health departments regarding ferrets and associated possible rabies exposure suggests that the ferret is becoming an increasingly popular pet in the United States. The lack of knowledge about this animal as a potential rabies vector has led us to prepare this guarary of in-

formation about ferrate and rabitate.

Perrets belong to the family Mustelidae along with the skunk, obtain, mink, and weasel. The only wild indigenous ferret in the United States is the black-footed ferret (Mustels nigripes) which is smong the ratest of the endangered mammals and is rapidly approaching extinction. There have been only 2 or 3 reliable sightings of black-footed ferrets since 1973.

Perrets sold as nerg in the United States are derived from Eurose selectively bred for productivity and desirable behavior traits. According to 1 major productivity and desirable behavior traits. According to 1 major producer, about 12.000 ferrets are sold each very in this country, half to the pet trade and half for reserving ferrets are not used in the commercial for industry. Most are marked at 8-12 weeks of age. There has been about a 5-fold increase in the sale of ferrets in this country in the past 5 years with an aqual increase in both pet and laboratory animal markets.

As pets, ferrets are similar to domestic cats in many ways. Like cats, they are fastidious in their toilet, self-training easily to a litter box or paper. Their behavior is docile and cat-like, unlike that which would be expected of a normal wild mustelid. As pets, ferrets are usually kept in cages except when actually being handled. They are inquisitive and if left to ruem free and unattended about the home are apt to get into trouble. They are not normally released

outsider-as a cat might her-and if they escape it is often dift to recover them. <u>Lecaped ferrets</u> rapidly develop the cunning, and stealth for which their wild counterparts are noted; even escaped ferrets do not appear canable of reproducing and escabe themselves in the wild. Race reports of young European ferret the Utild and Believed to have resulted from escaped pregnant gand are probably not capable of long-term survival.

Although studies on susceptibility of ferrets to rabies har reported, 44 a mustelid the ferret is assumed to be highly sushes and capable of transmitting rabies if infected. Two capasiteret rabies have been renorted in the United States, I in 1971 in 1978. We date are available on the first case: the second was a recognized possibility that the animal might have ceived live rabies vaccine.

We would appreciate receiving any information relative to f and rables which readers may have so that this information can disseminated to others who have questions about ferrers and rab

Source: Viral Diseases Division, Bureau of Epidemiology.

Rabies in Canada

Rabies in humans is rare in Canada. In the period 1925-1979 thoman rabies deaths were recorded. In the last decade there only 2 deaths: I in 1970 and I in which rabies was suspected in 1977.

About half (10) of the deaths were reported from Quebec. The death in Quebec Province was in 1964 in a 14-year-old girl who a bitten by a skunk. Six of the 21 deaths occurred in Ontario, withe last in 1967 in a 4-year-old girl who died I month after expto a rabid cat.

Alberta and Saskatchevan reported 4 deaths, with the last in 15-year-old boy in Saskatchevan in 1970 who was bitten by a bat weeks before onset.

Since 1947, rabies in Canada has been predominately a diseas of wildlife. Mevertheless, human exposure to rabies is still mo frequently associated with domestic animals. Undoubtedly, the lincidence in humans is largely due to prompt postexposure prophy (axis. In 1979 about 1,300 persons received postexposure treatm

PRESS RELEASE

12 February 1990

Contact: Don Hildebrand Rhone Merieux, Inc. Athens, GA (404) 548-9292

IMRABIM RABIES VACCINE

APPROVED FOR FERRETS

ATHENS, GEORGIA - February 12, 1990 - Rhone Merieux, Inc. has received approval from the United States Department of Agriculture (USDA) to use IMRABTM, a killed rabies vaccine, for vaccination of ferrets. This approval makes IMRABTM the only rabies vaccine cleared for use in six species of animals; i.e. dogs, cats, horses, cattle, sheep, and, now, ferrets. The product is manufactured by Rhone Merieux, Inc. of Athens, Georgia and is distributed by Pitman-Moore, Inc. throughout the United States.

IMRABTH is the first USDA approved rabies vaccine for <u>ferrets</u>, and is the largest selling rabies vaccine in North America.

The USDA approved an efficacy study that was conducted in ferrets vaccinated subcutaneously with one dose of IMRABIN.

Protection was demonstrated when the ferrets were challenged with pathogenic rabies virus one year later. Safety studies demonstrated that side effects were minimal, with only one reaction in the 2,951 ferrets vaccinated in the field trial.

MORE

IMRABTM FERRET APPROVAL - PAGE 2

The recommendations for use are to, "inject one (1) ml subcutaneously in healthy ferrets, 3 months of age or older, revaccinating annually".

"Public health authorities may require rabies vaccinated ferrets that bite humans to be sacrificed and tested for rabies infection".

For further information regarding the use of IMRABTM please contact Rhone Merieux, Inc. (404) 548-9292, Pitman-Moore Sales Representatives, or Pitman-Moore Professional Services

1-800-541-7459 (Illinois- 1-708-949-3300). To order product please contact your Pitman-Moore Sales Representative or Customer Service,

1-800-525-9480.

DEPARTMENT OF FOOD AND AGRICULTURE



1220 N Street, Room A-107 P. O. Box 942871 Sacramento, CA 94271-0001

February 6, 1990

Mr. Robert E. Pitts R&D/Regulatory Manager Rhone Merieux, Inc. 115 Transtech Drive Athens, Georgia 30601

Dear Mr. Pitts:

Approval for Use of IMRAB Inactivated Rabies Vaccine in Ferrets in California

Registration of IMRAB for requested use is approved. The proposed label contents are satisfactory for California Department of Food and Agriculture requirements.

This approval is based on efficacy data supplied by the manufacturer and is not to be construed as approval to own ferrets in California. Be advised that the Department of Fish and Game prohibits the possession of ferrets in California and a warning to that effect might be appreciated by that agency.

Sincerely,

LCVanderwager

L. C. Vanderwagen, D.V.M., M.P.V.M. Chief, Animal Health Branch Division of Animal Industry (916) 445-4191

cc: Bill Clark, California Department of Fish and Game, Sacramento Dr. Larry Barrett, California Department of Health Services, Sacramento



November 3, 1989

Mr. William B. Phillips
Executive Director,
California Domestic Ferret Association
P.O. Box 1868
Healdsburg, California 95448

Dear Mr. Phillips:

Thank you for calling and inquiring about our development work on a ferret rables vaccine. Our one year immunogenicity test is almost complete and the results are very good. We will be sending our vaccine to field trial before the end of this year. If all goes according to our plan, we will receive a federal license for this vaccine from APMLE sometime in 1990.

We too are anxious to obtain the federal license for the first approved rabies biological for use in ferrets. It should be well accepted by ferret owners across the country.

Very truly yours,

Dave Cahill

Product Manager,

Small Animal Biologicals

DRC/ar

A Question Of Authority

Watergate had its Haldeman, Erlichman, Mitchell and Dean, and, not to be outdone, "Weaselgate" has its own "Gang of Four," namely Constantine, Kizer and Freeman and Deisch. So far, every anti-ferret claim the current authors have ever seen has been traceable to at least one of these four men, none of whom has had any first hand experience with the animals in question. They constantly quote each other in their works, and more frequently than not they use their own previous memos, letters and the rare published article as corroberating references in later memos, letters and articles.

Consequently, what they have put out is so opinionated, anecdotal, biased and quite simply unbelievable that were it not for one fact, their contributions to ethology (the study of the behavior of animals) would be classified with their favorite 19th century sources—as primitive, amateurish speculation of the same type as the common stories of cats sucking a baby's breath or gorillas savagely mutilating the safari until the Great White Hunter finally kills it after a ferocious struggle.

The sad fact remains, however, that the "Good Old Boy" network is alive and well among government employees, (three of the Gang of Four are state health department employees; Deisch is a professor in Minnesota) andone will typically take the word of another at any time and without question, assuming that the taxpayer won't understand anyway. This is exactly what has happened with the 1988 CDHS Report on ferrets.

We would like to present our rebuttal to this report, wherein we have consulted contemporary sources (with ferrets so common both as pets and as laboratory animals, there was no need to fall back on the 19th century) and complete with footnotes which will allow you to obtain our sources and see for yourself just how absurd and biased these people can be at, quite literally, your expense.

A Question of Authority...

The 1988 CDHS Report is rife, as works of its kind commonly are, with the names and publication date of quoted authors who supposedly provided information. However, when examining the original documents, the current authors found that, in many cases, "quote" was perhaps too generous a word. We have listed a few of them here, so that you could see for yourself.

WHAT KIZER & CONSTANTINE SAY WAS SAID:

1. "A ferret that bites should be killed and tested for rabies as quickly as possible to determine whether the bite victim has been exposed to rabies (Centers for Disease Control)."

2. "Presently [December 1988], a feral population exists on San Juan Island." (Left unsupported, but said in such a way as to make the reader think that they have this from Washington Fish and Game.)

3. "Long known for their potential to harm small domestic animals and wildlife in Britain and Europe, ferret populations were established to lower populations of rabbits that had been introduced in 1864. Ferrets, and other introduced predators, now feed on native

WHAT THE AUTHOR ACTUALLY SAID:

- 1. "If, in the investigation of a ferret bite, the investigator can be reasonably assured that the animal has had no access to indigenous rabies vectors, then the chance of the ferret's having rabies seems extremely remote, and the antirabies treatment of the victim would not seem warranted." Viral Diseases Division, Bureau of Epidemiology, Centers for Disease Control, "Pet Ferrets and Rabies." Veterinary Public Health Notes, October, 1980 pg. 1-2.
- 2. "I understand that there have been attempts to use ferrets to control populations of exotic European rabbits on San Juan and Hat Island in Puget Sound. ... The rabbit populations dramatically decreased a few years ago, and I have been unable to find anyone who has observed a ferret there since." Dr. Thomas C. Juelson, Washington State Department of Wildlife, April 1988 eight months BEFORE the CDHS report was published!
- 3. "Stoats and weasels, from which so much was expected ... are, in their destruction of native birds and their depredation of the fowl yard, proving to be an uncontrolled nuisance." Carolyn King, Immigrant Killers, 1984. Ferrets are not mentioned in this context!

WHAT KIZER & CONSTANTINE LEFT OUT:

1. "Their [ferrets'] behavior is docile and cat-like, unlike that which would be expected from a normal, wild mustelid." [This and all subsequent quotes are from the same work as the quotes in the columns at left.]

2. "I am convinced that the only way an European ferret can survive in the wild in Washington is in conjunction with the concentration of an exotic animal species, such as the European Rabbit."

3. "One direct benefit which stoats and weasels confer is the wholesale destruction of rats and mice ... rats are more destructive to eggs and young birds than even stoats and weasels." And on the subject of ferrets, Dr. King says, "Ferrets were supposed to control the

WHAT KIZER & CONSTANTINE SAY WAS SAID:

animals and have contributed to the extinction of 20 species of endemic New Zealand birds and have pushed many to the brink of extinction (King, 1984.)"

4. "Bites to hands of persons who handle ferrets can be decreased by heeding commonly espoused advice to wear gloves when handling these animals (Rowlands, 1967; Willis and Barrow, 1971, Roberts, 1977; Winstead, 1981; Wellstead, 1982, Ryland et. al. 1983.)"

WHAT THE AUTHOR ACTUALLY SAID:

- 4. "It is advisable for beginners to wear gloves, but these should be discarded once confidence has been established." I.W. Rowlands, "The Ferret," The Universities Federation for Animal Welfare Handbook, 1967. pg. 591.
- "... Although young animals and frequently handled animals are quite tractable, gloves should be worn if the disposition of the animal is not known." Willis and Barrow. "The ferret as a laboratory animal," Laboratory Animal Science, 21(5): 712-715 1971.

Mervin F. Roberts, 1977, describes, at some length, the use of gloves when an adult ferret is being handled for the first time in its life. (page 14). He also advises such bizarre acts as feeding ferrets "fresh road kill," a sure course to many bacterial and parasitic diseases in any animal; this places all of his statements under suspicion.

"Again, it is important to stress that while these nips and bites [from baby ferrets] may be a little painful, they usually won't break the skin and are no more than you would expect from a kitten or puppy. There is a great deal of difference between these nips and the hard bite that draws blood and requires the protection of gloves. Anyone should be able to safely handle a good pet-quality, well-fed kit, assuming the handling is done gently and quietly and without

WHAT KIZER & CONSTANTINE LEFT OUT:

rabbit pest in the 1880s, but in reality, the rabbits controlled the distribution and numbers of ferrets, as they do today."

4. In the sixth edition of his book (1988), Dr. Rowlands responded to ferret detractors by saying. "The animal has quite an undeserved reputation for being ferocious and blood-thirsty. ... Ferrets become really affectionate pets and amply repay the time and effort spent on them."

"The ferret Mustela putorius furo L. has been described as a vicious and dangerous laboratory animal. After extensive experience with this carnivore, we have found this description to be a myth. ...This species [is] easy to handle and raise."

"It is a pleasurable sensation for animals to be handled gently by man, and in this respect the ferret is no different from other species and, again like all others, it quickly becomes docile in response to this form of treatment."

WHAT KIZER & CONSTANTINE SAY WAS SAID:

WHAT THE AUTHOR ACTUALLY SAID:

WHAT KIZER & CONSTANTINE LEFT OUT:

rightening the animal." Wendy Winstead, D.V.M., Ferrets. TFH Publications, Neptune, NJ. 1981.

We were unable to find any mention of wearing gloves in: Graham Wellstead, *Ferrets* and Ferreting. TFH Publications, Neptune, NJ, 1982.

"The ferret is best restrained [for veterinary procedures] when grasped above the shoulders. A handler may chose to wear a leather glove, as even the best trained ferret becomes apprehensive in strange surroundings." Lennox M. Ryland and Susan L. Bernard, "A clinical guide to the pet ferret." The Compendium on Continuing Education, 5(1): 25-32, 1983. page 26.

5. "The ferret...is found in a domesticated state in almost every village in England, and although constantly lost (when at work) and left to roam at large, no instances are recorded where it has thrived and multiplied in the British Isles when left to its own resources."

In his chapter on selective breeding, Everitt makes no mention of any "savage characteristics." Instead, he goes on at some length about breeding for size and color and advises only that one "Let your prime object be to produce a healthy strain of good, strong workers." Everitt, Nicholas. "Ferrets: Their Management In Health And Discase With Remarks Upon Their Legal Status." London, Adam and Charles Black, 1897.

6. "Goldsmith says that the ferret has been known to ... And Mr. Jesse relates..." Fennell, A Natural History of British and Foreign Quadrupeds. London 1943. Gossip is scientific data?

5. "The ferret, when trained, is as quiet, inoffensive and docile an animal as anyone can wish for."

known to engage in wholesale slaughtering of livestock." "The savage characteristics of polecats were highly valued and emphasized in man's selective breeding and development of ferrets... (Everitt, 1897)."

5. "Feral ferrets ... have been

6. "The propensity of ferrets "to attack and kill children in the cradle" is longstanding." (Fennell, 1841b).

6. "The ferret perishes if exposed to the cold of a moderate winter in [England], in whose southern parts, even it requires artificial warmth." He also describes at some length a man who was "attacked" by a ferret's severed head! (page 90).

Ferrets and the New Inquisition

A Rebuttal to the California Department of Health Services Report of December, 1988



Published by the

California Domestic Ferret Association

By Fara Shimbo and William B. Phillips, Esq. Deborah W. Kemmerer, D. V. M.., Consulting Editor.

"Their point may be well taken, as to the number of bites by ferrets being less, proportionately, than dogs and cats.... You are not going to find the data you want [data disproving the claims of ferret proponents]. It just doesn't exist."

Kenneth W. Kiser, M.D., MPH. Director, California Department of Health Services, phone conference with a State Senate aide seeking information to refute pro-ferret claims, April, 1989.

"I really don't know much about ferrets. My area of expertise is rabies in bats."

> Denny G. Constantine, D.V.M., M.P.H. Public Health Veterinarian, Phone conference with William B. Phillips, August, 1988.

Ferrets and the New Inquisition

A Rebuttal to the California Department of Health Services Report of December 1988

With Photographs, Charts and Drawings

by Fara Shimbo and William B. Phillips, Esq. Contributing Editor: Deborah W. Kemmerer, D.V. M.

Published by the

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Contents

| Introduction | 33 |
|---|----|
| An Overview of General Discrepancies | 36 |
| Between the CDHS Report and the Current Literature | |
| The In-Depth Analysis of the Department of | 40 |
| Health Services Report; | |
| Part I: Definitions | 40 |
| Part II: Ferrets are a Domesticated Animal | 41 |
| Part III: About Supposed "Feral" Populations | 46 |
| Part IV: Ferrets and the "Rabies Scare" | 50 |
| Part V: Does Ferreting Call for a "Vicious" Animal? | |
| Part VI: The Allegations of Biting and Savaging | |
| In Conclusion | 61 |

Introduction



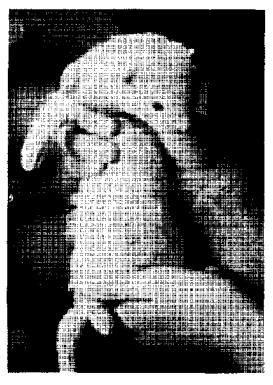
Three and a half million Americans keep over six million domestic ferrets in their homes as companion animals, making them the third most popular interactive pet in the country. The character of ferrets is described universally both by ferret fanciers and by those veterinarians and researchers who have worked with them in such words as "friendly," "intelligent," "gentle," "comic", "generous" and "joyful." Ferret fanciers, the vast majority of whom are working or professional women between the ages of 35 and 54², annually spend an estimated \$400 million on their pets in food, medical care, supplies and toys, and, increasingly, travel to and participation in championship ferret shows. (They spend an additional \$16,000,000 in sales taxes.) So loyal are ferret fanciers to their companion animals that many fanciers' clubs throughout the county have even set up private shelters, generally in cooperation with local private or county animal shelters, for lost or surrendered ferrets. Many have placement rates as high as 100%, and many have waiting

2. ibid. 85% of ferret owners responding to a survey by American Ferret magazine's marketing department were women

in this age group when the survey was taken in early 1986.

^{1.} Statistics are from marketing research done by American Ferret Magazine and the "Industry figures" cited in the August, 1989 issue of Pet Dealer Magazine.. In terms of installation in numbers of households, tropical fish are at this time the most "popular" housepets. The ferret trails only the dog and cat as an "interactive pet."

^{3.} For instance, Colorado Ferret Rescue works in cooperation with the Denver Dumb Friends League, a privately funded animal shelter. CFR has a 100% placement rate. Two Virginia shelters have also reported a "perfect record." The Greater Chicago Ferret Association runs a shelter which was featured on CNN and four area broadcast stations. This shelter maintains an 86% placement rate--far better than the average "pound" rate of about 15% nationwide.



lists of would-be adoptive homes³. Over 100 international, national and local clubs exist to serve and support ferrets and their owners in all parts of the English speaking world; at least one club exists for the owners of handicapped ferrets. In 1988, responding to pressure from public health officials, ferret fanciers enlisted the aid of the Morris Animal Foundation to help in researching, funding and gaining FDA approval of a ferret-targeted rabies vaccine, even though the Centers for Disease Control notes that only 8 cases of rabid ferrets (in the 22 million ferrets estimated to have been alive in the United States since 1957, thus 0.00004%) have ever contracted the disease, and existing vaccines have been proven entirely satisfactory in both American and European trials, as will be dis-

cussed below.

However, since 1986, there has been an ongoing attempt on the part of some individuals and organizations to see the companion animal ferret banned. The rationale given is almost universally based on a view of the ferrets' personality which is in complete contradiction not only to the those of the millions of experienced ferret owners, researchers and veterinarians, but to all of the modern scientific literature and nearly all of the popular literature written by persons who have actually taken the time to meet the animals personally.

What, one must wonder, would make the millions so endeared to ferrets so great a threat to the virtual handful of "ferret-phobes?"

It is noteworthy that there has not been so hysterical an attack on a single species and the women (and men) who love it since Pope Innocent III outlawed the domestic cat in 1484. The Inquisition he began in the same writ lasted for three centuries and cost almost eight million women their lives. Today, those who love ferrets do not have to fear for their lives, but many feel as if they are nonetheless living in a state of seige. Ferret fanciers have

^{4.} Meyer, J. "What's warm, cuddly and a misdemeanor?" The Herald Examiner, 23 March 1989.

^{5.} Ruth, Connie. "Wardens arrest woman in ferret case." Los Angeles Sun, 21 March 1989.

^{6.} Babwin, D. "Yucaipa pet store owner fights law against possessing ferrets." The Press Enterprise, March 21 1989.

^{7.} The arresting officer, Lt. Al Steigel, was quoted in the News Mirror on page A1 (23 March 1989) as saying that Ms. Pat Richards was not read her rights upon arrest because "you're only read your rights if you're planning on asking questions. We weren't."

^{8.} In one case reported to the present author, a woman tried to bring a ferret into California. She was stopped at an agricultural stop in 1987 and told the current author, "The guard was going to slit [ber ferret's] throat right on the hood of my car. I had to threaten to sue him to save her life!"

A man tried to bring his ferret, Gus, into California with a permit, and told the current author that while one Fish and Game officer inspected his permit, the other walked into his vehicle, took out his ferret, and proceeded to walk toward the local incinerator with it. When he caught up with the officer and explained that this was a neutered male with a permit, he was told, "We don't even allow neutered males in here. They grow back."

had their homes and businesses ransacked, been arrested and jailed without being charged with a crime, have been searched at the borders of certain states and their ferrets seized and killed before their eyes, and seen informers planted in their midst. ^{4,5,6,7,8} The ferret-phobes have indeed begun a "New Inquisition" against those whose choice of a companion is not what they have determined is, by their philosophy, in the public's best interests. Interestingly, it seems that what is in the public's best interest—that ferrets should be slandered to the point where no one would stand up for the animals' welfare—is also in the best interests many segments of the animal experimentation community, now searching for a "less popular" and "more cost effective" alternative to the dog and cat and finding it in the ferret. ^{9,10,11,12} Organizations which object to the "use" of ferrets as companion animals either overtly support their use in the laboratory (as in the American Veterinary Medical Association) or are conspicuously silent on this point (as in the Humane Society of the United States).

This report constitutes a critique of a report prepared by the California Department of Health Services entitled "Pet European Ferrets: A Hazard to Public Health, Small Livestock and Wildlife" wtitten by Msrs. Constantine and Kiser, which is so sensational in style and so biased in content as to be almost meaningless in an objective context. In this report, data will be presented showing not only that every statement concerning the personalities and "propensities" of ferrets stated in the California Department of Health Services Report is wrong, but also evidence that hatred of ferrets such as is espoused by certain of these men and groups is part of what appears to be a larger effort on the part of the vivisectionist research community to generate such public loathing of ferrets that they, like rats, may be used with impunity in exercises in academic and medical grantsmanship. The notion that several "humane" and "animal rights" organizations are, as some ferret fanciers believe, a part of what seems almost to be a conspiracy to this end, making them sound more like proponents of Animal Farm ("All animals are equal-but some animals are more equal than others.") than animal rights, will also be examined.

^{9.} Anon. "Ferrets: another domesticated pet becomes popular in the laboratory." The Journal of the New England Anti-Vivisection Society. March 1985.

^{10.} Many studies have been done to determine the suitability of ferrets to replace dogs and cats in the areas of toxicology and teratology. See particularly Hart, 1986 Vinegar, 1981 and Linden, 198.
11. PETA News, Spring 1989, pages 3-5.

^{12.} Anon, "Ferrets in biomedical research" (editorial) Laboratory Animal Science, 35(2):199 1985. "Public pressure to reduce to the us dogs and cats in research has stimulated more extensive evaluation of ferrets as a substitute for traditional carnivores in a variety of disciplines... Lessons of history support the contention that this trend will intensify in the future."

An Overview of General Discrepancies Between the CDHS Report and the Current Literature

There are several items which, on first reading of the Department of Health Services reference report, strike one as being extremely odd.

Firstly, the sources quoted by the authors to show the "viciousness" of ferrets are generally from papers written by amateur naturalists during or before the year 1915, sometimes as far back as 1837. These books and articles consist in the main of anecdotes and hearsay, and only rarely speak the personal experience of the author. The writings of these authors are generally dreadful in tone; but nowhere is the casual reader of this Report reminded that

1. To speak of all animals as "savage brutes" was the social norm at this time, when the "Great White Hunter" was one of the Western World's greatest hero-images (and all non-Europeans were commonly referred to as "savages") and

2. All animals save those useful to the military (horses) or the sportsman (dogs) were spoken of in the same general tone (a brief reading of any of the works of Arthur Conan Doyle, particularly The Sign of Four, will adequately illustrate both of these points).

It is ever unwise to take "early writings" on animal behavior at face value, regardless of their source. Consider the reputation of the gorilla, which up until as late as the 1970s, was profitably portrayed as a beast of unimaginable savagery which would not hesitate to rip a man to shreds, a la King Kong. We now know this image to be entirely false; gorillas are, in fact, among the gentlest creatures on the face of Mother Earth. Of "killer" whales the United States Navy itself once said, "There is no recourse from attack by a killer whale except reincarnation." This was held to be true even though there was and is to this day no documented evidence of a killer whale having ever attacked a human being. And how many people still believe that a cat will crawl into a cradle and "suck out a baby's breath?"

When currently living authors are quoted in the CDHS Report, they are quoted out of context. The impression this creates is to make these authors sound as if they are, in fact, afraid of the animal when the entirety of their articles, or even direct quotations, are quite to the contrary. (See below.)

Thirdly, there is the fact that although the sheets of statistics, and pages of written accounts are manipulated so as to lead one to believe that there have been a great many incidents of ferrets "attacking" humans, there are, in fact, only between eight and twelve which may be construed to be deliberate savagings. Many of these incidents are simple nips on the finger by juvenile animals, such as is commonly done by a puppy or kitten. Many of these incidents-and indeed almost all of the cases involving children-were without witnesses by the Report's authors' own admission. A more salient point than simply that ferrets may have been involved-i.e., how many of these cases are being treated as child neglect or possibly abuse—is never mentioned. The authors attribute the lack of witnesses to the idea that "it is as if the animal waited until the adults left before attacking the

I. Sebeck, T. in Norris, K. Ed. Whales, Dolphins and Porpoises, U of M Press, 1967.

^{2.} Based on evidence collected by Mr. William Phillips, Esq. in 1989 and actual case reports supplied to the current authors by Dr. Constantine himself.

hapless infant." Such anthropormorphisation of an animal's behavior is quite out of place in any serious ethological presentation.

It is just as interesting to review what the authors did not say about these cases as what they did. For example, never is any mention made that many of these "bite incidents" are also incidents of gross parental neglect. For example, the reader is offered a number of quotations from British sources, supposedly to show that the mauling of infants by ferrets has been a "common" occurrencé in that country. However, when a child left alone for hours in a house with several neglected animals, including a dog and two ferrets whose food had grown mold by the time of the alleged incident, was mauled and killed, the coroner in charge of the incident, Dr. Mary McHugh, noted that "There have only two known cases of ferrets savaging children. There was a great deal of irresponsibility and a great deal of negligence." When the child's father was questioned as to whether he had any reservations on leaving a six-month-old child alone on a cot while he and the mother spent several hours at the pub, he replied that he only realized so after the Yet we are to believe that the "fault" for this outragous event lies solely on starving animals!

It is also possible, but the possibility is never mentioned, that some parents may simply have lied to escape prosecution for child abuse or neglect (it is never mentioned anywhere that all these cases must, by federal law, be investigated as instances of child abuse or neglect). There is also the possibility that some of these events either never happened in the first place', or were assumed to happen the way they did by those who wanted to prove something, or that the parents or caretakers were "led" into citing a ferret as the cause of the marks on the child. Nowhere in the CDHS Report is it ever mentioned whether any attempt to ascertain the veracity of these "attacks" was ever made, and there is much reason to believe that, for the reasons stated above as well as those given below, this certainly should have been done. As we shall see later, many persons cannot distinguish ferrets from many other species including rats, and even doctors have stated that the wounds left on the children closely resemble those typical of rats". With all the publicity surrounding ferret "attacks" in the popular literature, it is not unthinkable that some abusive or neglectful parents may take up not only the "ferret bite" but also the casually accepted lack of witnesses to these incidents as an alibi for their own behavior. Sadder still, it is also not impossible that many social welfare agencies, exposed to the same literature, will accept such an alibi as valid. Regardless of the nature of an incident, animals cannot and should not be held responsible for incompetent parenting; though the fear of charges of child neglect or abuse will continue to motivate certain parents to focus on an animal's behavior rather than their own inadequacies.

The CDHS Report lists several agencies as opposing ferrets without giving the specifics of why these agencies are opposed, leaving one to assume that their rationale is then the same as that of Constantine and Kizer. However, this is not the case. The Centers for Disease Control is concerned over the lack of a ferret-licensed and FDA agproved rabies vaccine in the United States', something which will become a reality within the next six months to one year. The American Medical Association has, to the best of the current author's knowledge, not come out against the keeping of pet ferrets per se; but this is sometimes assumed to be the case since the association's journal published an article describing cases of children said to have been mauled by ferrets.

(A short, but necessary, digression: this article is extremely interesting in terms of the circumstances which surround it; that in all

^{3.} In one example, the Denver General Hospital "History and Physical Progress Record" for one of the cases mentioned by Paisley and Lauer in their *JAMA* article has a nursing note which states, "Mom appears young and needs some teaching." In fact, the mother was an unwed teen living with her parents and who left the child in the care of a babysitter during the day.

^{4.} Anon, "License ferrets' call after baby's death." The London Daily Telegraph, 1 Feb 1978.

5. For example, the current author searched the microfilm files of the Boulder Public Library and the University of Colorado public library for any independent corroboration of the two accounts of attacks on infants which allegedly took place in this state. She was unable to find any mention of either of them as far back as 1951 in any of the major or local Colorado newspapers until after the JAMA report had been published. Eventually, a hospital report for one incident was discovered, but

independent corroboration for the second incident has yet to be found.

6. Paisley, J and Lauer, B. "Severe facial injuries to infants due to unprovoked attacks by pet ferrets." JAMA 259(13):2005-2006 1988.

^{7.} A full discussion on this point appears in Part 4.

three cases described, there were, as usual, no witnesses; that all three instances happened in states where health department officials have been hostile to ferrets for some time; that the photos presented in the article do not match the text which purports to describe them' that one of the authors is also a specialist in influenza", for which ferrets are the experimental animal of choice12; that the article was printed along side a commentary calling upon AMA members to renew their struggle against animal rights groups wishing to see the use of dogs and cats in laboratories banned and that the animal rights people have all come out against the keeping of ferrets as pets, but with the exception of one organization done nothing as regards the same use of ferrets. Taken together, these facts are seen by some ferret fanciers as further evidence of a "conspiracy" aimed at making ferrets the ideal animal to replace dogs and cats for experimental purposes14; a situation with clear "political" advantages for both sides of the animal experimentation argument.)

To return to the main point, the third organization cited, the American Veterinary Medical Association, has publicly repeated the line about ferrets attacking babies, but when the present author spoke to the Mr. Tim Donovan, the director of publicity, on 9/11/86, she was told that the problem was both that "nobody knows a thing about a ferret" and that ferrets are "suited for work but not for pets." Since there is no work that ferrets do outside of the laboratory, ¹⁵ again the same concern that the species becomes exclusively a laboratory specimen is evidenced.

The Humane Society of the United States came out with its ferret diatribe in the same issue of its newsletter in which it complained loudly of the NIH's involvement in lobbying against the Pet Protection Act of 1986 HSUS's reasons for decrying the companion ferret as stated in their original article were that the ferrets are "exotic animals that are totally unsuitable as pets" and citing "numerous reports" of maulings and the possibility of rabies. Since most of their arguments have since been debunked, HSUS has now taken a different tack, and claims that the ownership of ferrets lessens the demand for impoundeddogs and cats, even though many fanciers obtained ferrets originally because of allergies to dogs and cats or because these animals were not permitted by their landlords17. The HSUS also maintains that ferrets, which are normally caged when asleep, are "unsuitable" because. as their director was quoted as saying by the Washington Post, "'any animal that has to be kept in a cage is not a proper pet.' And when they are let out, he says, 'they are natural diggers and climbers. They destroy antiques, carpets and what not." By this rationale, cats, dogs and small children are thus also "unsuitable" in the home. The HSUS has, in fact, instructed its shelters to kill all surrendered or impounded ferrets; since ferret shelters have such high placement rates and sometimes even waiting lists, it seems obvious that this policy is aimed strictly at limiting an adoptor's choice of a companion to only those animals it sees as philosophically correct.

Much of the purported behavior of ferrets presented in the CDHS Report is supported

10. For instance, the text says "40% of both ears had been bitten off (Fig. 2)" but the child in Figure Two has all of its visible ear in place.

12. 22% of all papers published between the years 1975 and 1985 were on this very subject. See Frederick, KA and Babish, JG, "A compendium of recent literature on the ferret," Laboratory Animal Science, 35:3 298-318 1985.

13. Editorial, JAMA April 1, 1988.

14. Anon, "Did You Know" The North Coast Ferret Fancier, Winter 1989 pg. 14

15. Ferreting (the use of ferrets to flush small game from underground burrows or warrens) is banned in 42 of the 50 states, allowable only for "vermin" in two others.

17. "Why are ferrets so popular?" American Ferret Magazine, Sept. 1987

^{9.} In fact, the pertinent health department official in the North Carolina case, Dr. Freeman, has repeatedly tried to have legislation passed which would make the ownership of ferrets illegal as a precedent to making domestic cats illegal, saying that once ferrets are banned, "Cats would be next." (Personal communications from Dr. George Harmon, 7f//88 and John Armshaw, 5/11/89.). John Pape of the Colorado Health department, called the current author in 1983 when she was preparing her first book on ferrets and told her "Don't encourage people to go get these things."

^{11.} Dr. Paisley is a member of the Influenza Advisory Board of the Colorado Lung Association. While this is by no means proof of a link between these incidents and the research community, many ferret owners note that the it is a link, nonetheless.

and allowable only for "vermin" in two others.

16. [Blaney, N]. "More ammunition in the fight against ferrets." Animal Activist Alert, 2(3):2 1986.16. This is also untrue. A marketing study done by American Ferret magazine has shown that 75% of their subscribers have either a cat or dog (33% have both), and a further 10% also keep fish, birds, horses or small mammals.

with either a short anecdote, or else a name and date of a book, paper or memo. Other aspects of what the authors present as 'normal' ferret behavior—stories of "shark-like frenzies" and of blood sucking, are left unsupported. While accusations like these have been made for the ermine, stoat and weasel for hundreds of years, they are now accepted as superstitions. For example, Dr. Herter, author of the chapter on Mustelids in Grimzek's Animal Life Encyclopedia (Mammals III) speaks of the hunting strategies of ermine and states,

"Once the prey shows no sign of life, the ermine releases its hold and sniffs its prey. Blood running from the wound is licked up. This characteristic behavior has led many people to the false conclusion that "mustelids suck the blood out of their victims," and feed chiefly on blood, from which they get into a frenzy." [Emphasis added]

One of the Report's authors was gracious enough to supply Mr. Phillips with what he claimed was "all" of the documentation supposedly produced to prepare the CDHS Report, but nowhere in the literature provided therein nor in the scientific literature collected by the current authors in the course of investigating this accusation can this superstition be found in reference to ferrets, or even polecats. However, this "information" does indeed exist in other documents. One of these was an article entitled "The Jet Set Pet that Eats Kids." which appeared in the April 1st, 1986 issue of The Sun, a tabloid otherwise known for articles such as "Millions Hear Elvis On Radio From Beyond the Grave." Much of the rest of the more savage sounding behavior is contained in an article called "The King of the Ferret Leggers" which appeared twice in Outside magazine (in 1983 and again in 1987)² and which was described by its publisher upon its reprinting as "the most editorially challenging pieces in the history of non-porn mags." Again, not reliable ethological sources.

The Department of Health Services Report authors have both been provided with an opportunity to interact with ferrets, but both refused²¹. No reasons were given.

18. Suplee, Curt. "Ferret Chic." The Washington Post, April 19, 1988.

19. Hertner, K. "The mustelids." Grimzek's Animal Life Encyclopedia, Vol XIV. 1976. pg. 37.

^{20.} Katz, Donald. "The king of the ferret leggers." Outside, Feb/March 1983 and reprinted in 1988. The article describes the activities of a man who "for charity" deliberately torments ferrets, and then tests his virility by placing them inside his trousers and having them "hangin' from me tool for hours and hours."

^{21.} Mr. William Phillips, a California attorney who owns a ferret under a California permit, offered each of the offers a ferret and its maintenance for a year, with the further stipulation that if at the end of the year the animals were no longer wanted, he would take them back. Both Constantine and Kizer refused this offer.

The In-Depth Analysis Of the Department of Health Services Report

Part 1: Definitions

The "claims of ferret owners," —that ferrets are domestic animals, rather than wild animals: that lost ferrets do not form feral populations and in fact die if they become lost; that ferrets are less prone to biting than dogs; and that ferrets are in no danger of getting or transmitting rabies—are all addressed by the CDHS Report. However, they are addressed mainly by taking quotes out of context and by quoting sources so antiquated as to be almost irrelevant, or else by quoting statistics as simple numbers, without mentioning such validifying data as, for example, the number of "attacks" per million animals of a given species compared to the same data for other species. Additionally, the California Department of Health Services Report makes its own claims against ferrets without making clear what it means by these claims.

For example, on page 2, line 22 we find the statement "they [ferrets] are frequent biters". What the report means by "frequent" and what, exactly, the authors mean by "biting" is never stated. Depending upon whom one asks, a bite can be anything from an actual savaging to a simple mouthing in play. To be clear from this point on, let us use some more concrete terms, and define the words "bite" and "savaging" as follows:

 A BITE is a simple grasping by mouth, without malicious intent (generally as either a means of attracting attention to one's self (juvenile play) or as a means of carrying an object). A bite which actually breaks the skin is extremely rare and occurs only by accident.

A SAVAGING is a deliberate attempt to use one's teeth to inflict pain on another party (generally in self-defense or out of fear or pain). Piercing of the skin is the savaging party's intent.

Also, we see that "attacks" are repeatedly referred to as being "unprovoked" yet we are never told exactly what is meant by provocation. This becomes an important point because provocation is so widely interpreted, both by the public and in a legal sense. Consider the case of a dog chained in a yard behind a fence, which is tormented daily by a passer-by who throws stones and sticks at it as he passes. On one particular day, though he does not bother the dog, the dog is unchained and able to reach and bite him. In some communities, since the passer-by had not harassed the dog that day, the dog's attack is "unprovoked", and furthermore, the owner of the dog is held responsible for its actions because the dog was that day unchained. In other communities, the attack is considered "provoked" because the ongoing harassment was clearly intended to provoke the dog. In order to properly evaluate the lists and tables, and the text, of the "attacks" presented in the CDHS Report, such a definition is an absolute necessity. However, the authors neglect to provide their readers with such this information, leaving their data open to a wide range of interpretations.

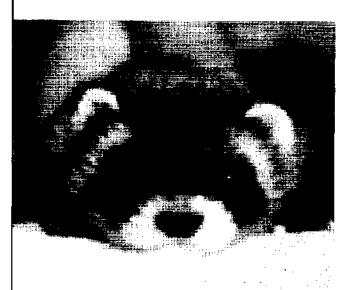
Part II: Ferrets Are A Domesticated Animal

The California Department of Fish and Game has ruled that ferrets are a "wild" animal (even though, by California law, they do not have the power to declare any species "wild" or "domestic")²², and has in the past routinely seized and killed them on this basis. The Department of Health Services Report repeats the California Fish and Game Department's declaration that the domestic ferret, Mustela furo, is actually a wild animal, i.e., the European Polecat, Mustela putorius. The CDHS Report upholds this claim by making several erroneous assumptions based entirely on antiquated and anecdotal material, and goes so far as to say, "One should not presume that man's development of ferrets from polecats means that the ferret has undergone isolation from and differentiation from polecats for thousands of years." The current author's belief is that what the report's authors are trying to say is "Just because they've been captive bred for thousands of years doesn't make them different from polecats."

And yet, the opinions expressed in the vast majority of the scientific literature on domestic ferrets maintains that Mustela furo, the domestic ferret, and Mustela putorius, the European polecat, are indeed different species. There are some who feel that the ferret was originally an offshoot of polecat stock, but many now feel that the ferret "is descended from some now extinct species which was bred in captivity," and is most probably North African or Spanish in origin.

Table One summarizes the differences between Mustela furo, the domestic ferret, and Mustela putorius, the European polecat. Photographs of the faces of each are provided for comparison.

Differences between the Domestic Ferret, *Mustela furo*, and the European Polecat, *Mustela putorius*.



Ferret

- Many are albinos; coats come in a variety of colors including bicolored ("pinto") and tri-colored ("calico"). Eyes may be brown, hazel, dark or light blue, grey, plum or red. Odd-eyed ferrets have also been seen. Vertical "baby bar" on head disappears at puberty and reappears upon neutering or in old age.
- Skull pointed with eyes facing sideways; little binocular vision. Typically acrophobic.
- No cones present in retina, rendering ferrets colorblind.
- Lateral geniculate nucleus delaminated; all colors of ferrets have their visual systems wired as if they were cross-eyed.
- Disruption in formation of the primary auditory cortex and cortical

^{22.} See California Constitution, Article IV Section 20.

^{23.} Herter, K. "The Mustelids." Grimzek's Animal Life Encyclopedia. Simon & Shuster, 1976 pg 37-68.

projections causes ferrets to be unable to locate short bursts of sound in space.

- Average litter size is 10 ± 2 first year, 8 ± 3 thereafter. There may be two or occasionally three litters produced each year.
- Unable to tolerate extremes of heat or cold—may die of heatstroke within then minutes at temperatures above 90, or suffer hypothermia below freezing.
- Fathers will assist with rearing of their own young if allowed the opportunity.
- Thick skinned. Fur tends to fall out of pelts with a year.
- Primarily diurnal; ferrets will adjust their schedule to match the activity level in their environment. Because of their miswired visual pathway, circadian rhythms appear to be entirely absent.
- Unafraid of new surroundings. Difficult to startle.
- May have as few as 37 and as many as 43 chromosomes, with differences occuring between body parts and also between the sexes.
 - No typical greeting gesture.

Polecat

- Skull blunted with eyes facing forward, with good binocular vision. No acrophobia.
- Coats come only in dark sable with buff or orange underfur. Eyes uniformly brown. "Baby bar" remains for the life of the animal, whether neutered or not.
- * Cones present in retina--polecats can distinguish red and blue.
- * No disruption of visual system organization. Circadian rhythms intact.
- * No disruption of auditory system organization; can locate sounds in space quite well.
- * Average litter size is 6. Only one litter produced per year.



- Thin skinned. Considered far better as fur bearers than ferrets as hair does not fall from pelts and is finer in texture.
- Primarily nocturnal or crepuscular.
- Both sexes have 40 chromosomes uniformly.
- Greet conspecifics with a "token attack."

Sources:

Harding, (1943), Fox, (1987), Herter (1976), Hagerdoorn, (1947), Poole (1966, 1967, '1972), Basrur (1966), Apfelback and Webster (1977).

The Ferret and Polecat are different in the same ways that Norwegian Fjord Ponies, that domestic dogs differ from wolves, and domestic cats differ from the Indian Desert Cat or the European Forest Cat. However, the authors do not seem to believe this is so for ferrets because, as they state, "On the contrary, ferret breeders have periodically crossed ferrets with polecats to produce the polecat ferret or fitch-ferret coat color pattern." Why, one must wonder, should this mean that ferrets and polecats are the same? Surely a mule is neither a horse nor an ass. And of course,

^{24.} Hagerdoom, R. "The 'waltzing' ferret and its origins." Genetica, 24(1):1-10 1947.

^{25.} Chang, MC. "Reciprocal insemination and egg transfer between ferrets and mink." J. Exp. Zool 168(1):49-59 1968.

again what the authors don't say is as important as what they do say—which is that the crossing of a ferret with a European polecat often causes birth defects in the offspring.

It is true that during the fifties and sixties there was somewhat of a fashion in taxonomy for lumping various types of animals together, and during that time a few writers concluded that despite the massive amount of evidence to the contrary, the polecat and ferret were one.

Since taxonomy is largely a matter of speculation in the first place, one can find an authority to support almost any claim one wants to make. The authors have found one (Volobuev) who agrees with them, although on somewhat shaky grounds; a karyotype of a ferret (a technique for gross examination of chromosomes) looks the same as the karyotype of a polecat for the same reasons the karyotype of a wolf looks the same as that of a dog.

The ferret was, and is now known to be. of a separate type called either Mustela putorius furo or more simply Putorius furo or Mustela furo. Dr. Trevor Poole, of the University of Wales, who has studied the behavior of domestic ferrets, European polecats, and their hybrids for a number of years, notes that the ferret meets all the criteria set forth by Lorenz and others for a domesticated species (in that the behavior of of the adult domesticated animal resembles that of the juveniles of wild counterparts) while the polecat does not. He also notes that neither of these species display "frenzy behavior." Other researchers point out that the ferret also meets all other biological criteria of domestication—the skull is reshaped to favor the development of the front, rather than the back, of the brain; that until ferrets were, in the last two decades, deliverately bred for size, they were smaller than wild counterparts, that the length of the gut, in carnivores, is longer to allow for a poorer diet, and so forth.

Table Two, below, gives a list of those scientists who have concluded that the ferret and polecat are indeed distinct species.

Table 2

Authorities who cite the domestic ferret as Mustela furo or Mustela putorius furo

NameYear Affiliation Appel, MJG (1988) Cornell University Birnbaum, C (1969) Karl Marx University, E. Germany

Biben, M (1982) National Institute of Health

Curry PT (1988) University of Wyoming Eastment, AM (1968) Queen's University, Belfast

Erskine, MS (1982) Mass. Institute of Technology

Fitsgerald, VJ (1988) University of lower Florczyc, AP (1981) Bristol Laboratories Fox, JG (1984) Mass. Institute of Technology

Hoover, MS (1988) O. S. U. College of Veterinary Medicine

Joffre, CHR (1973) Centre d'Etude du Biologie des Animaux Sauvages, Beauvoire, France

Nowak, RM (1983) Johns Hopkins Pollard, JS (1969) University of Canterbury and Christchurch, New Zealand Ryand, K.D (1984) Women's Hospital, Pittsburgh

Ryland, LM (1983) U. S. Department of Agriculture, Washington State University Thorp, PA (1983) U. of Cambridge (U.K.) Zeuner, FE (1963) U. of London (U.K.)

The following literature also cites the Domestic Ferret as Mustela furo or Mustela putorius furo:

Collier's Encyclopedia 1984 New International Encyc. 1917 Walker's Mammals of the World 1983 Oxford Encyc. of Mammals 1984 Encyclopedia Britannica 1986 Universities Federation for Animal Welfare

^{26.} Basrur, P.K. The somatic chromosomes of the ferret." J Heredity 57(3):110-112 1966.

^{27.} Poole, R.B. "Agreesive play in polecats." Symposia of the Zoological Society of London, 18:23-44 1966.

^{28. ----, &}quot;Aspects f agreesive behaviour in polecats. Z. Saverg. 45(6):376-383 1967
29. ----, "Some behavioural differences between the European Polecat, Mustela putorius, the ferret, Mustela furo, and their hybrids." London Journal of Zoology. 166:25-35 1972

^{30.} Berry, R.J. "The domestication and explitation of animals." in Ucko and Dimbley, eds. The domestication and exploitation of plants and animals. Chicago, Aldine Publishing Company, 1969.

Handbook 1976 Laboratory Animals 1971

This is a partial list of those authorities who cited the ferret as *Mustela putorius furo* or *Mustela furo* and was culled from Biological Abstracts and other sources at the University of Colorado at Boulder, and the Colorado State University Veterinary School library at Fort Collins, Colorado. In cases of articles by more than one author, only the leading author was cited. In addition, a further 9 authorities listed the domestic ferret in a different *genus* altogether from the polecat, usually as *Putorius furo*.

The CDHS Report says that "European ferrets resemble weasels, except for being larger and stockier." Again, this is incorrect. Ferrets are not only larger and stockier, they are shorter tailed, of an entirely different build, quite differently colored, and with different head and neck architecture, yet this distinction is often missed. That many persons in

the California Department of Fish and Game cannot differentiate between a weasel and a ferret is admitted in the CDHS report and a small and not terribly successful attempt, consisting only of a table of differences in length, weight in pounds and coat color, was made to correct this 31. In one instance, a Long-tailed

A 6 week old Long Tailed Weasel

Weasel (a species native to California) was brought to the Ventura animal shelter on the 29th of May, 1988 by California Fish and Game Region 5 Warden Jorge Gross, who believed it was a ferret and wished the animal

to be held for three days and then turned back over to him so that it could be stuffed and mounted and then used "to educate people about ferrets." In another, a "licensed wild animal rehabilitator" in the employ of California Fish and Game brought to one of the current authors in 1984 a long-tailed weasel kit which she believed was a ferret (see Figure 1). A picture of a ferret kit of the same age is provided for comparison.

The ability to distinguish between a polecat or fitch, a weasel, a mink and a domestic ferret is a valuable one, for there is reason to believe that many of the incidents of maulings reported in the Department of Health Services document may have involved these animals and not ferrets. Many mink raisers also raise polecats (called "fitch" in this case, as are their pelts), and some have been trying to cash in on the ferret market by selling these animals as "ferrets." As fur-farm animals are never handled except for weaning, possibly

for vaccination and for "killing off" 33, one can understand if they might be somewhat distrustful of human company.

It is true that even though the United States Department of Agriculture considers the ferret a non-dangerous, pet-type domestic animal and in any individual states at one time had banned ferret ownership, even

A six-week old Ferret

though only 8 of them considered the animal "wild" at that time.

In most states where ferret ownership had been banned, the pressure to ban them had come from sport (i.e., paying) hunters whose

33. Broidie, I. Ferrets and Ferreting. Blandford Press, Dorset, IK. 1980, pg21-26.

^{31.} Kizer, K. "Need for data on ferrets that bite, eat human flesh or develop rabies." California Morbidity, 21 Feb 1985,

^{32.} Personal communication from Melanie Edwards, 1987, verified by William Phillips, Apr. 6 1989.

^{34.} Federal Register, 54(49):10833-10834, Wednesday, March 15, 1989.

intent was to pressure ferreters away from "their" rabbits.

In recent years, the efforts of ferret owners, sometimes appealing directly to state legislatures and sometimes after resorting to lawsuits, have resulted in the ferret gaining "standard household pet" status (as the Boulder, Colorado, county commissioners described them in 1984³⁰) in almost all of these states. Alaska, which once allowed ferrets, determined to ban them in 1983, but after suit was filed against them in 1985 the ban was lifted; the court found that ferrets were a domesticated species and therefore not under the jurisdiction of the Fish and Game department of that state, and thus must be allowed. Pennsylvania, likewise, was taken to court by ferret fanciers in that state.

In Maine, ferret fanciers petitioned the state directly. Fred Hurley, a wildlife biologist for the Maine Department of Inland Fisheries and Wildlife, remarked that the "official fear" was that the ferret would establish a wild population. After presented with data from fanciers, he was quoted in Maine magazine as saying,

"A group of them gave us a lot of information on the long history of domestication of ferrets. They persuaded us that pet ferrets have been bred for domestic use for so long that they couldn't survive in the wild. We checked with other states where they were legal, and there didn't seem to be any problem with them. [Emphasis added]

Table 3 is an abbreviated list of those authorities which recognize the ferret as a domesticated animal. In addition, most of the authorities in table one also cite the domestic ferret as domestic.

It will be noted later that Arizona was chosen as one of the two (of three) bordering states from which bite information was requested by the CDHS. Arizona recently proposed a ban on ferrets in two of their northern counties, feeling that such ferrets would be a veterinary health threat to any transplanted black footed ferrets which might be reintroduced in these counties. However, so

Table Three Authorities Which Recognize Mustela furo as a domesticated animal

Government Agencies

The United States Department of Agriculture

The states of

Alaska Arizona Missouri Arkansas Montana Colorado Nebraska Connecticut Nevada Delaware New Mexico Georgia **New York** Hawaii North Dakota Idaho Oklahoma Illinois Pennsylvania. Indiana Rhode Island Kansas South Carolina Kentucky South Dakota Louisiana Utah Maine Virginia Michigan Washington Minnesota West Virginia Mississippi Wisconsin Wyoming

 The Universities Federation for Animal Welfare (Great Britain)

Books and journals

The Merck Veterinary Manual
Encyclopedia Britannica
Oxford English Dictionary
A History of Domesticated Animals
(E. Zuener)
Walker's Mammals of the World
Laboratory Animal Science
Cowle's Encyclopedia of
Animals and Plants
Oxford/Equinox Encyclopedia
of Mammals
Compton's Encyclopedia
Collier's Encyclopedia
New International Encyclopedia

^{35.} Harding, A.R. Ferret Facts and Fancies, Cleveland, by the Author, 1943

^{36.} Mc Grath, S. "Commissioners ban exotic pets." Boulder Daily Camera, 6 July 1984 pg 1A. Ferrets were listed under "standard household pets."

^{37.} Anon, "A fancy for ferrets." Maine Magazine, June 1987 pg. 23.

New Columbia Encyclopedia (Columbia University)
New Book of Popular Science
Funk and Wagnal's New Standard Dictionary
Grolier's Academic American
Encyclopedia
New Standard Encyclopedia
Oxford English Dictionary
All books written specifically about ferrets.

many ferret owners (200 by one report³⁹) came forward to speak on behalf of their companions that Arizona Fish and Game determined:

"Restricted List: Issue: Ferrets. Many, many people responded to this [proposal], presenting literature to support their belief that pet ferrets are a domestic animal and that they could not survive in the wild.

Response: Scientists still appear to be in disagreement whether *Mustela putorius furo* is a valid taxon. Regardless, the Department [of Wildlife] finds the available information sufficient to consider it domestic. Further, it is found that canine distemper (which was of primary concern as it may be transmitted to black-footed ferrets) kills European ferrets so quickly that the possibility of transmission in the wild is highly unlikely. Ferrets are NOT INCLUDED in the Department's new draft proposal.

Indeed, it is the overwhelming consensus of opinion that the domestic ferret is, in fact, a domestic animal. Restricting its possession because one may wish, for whatever reason, to re-classify it as "wild" or "exotic" is therefore a meaningless act.

Part III:

About Supposed "Feral" Populations

The CDHS Report says "feral ferrets abound in other states with climates far more severe than occurs in most of California." In order to verify this, Mr. Phillips instituted two surveys, one in November of 1987 and one in April of 1989. In neither survey did any State in the Union report any feral populations of ferrets.

This is, of course, fine for the rest of the world, but what about the state of California? As "evidence" of feral populations, we are told that a ferret "kitten" (a young ferret is properly referred to as a "kit") was found near its mother, which had been hit by a car in Kern County, and "it was concluded that [the mother] had bred in the area." No information about how that bizarre conclusion had been drawn was provided; and as has already been shown, it is also possible that the animal was not a ferret but a weasel.

Companion ferrets are extremely vulnerable outside their owner's care. Unable to tolerate extremes of heat and cold, unafraid of either traffic or feral (or simply free-running) dogs and cats, assuming that food comes from a bag or can, they survive, at best, no more than three or four days on their own.

Note that a distinction was made in the paragraph above between "feral" and "free-roaming" dogs. Like the distinction between "biting" and "savaging," the distinction between "feral" and "stray" is also one of paramount importance. A "feral" population is defined as a self-sustaining population of otherwise domestic animals; i.e., one wherein individuals can both hunt (in the case of the carnivora) and reproduce successfully, and then teach their skills to their offspring who in turn are as successful as they. A "stray" animal is simply one whose owner is not immediately apparent (e.g., at the other end of a

^{38.} CDC, "Pet ferrets and rabies." Veterinary Public Health Notes, October 1980. Many others reiterate this data.

^{39.} Childs, V. personal communication, 1988.

^{40.} A copy of this draft and the pertinent resulting wild animal legislation is included in the appendicies.

^{41.} Herter, op. cit., pg. 59.

leash). Feral animals are generally assumed not to have been under human care at any point in their lives, whereas stray animals are assumed to be owned by someone (or to have been recently abandoned).

In order to prove the California Fish and Game Commission's claim that ferrets are actually captive wildlife, the CDHS Report offers several examples of ferrets having "escaped their owners" and established feral populations, particularly in New Zealand. They make only passing reference to the extremely important fact that this is a case not of "escaped pets" but of of trained hunting ferrets (likely either crossed with Polecats or possibly fullblooded Polecats, as they are called "Fitch" in these countries 41) deliberately introduced by the thousands per year (3,000 in 1884 alone! 41a) in these countries for the purpose of containing "out-of-control" populations of European Rabbits which also had been deliberately established in these places. The reader is led to believe that currently there are, in New Zealand, large populations of feral Mustela furo; but there is much doubt on this point. While ferret-like animals are found, especially in the region of Pukepuke Lagoon, it is felt by many that these animals are actually polecats. Dr. De Vos and his colleagues, in their study of ferrets in this ecosystem. list domestic ferrets as an "unsuccessful introduction." Eventually stoats, weasels and polecats were imported to replace them.

New Zealand lends itself particularly to colonization by new species as it is an island—a closed ecosystem with a dearth of competing predators and many "open" environmental niches. Only one confirmed population of feral ferrets has ever existed in the entire United States, and this population was also on an island (it will be discussed in more detail below). The fact that all scientifically confirmed cases of feral populations of ferrets have existed on islands is not by coincidence. In an island ecosystem, the only natural predators generally present are birds of prey; large cats, wolves and other wild canines

and most mustelids do not exists in such ecosystems. With no predation and no competing predator species, any introduced species is at an advantage. The degree of domestication of the ferret is well evidenced by the fact that even after 3,000 years of domestic breeding and "escapes" (300 years in North America), documented, scientifically confirmed populations of Mustela furo exist only on islands. (The CDHS Report brings up the fact that Mongooses have become established on Caribbean Islands—but this is a case of truly wild animals in an island habitat, and therefor has little connection to the matter at hand.)

Furthermore, a study of the ferret's suitability as an "invader species" undertaken by Dr. V. J Fitzgerald of the University of Iowa has shown that the likelihood of pet ferrets establishing themselves anywhere on the United States mainland is nil. Her conclusions are based on the facts that while an invader species needs to be long lived, have a short generation time, be fairly impervious to predation and be a predator superior to native species of the same type, the ferret is on the other hand short lived, extremely subject to predation, especially by feral dogs and birds of prey, requiring of a long generation time when compared to native weasels, and far slower and less efficient a predator than any weasel found in the United States. 45, 46 Her conclusion is that "the fear of drastic ecological impact from the keeping of these animals in North America is an unwarranted speculation."

The CDHS report states that there is "currently" (i.e., as of the date of the document, December, 1988) a feral population of domestic ferrets on San Juan Island, off the coast of Washington State. While it is true that such a population did indeed exist there at one time, the Washington State Department of Wildlife confirms that this population has been extinct since the early 1980s, when the population of European rabbits that the ferret colony had been established to control was nearly wiped

⁴¹a. King, C. "Stoats, Weasels and Ferrets." Introduced Mammals, New Zealand, Department of Scientific and Industrial research, 1974.

^{42.} Lavers, R. B. "Aspects of the bioloty of the ferret at Pukepuke Lagoon." Proc. N.Z. Ecol. Soc. 20:7-12 1973 ff.

^{43.} Fitzgerald, V.J. "The domestic ferret as a threat to wildlife. The Ferret 2(3):2-4 1988.

^{44.} DeVos, A. et al. "Introduced mammals and their influence on native biota." Zoologica 4(10):163-194, 1955.

^{45.} Fitzgerald, op. cit.

out by leptospirosis. Non-Game Program Manager Dr. Thomas C. Juelson of the Washington State Department of Wildlife noted in April of 1988 (eight months prior to the publication of the CDHS Report):

"I understand that there have been attempts to use ferrets to control populations of exotic European rabbits on San Juan and Hat Islands in Puget Sounds. I also understand that during the time the rabbit populations were healthy, ferrets were frequently observed in conjunction with these colonies. Those rabbit populations dramatically decreased a few years ago, and I have been unable to find anyone who has observed a ferret there since.

"I am convinced that the only way an European ferret can survive in the wild in Washington is in conjunction with the concentration of an exotic animal species, such as the European rabbit." [Italics added].

The CDHS Report also cites a number of other places in the United States where feral populations of domestic ferrets are supposed by the authors to exist. The Report states that feral populations arose around New London, Ohio, a town known in the 40s and 50s as "Ferretville" because so many ferret farms were concentrated there. However, the Ohio Division of Wildlife Executive Administrator Patrick M. Ruble reported in October of 1987 that "no feral populations are known in Ohio."

New Mexico is also cited as a state with feral populations of domestic ferrets, but again, that state's officials disagree. John P. Hubbard, Assistant Chief for Endangered Species of the New Mexico Department of Fish and Game, said in November of 1987 that they had "reports" of feral ferrets in the Clovis area, but later qualified this statement in a phone conversation with Mr. Phillips by saying

"In the sense of having photos or a specimen or other scientific documentation of such colonies, there is none. In the Clovis area, there is the possibility that 'ferrets' have been deliberately released to control prairie dogs and are being artificially maintained and

supplemented to maintain a colony". [italics added]

The CDHS Report also maintains that these supposed feral populations of ferrets in New Mexico "are competing with the near extinct black-footed ferret." One wonders how this could be, since the last wild black-footed ferret was taken into captivity in 1986. In addition, Mr. Max Shroeder, former coordinator of the Black Footed Ferret Project and currently of the U.S. Fish and Wildlife Service, when asked whether or not sightings of Black Footed Ferrets had been confirmed in New Mexico in recent years, he replied,

"To the best of my knowledge, there had been no confirmed sighings of Black Footed Ferrets in New Mexico for several years, and no recent evidence of Ilving Black Footed Ferrets has been found there. Again as far as we know, there are no wild populations of fitch ferrets there either. People bring in kits every once in a while, but the adults don't seem to be able to survive."

When New Mexico's Fish and Game commission was questioned on these points again in 1989, they responded that there were are no feral ferrets in that state at the present time—they did, however, refer Mr. Phillips to the CDHS report, saying that he might find it "helpful."

Arizona is also implicated as having a feral ferret population; but this is only on the advisement of one local Animal Control officer, and as demonstrated above, Arizona does not consider the domestic ferret a threat and reports that no feral populations are known in that state.

The tendency of some in the California Department of Fish and Game to confuse ferrets with polecats or Long Tailed Weasels has already been mentioned. In addition, some apparently falsified information has also cropped up. For example, CF&G's Tracy Moreno said in 1987 that "We know of a colony of about 350 feral ferrets near Camp Pendleton." However, when the Camp Pendleton's Director of Natural Resources,

^{46.} ibid.

^{47.} M. Shroeder, Personal communication, April 26, 1989.

^{48.} Snyder, George, "A furor over ferrets as pets." San Francisco Chronicle, 16 April 1987.

^{49.} Letter dated 29 April 1987.

Timothy A. Burr, was questioned about this rather large population, he replied,

"The Natural Resources Office has no knowledge of a colony of feral domestic ferrets on Camp Pendleton nor any documentation of a past colony. ... Each year our Animal Shelter and warden personnel receive several calls regarding wild "black footed" ferrets. Each of these sightings of a wild ferret is investigated. In all cases where visual contact has been possible, the animal has been identified as a Long Tailed Weasel."

The Report's authors themselves admit that verifiable feral populations of domestic ferrets in California are, indeed, nonexistent, when they say that "At this time the available information suggests that if feral populations exist in California, they may not yet be beyond control" (page 15) and "Feral populations seem to have developed..." (page 34; in both casees, emphasis added).

Why is there so much fear of a feral: population of domesticated ferrets? Once feral, the CDHS Report maintains, ferrets revert to polecat behavior and "ravage native wildlife and poultry." Not surprizingly, this claim is also commonly attributed to mustelids of all varieties. But do polecats, weasels, or indeed any of the mustelids, have an impact on agricultural development? And if so, are their actions damaging enough to warrant attention? The opionion of those naturalists who have studied the problem is no. For example, in the case of the weasel, the late Normal and Stewart Criddle of Manitoba noted, "In the last 20 years, we have permitted weasels to frequent the farm buildings at will and the poultry house has been no exception. In that time, rats and mice suffered severely from the weasels, while the total number of poultry taken were six. Many times that number, however, were killed by rats." The polecat seems to have suffered "guilt by association" for Dr. Herter tells us.

"At least 80% of the European Polecat's diet consists of vertebrates, of which half are harmful rodents [and included in the rest are frogs and both venomous and non-venomous snakes]. Like other mustelids, the polecat has gained a bad reputation by occasionally breaking into chicken coups and rabbit hutches. However, excepting such deeds, the polecat does a great service to farmers, and is a valuable animal."

And indeed, when in 1989 one of the current authors polled the Departments of Agriculture of all 50 States as to the impact on agricultural interests attributable to domestic ferrets, each and every state replied in the negative: the environmental and agricultural impact of Domestic Ferrets throughout the united states is NILL.

Bearing all this in mind, it becomes clear that the question of ferrets "running wild" in California—or anywhere else in the United States for that matter—is an absurdity.

^{50.} Quoted in E.R. Hall, "The Graceful and Rapacious Weasel." Natural History, November 1974 pp.44-50

^{51.} Herter, op. cit., pg 51.
52. Blancou, J., Aubert, FMA., and Artois, M. "Rage experimentale du furet (mustela putorius furo)." [Experimental rabies in the ferret.] Rev. Med. Vet., 133:553, 1982. It should be pointed out that one researcher feels this may not be the case for all strains of the virus; however, there is at the time of this writing no documentation to this effect.

Part IV:

Ferrets And The "Rabies Scare"

Let us now turn our attention to the issue of ferrets and rabies across the entire United States. This is probably the most irksome area as far as many ferret owners are concerned, because so many ferrets are killed annually on "bite raps"—in fact, one was even killed for licking someone!—when research has shown that ferrets do not secrete the rabies virus in their saliva⁵², rendering rabies transmission from a ferret bite virtually impossible.

Information on rabies was obtained for all species from the Centers for Disease Control in Atlanta. There were, in total, twelve cases of rabies in the 22,000,000 ferrets having lived since 1957.

At least one or possibly two of these cases are thought to have been the result of vaccinating ferrets with a live virus vac-A literal handful of individuals have been made to undergo rabies prophylaxis, compared with those who received the same treatment for dog and cat bites. Even if the knowledge that the virus is not present in ferret saliva had not been available to most health departments (and they can possibly be forgiven for this as the article was originally written in French), had the CDC's advice, detailed below, on the handling of ferret bites been observed, almost all of these treatments would have been avoided. One must also remember the problem of misidentification, and the tendency of some to identify as ferrets weasels, mink or even rats. Thus it is not surprising that there are no documented incidences of ferret-to-human transition of rabies in the United States'

Since 1957, it is estimated that there have been 22,000,000 ferrets in the United States. This means that only one in over three MIL-LION (3,200,000) ferrets—about four one ten-thousandths of a percent of the population alive since 1957—has ever been rabid.

The Centers for Disease Control. responding to questions from the public health sector, concluded in 1986,

"If, in the investigation of a ferret bite, the physician can be reasonably assured that the animal has had no contact with indigenous rables vectors and was not vaccinated with a modified live virus rabies vaccine, then the likelihood of the ferret's having rables seems extremely remote, and the anti-rabies treatment of the bite victim would not seem warranted. On the other hand, if the ferret has possibly been in contact with wildlife, then rables should be considered.

Although the CDHS report cites this quote in its listing of references, apparently the authors only believe in the validity of the last clause of it, as they recommend the destruction of all "biting" ferrets, whether vaccinated or not, and whether pets or strays, and subsequent rabies testing of same 1. It is also maintained that "No rabies vaccine trials have been performed in ferrets" but this is not true. The University of Oklahoma performed such trials in 1988⁶², as has Norden Laboratories, which has already completed one round of challenge tests⁶³. The Morris Animal Foundation has also set up a fund for ferret rabies research to which ferret owners throughout the United States have been contributing.

Tests and developments of vaccines have

^{53.} Centers for Disease Control. "Viral Diseases: Pet ferrets and rabies." Annual Summary of Rabies Surveillance, Washington D.C., U.S. Department of Health and Human Services, 1980 see also:

Virginia Department of Health memorandum, July 5, 1985, and a CDC "Farret Report" signed by Dr. Fishbein.

<sup>Gunby, P. "Can you catch rabies from your ferret? Probably not." JAMA 245(16):1628 1981
54. Gloseclose, S. "Pet ferrets require special safety considerations." Norden News, Winter 1986, pg. 33-34.</sup>

^{55.} Groseclose, op. cit.

^{56.} Gunby, op. cit.

Dr. L.A. Sawyer, letter to Ms. Grace Holden, Apr 17 1987.

^{58.} This figure represents a conservative estimate based on the figured received from the International Ferret Association. Some sources have quoted figures in the 30,000,000 range.

^{59.} Gunby, op. cit.

⁶⁰ Groseclose, ibid. See also, Annual Summary of Rabies Surveillance for 1980-1982.

^{62.} Hooper, J. Letter to the Editor, JAVMA, June 1988. Pet European Ferrets... pg. 23.

^{63.} Dr. Kent Marshall, personal communication, 17 April 1989.

^{64.} Matouch, D. and Dousek, J. "vaccination of ferrets, Putorius furo, with a tissue vaccine." Vet. Med. (Praha)

also been undertaken in Europe. For example, researchers in Chekoslovakja have developed and tested a tissue vaccine of. Researchers at West Germany's Paul Erlich Institute report excellent results in ferrets from seven existing vaccines, saying that "effective protection against rabies was shown by 91.5% of the animals after 14 days and by 99.2% after 28 days."63

Several prominent authorities recommend vaccinating ferrets with a killed virus vaccine such as Fort Dodge's Trimune. only vaccinated ferret who has ever tested positive for the virus was one who had been vaccinated with a modified live virus vac-

It is also possible that at least two "false positives" have been reported, one in a 1985 case from Michigan and another in a 1986 case from South Carolina. 72. Vaccines work by causing the body to produce antibodies against a virus. Ferrets are typically tested with the fluorescent antibody test. Since it is the antibody and not the virus which is detected by this test, a ferret who does not actually have the disease but has been vaccinated for it would then test "positive" if a blood-titre for the antibody was all that was looked for.

Other curiosities about this section of the CDHS report have to do with statistics and how they are gathered and presented. For example, page 4 states that the "statistical significance of the data associations were done with the chi-square test," but the result of this test is never mentioned. This is not surprising when one realizes that in order to perform this test, an "expected" value is required, as in the equation below:

 $\chi^2 = \sum [(observed value - expected value)^2]$ expected value

Since no studies have been done to determine what the "expected" value (which in this case would be the number of ferrets one would expect to contract rables in a given period of time) would be, the test cannot be performed, and no statistical results can be obtained by the use of this test, as, as most school children know, division by zero is undefined.

The CDHS Report adds on page 22 that "22% of Californians who were bitten by ferrets underwent rabies prophylaxis." This was done even though only one ferret from this state has ever been rabid. In light of the CDC statement mentioned above and the knowledge rabies is contracted by only 0.00004% of all ferrets, this strikes one as being somewhat overcautious.

The reader is also warned that "rabid ferrets may occur at any place at any time." However, the proper perspective on this idea is omitted-it being, as one researcher put it, that "any mammal whose life span exceeds the pathogen's incubation period, including Homo sapiens, can become infected."76 The CDHS authors report that there is no proof that by being kept strictly indoors and thus away from wildlife vectors, a ferret is prevented from contracting the disease. Since the rabies virus is transmitted via saliva and cannot live in air, there is no other way for ferrets, or any species, to contract the disease except by being bitten by a rabid animal or a rabies carrier, (and the only animal known so far to have a true carrier state is the dog); but the authors do not explain what they believe the ferret's "exotic" mode of transmission of rabies to "house-isolated" might be, nor why the ferret should have a mode which is different from that of every other warm-blooded animal.

The extreme rarity of the disease in ferrets (one in 3.2 million animals) is barely alluded to in the CDHS text.

Czechoslovakia 31(2):123 1986

^{65.} Manika, C et al. "Studies on rabies antibodies of ferrets after a single antirables vaccination." J Vet Med Ser R 35(1):24-28 1988.

^{66. &}quot;Diseases of Ferrets," Merck Veterinary Manual, Sixth Edition, 1986, pg.945.

^{67.} Ryland, op. cit. p.1155

^{68.} Randolph, RW, "Preventive Medical Care for the Pet Ferret," Current Veterinary Therapy IX: Small Animal Practice, Saunders, New York. pg. 772-774.

^{69.} Fox, M. Biology and Diseases of the Ferret. Lee and Feibiger, 1988.

^{71.} Gunby, op. cit., pg 1628. 70. Ryland (1983) pg 27.

^{72.} L. A. Sawyer, letter to Grace Holton of April 17, 1987.

^{74.} Fitzgerald, op. cit., pg 2
75. Spaulding, C.B., A Veterinary Guide for Animal Owners. Rodale Press, Emmaus, Penn. 1976.

^{76.} The Merck Veterinary Manual, Fifth Edition, pg 280-282

^{79.} Jane Alvaro of the Anti-Cruelty society, quoted in The Washington Post, 5 April 1988.

^{79.} Fitzgerald, op. cit.

^{80.} Meyer, op. cit.

So, as one can see, there is virtually no reason to be concerned about rabies in ferrets except in such cases where public officials insist on making an issue of it. Hopefully, with the AFIS licensing and subsequent public introduction of Pittman-Moore's IMRAB rabies vaccine for ferrets on February 14, 1990, and the pending licensing of Norden Laboratories' ferret rabies vaccine in the late Spring of 1990, this issue will now be dropped entirely.

Part V:

Has Ferreting Called for a "Vicious" Animal?

Ferret foes claim, as one of them put it, "They're mean, vicious little animals." Ferret owners, 3.5 to 4 million strong, make exactly the opposite claim, calling ferrets "the greatest little critters ever." Even researchers, whose ferrets may indeed have good reasons to treat them less than charitably, comment on the ferret's docility, saying, "The ferret is tame, easy to handle, and we found it simpler to train than the rat, cat and rabbit."

"The ferret, Mustela putorius furo, has been described as a vicious and dangerous laboratory animal. After extensive experience with this carnivore, we have found this description to be a myth. [It] is pleasant and easy to handle and raise."

Modern breeders today concentrate on even, playful temperaments; the most conscientious breeders handle their kits daily from birth.83

Why do a handful of vocal critics feel that the perceptions of millions of ferret owners and an ever increasing number of veterinarians and research professionals are mistaken (at best)?

Generally, the argument begins, as it does in the CDHS Report, with the notion that ferrets, being originally hunting companions (like the dog), were selected for the inherent

^{81.} Rabe, A., et al. "Behavior and behavioral teratology using the ferret." Teratology 24:13A 1981.

^{82.} Willis, L.S. and Barrow, M.V. "The ferret as a laboratory animal." L:ab Anim Sci 21(5):712-716 1971.

^{83.} For more information one may contact any of the ferret associations or registries, such as the American Ferret Breeders' Association, the Ferret Unity and Registration Organization Inc., the International Ferret Association, the British Ferreting Society, the Ferret Fancier's Club or any of several other local clubs.

^{84.} The American Association of Ferret Practitioners had been a vocal opponent of the AVMA's "no pet ferrets" policy for some years, and had this year succeeded in softening AVMA's position on this subject to the extent that seminars on ferret care will be allowed for the first time at the AVMA's yearly convention. Personal communication from Dr. D. Kemmerer, 19 April 1989.

^{85.} Pet European Ferrets, p. 15

^{87.} Wellstead, op. cit.

^{86.}Harding, op. cit.

^{88.} ibid. pg. 61

"recalcitrance" that, as has already been mentioned, is part of the general folklore concerning all mustelids. "The savage characteristics of polecats," the Report tell us, "were highly valued and emphasized in man's selective breeding and development of ferrets for killing rats and rabbits."85 The Report's authors

The Report's authors also relate that ferrets are chosen as rabbitters and ratters because of the "fierce and relentless nature of their attacks." This statement contains two

major fallacies:

 that ferrets are preferred for rabbiting and ratting over other uses they might serve or have had served, and

that a fierce and relentless attack is their

modus operandi in this business.

Ferrets are preferred for rabbiting for no other reason than that they can crawl into rabbit warrens and flush out the rabbits therein. whereas domestic dogs, including terriers specifically bred to follow prey "to earth", are too large. But when one considers that the rabbits it is sent in to find are intended for human consumption or often for the market, it becomes obvious that a "fierce and ruthless attack" is exactly what a ferret breeder would not want-instead, one would want an animal which would chase the rabbit from its burrow, leaving the actual catching and killing to its human partner, rather than attacking and "spoiling" it. This, of course, is exactly the criterion by which breeders of "hunting ferrets" select their stock. Harding, oft quoted in the CDHS report, stated in 1943, "Ferrets are very tame and can be carried in the pocket and handled with the bare hands to chase out rabbits from their burrows...rabbits driven out and caught [in nets] are not shot up or damaged as they are when caught by other means [i.e., the meat is not bruised and rendered unsalable]." Graham Wellstead, head of the British Ferreting Society, tells this story in connection with selecting modern breeding stock:

"She (a jill ferret) was a little darling, a great favorite with the family and a very attractive animal. She loved a game and was a pleasure to handle. I had put her through the normal working up process, and, although I hadn't used her often in the first winter, she was a good bolter."

So we see that docility as well as skill were valued by the ferreting man.

Yet, in the CDHS Report, we read that "like the pit bull, [ferrets] have been bred not only to be instinctively unafraid of man but also to be especially ferocious and tenacious against intended victims." Is this so? Those with experience of the species do not believe so. For example, Dr. Herter of the Insbrook Zoo states, "Ferrets, and polecats raised in captivity, regard their keeper as a companion and playmate, and they are quite exciting...Only very tame ferrets are suitable for hunting. [Emphasis mine]"89 Animal researchers have also lauded the ferret for its even-tempered and easy-going nature.

"Fear of Man," an idea made much of in the CDHS Report, is not a matter of breeding but rather a matter of habituating an animal to human contact during a "critical period" in its youth. Poole notes that "Fear of man does not develop in polecats and [ferret-polecat] hybrids if they are removed from their mother at any time prior to the second day after their eyes have opened." This occurs in polecats at about 5½ to 6 weeks. In ferrets, which are often handled from birth, a similar critical period and eye opening occur at 4½ to 5 weeks, although even if ferrets are not handled at this time, apprehension toward hymans and other large animals fails to develop.

The success of these centuries of breeding in dulling the ferret's "killing instincts" were adequately demonstrated at the first United States ferret show, held in Claussen, South Carolina in 1985. A maze of sewerpipe was set up with a caged rabbit at one end for the ferrets to find. But instead of scrambling to get at the rabbit, the ferrets fell asleep in the tubes and many were in fact afraid of the rabbit, or, as the reporter covering the show put it,

"Neither the rabbit nor the terrets got very excited about the presence of the other...[the show organizer's ferret] had to be almost shoved at the rabbit. The two didn't seem to know one was supposed to be the natural enemy of the other."

The CDHS Report disagrees that this could be, and further argues that "In addition

^{89.} Herter, op. cit.

^{90, 91.} Poole, op. cit.

^{92.} Owen, J. "Old fur piece pets in field trials near Clausen." Florence Marning News, 13 July 1985. 93. Wellstead, G. Ferrets and Ferreting. Neptune NJ; TFH Publications, 1982. pg. 26. 94. Anon, "The jet set pet that eats kids." The Sun, 1 April 1986.

to being developed to be bold, man selectively bred ferrets to be unafraid of humans" and it is this lack of "inherent fear of man" which causes ferrets to attack. Surely this is indeed an example of "fuzzy logic" because by this same argument, a Labrador retriever is more likely to attack a person than a wolf, and a housecat is more likely to attack a person than a tiger. Nevertheless, many persons, on first viewing a ferret, evince some fear of them.

"Perhaps it's the sharp teeth, the glaring eyes or quick, sinuous movements that frighten them," says Mr. Wellstead. "But don't judge a book by its cover—ferrets are gentle, docile animals, and a few minutes of observation will dispel all those negative notions."

HOROHS.

Rather than being vicious, the ferrets, especially pet or show bred ferrets, is as they have always been, spritely but loving and gentle.

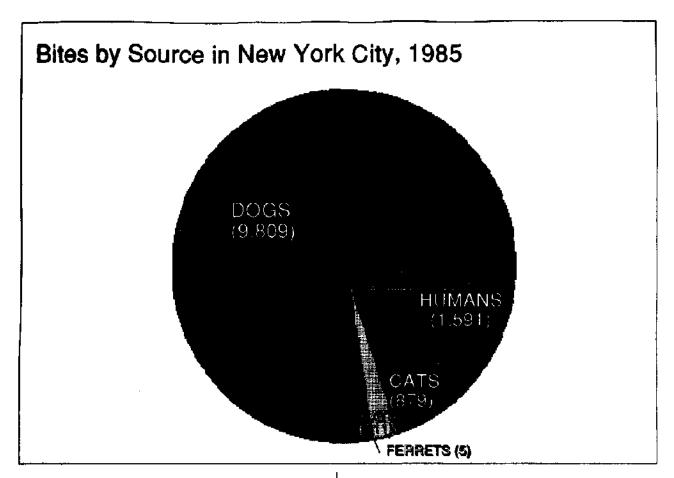
Part VI:

The Allegations of Biting and Savaging

Stories of ferrets biting babies (and adults) have been circulating along side stories of cats sucking babies' breath for many years, but documentation of any kind except hearsay was generally lacking. However, in 1986, reports of maulings began to surface in the and in some interpopular press. departmental memos. Ferret owners claim that they are never savaged by their companion ferrets except when the ferret is severely frightened or in extreme pain, and only rarely play-bitten; but "ferret phobes" are now ready with pages of "bite reports" such as those included as Tables 1, 2 and 3 in the Department of Health Services report.

Unlike domestication, feral populations and rabies, savaging is not as straightforward as the pages of numbers and tables in the CDHS Report would have one, at first glance,

| Breakdown of Bites by Dogs and Ferrets by of Severity of Injury | |
|---|-----|
| Bites Requiring medical attention in one year: | |
| DOGS: 1,000,000-3,000,000 Per 1,000,000 Dogs: | Ω |
| FERRETS: 125.5 (using the CDHS figures of 425 in 18 states—thus 1,250 in 50 | |
| Per 1,000,000 Ferrets:1 | _ |
| Serious Injuries (requiring suturing, plastic surgery, etc): | |
| DOGS: 44,000-132,000 | ^ |
| Per 1,000,000 Dogs: 965. | U |
| Per 1,000,000 Ferrets: | 2 |
| Serious Facial Injuries in one year: | _ |
| DOGS: 16,000 | _ |
| Per 1,000,000 Dogs: | .0 |
| FERRETS: at most 1.2 | 24 |
| Per 1,000,000 Ferrets: 0. | .54 |



believe. Domestication is a matter of history, feral populations a matter of ecology, and and and rabies, savaging is not as straightforward as the pages of numbers and tables in the CDHS Report would have one, at first glance, Domestication is a matter of history, feral populations a matter of ecology and rabies a matter of biology. Savaging, on the other hand, is a matter of behavior, and not just of the biter, but of the person bitten as well. In order to properly understand this phenomenon, the behavior of both sides must be thoroughly understood.

Since we are not provided with many clues to the nature or circumstances of the "attacks" spoken of in the text but only numbers, the current authors will begin our discussion of ferret bites with numbers also. What are the statistics relating to the frequency of ferret bites?

Even if one is not making a distinction between "biting" and "savaging," the available statistics show overwhelmingly that the ferret is probably the animal least likely to bite of all domesticated creatures save, perhaps for the guinea pig. For example, statistics from Pima County, Arizona (a community where ferrets have been popular pets and ferret shows have been popular events for some time) show that one is eight times more likely to be bitten by a dog than by a ferret, and twice as likely to be bitten by a cat than by a ferret on. In New York City, it is far more likely that one will be bitten by another human being tha by a ferret. as statistics from the New York City health department for 1985 show (see chart above).

Even if we were to believe, simply for the sake of argument, that all these 425 incidents across 18 states were in fact savagings and did happen as described (there

96. Searcy, R. "Biting the hand that feeds." Community Animal Control, 6(1):14 1987.

^{95.} Van, J. "Ferret fad dangerous, vets warn." Drs. Constantine and Kizewr a copy of this article, in which they themselves are quoted. They did not supply the name of the source newspaper.

^{97.} Assuming that ferrets are more or less uniformly distributed amongst those states where they are legal (and California) and assuming a base population of 12,000,000 since 1986, based on International Ferret Association numbers.

98. Anon, "Data on dog and cat bites," Cornell Animal Health Newsletter, 7(2):6-7 1989.

deliberate savagings and did happen as descripbed (and there is much reason to believe that they did not), we are still talking about 425 "attacks" in a ten year period out of a population of perhaps 8,000,000 ferrets? alive during that period. This means that less than one half of one percent are even implicated. Hardly worrisome figures, especially when the statistical risk of a 6.5% chance of being savaged by any given dog is considered "acceptable."

The astute reader will notice that all our figures are given as percentages, as as numbers per unit population. These are figures which the CDHS report never provides, and one can only wonder why. The numbers of bites per unit population of ferrets compared with the same statistuc for dogs is especially telling. For the sake of argument, we will take the Cornell University figures for dogs at 46,000,000 at the present time with 1,000,00 to 3,000,000 savagings per year³⁰ and Sacks, Sattin and Bonzo's figures of 157 dog-bite related fatalities since 1979 (15.7 per year)³³. The breakdown resulting from this information (and we have used a very conservative figure of 3.5 million ferrets) appears in the table on page 27.

Perhaps the most dubious point about al Ithese incidents is the concentration of ferret "bites" in states where the respective departments of health have been hostile to ferrets for some time, or which have reached decisions which disagree with those of California's Fish and Game Department. A quarter of all the attacks listed are from California, we are told on page 8 line 2. Since ferrets are widely distributed in 44 of the 50 states, we would normally expect that only an average of 9.4 incidents (2.2%) would occur per state (plus California); quite a difference. Arizona's connection to all this (that it legally defined ferrets as domestic, against the wishes of California) has previously been explained, and somehow the authors are not surprised that Arizona is reported as having a "bite count" second only to that of California.

The lack of witnesses in the vast majority of these events has already been addressed elsewhere in this report. But it should be reiterated that such "non-witnesses" may lie, especially those who are less than adequate caretakers or who may have had a history of child neglect or abuse (a statistic we do not see in the CDHS report); in other cases they can be "led" by investigators into saying things others may want to hear. It is also possible that many of these bites were not inflicted by ferrets at all, but by weasels or by rats, which many people, including some in California Fish and Game, cannot distinguish from a ferret; indeed, the doctors who wrote the JAMA bite report themselves admit that "The attacks on sleeping infants are similar to those by rats." Surely the difference in dentition between the carnivore on the one hand and the rodent on the other would make this similarity somewhat impossible. Until cases with reliable and objective third-party witnesses can be tabulated, it can only be said that the CDHS report's conclusions about the frequency of savagings by ferrets must be taken under extreme advisement.

It would be wise, at this point, to review the definitions of "biting" and "savaging," and necessary to recall that to some people, any connection between the teeth of one animal and the body of another is a savaging; there are a great many people who believe that every instance of use of the teeth is an act of aggression. Those who understand the behavior of animals and children know that only very rarely is this the case. Both animals and small children ("ankle biters") play at grabbing with the teeth without any aggression at all. In addition, animals without opposable thumbs use their mouths to lift and carry things. This is particularly so in the case of the ferret, who earned her latin name furo (from "furonem", thief 102) for very good reason. Ferrets are most widely known among those who keep them as companion animals for stealing anything that strikes their fancy,

^{96.} Searcy, op. cit.

^{97.} Extrapolating the figures assuming the industry standard population of 5,000,000 in all states.

^{98.} Anon, "Data on dog and cat bites." Animal Health Newsletter, Cornell University College of Veterinary Medicine, 7(2):6-7 1989.

^{99.} Sacks, J.J., et. al. "Dog bite related fatalities from 1979 through 1988." JAMA, 262(11):1989

^{100.} The authors admit this on page 3, lines 10-13.

^{101.} Paisley, J and Lauer, B. "Severe facial injuries to infants due to unprovoked attacks by pet ferrets." JAMA, 259(13):2005-2006, 1988.

^{102.} Oxford English Dictionary etiology.

^{103.} Roberts, M. All About Ferrets TFH Publications, NJ. 1977

^{104.} Yost and Linberg, What's a Ferret? 1977 pg 11.

from rubber erasers to dirty socks, and packing them away under couches or beds. Ferrets will also grasp in play in the same way that dogs and cats do; yet the CDHS Report would have one believe that ferret play is aggression but dog and cat play is play. This is not ecologically valid.

As has been explained above, "biting" becomes "savaging" when an animal is deliberately attacking a person with the intention of causing injury, generally in self-defence. One naturally understands that young animals nip and that in a report such as this only savagings warrant inclusion. However, in their tables, the CDHS report includes a number of incidents so minor that it is only reasonable to conclude that they are incidences of play biting. When their own data are examined, one sees that there only eight (8)—or possibly twelve (12)—out of these four hundred twenty five (425) incidents which are, or may be construed to be, actual maulings, requiring extensive suturing and plastic surgery

Other incidents included are actually circumstances of gross parental and caretaker neglect, but again, the CDHS Report provides no data to show this. In one of the two incidents in Colorado, the child in question was left for the day in the care of a babysitter. who in turn left the child alone with her own young daughter. The daughter placed the child on the floor and then left it there when she also left the room. The child was said to have been found later in the room with the ferret (which was not "on" the child when the babysitter returned 106. This is certainly an extremely dubious basis from which to make a blanket statement that ferrets are "vicious"-had the animal been a dog or cat, the accent would almost certainly have been on the phenomenally incompetent actions of the babysitter.

Yet apparently the authors feel that we should all be made aware of all reported incidents of play biting, sock stealing and animals trying to attract a little attention to themselves with the only tools they have to do so, and all cases where, by withholding vital information about the circumstances of the incident, blame

can be shifted away from those who might otherwise face punishment for their own behavior.

The CDHS Report talks about several "victim facilitated" bites, and mentions that some were "provoked" but do not define these terms for the general reader or legislator. It is curious that a number of the bites listed appear not to be so much "victim facilitated" as "guardian facilitated". It is a common behavior of parents to either hold a child up to an animal, or an animal up to a child, so they can "pet the kitty" or "see the doggie" or some such thing, and it is also common for very young children in this situation to slap at an animal in a somewhat uncoordinated attempt to touch it. A ferret being held off the floor (as we have seen, ferrets are typically acrophobic) in front of a child —or, for that matter, any small animal held in this way waving its hands at it and or screeching at it in the manner typical of infants may very well feel threatened on two fronts and attempt anything to get away. In this situation, one would normally expect the ferret to snap at whatever it could reach, and it is possible that this is the origin of many of the bites or lacerations (scratching) to the face and hands of child-One must realistically assess the probability of a parent, or especially a paid caretaker, not telling the entire truth about such an incident when an animal so widely touted as "vicious" could be blamed instead.

A previous point, of ferrets' means of attracting attention to themselves, is something ferrets do in a way that those who do not personally know the animal have described variously as "they just went nuts" to "being possessed." Ferret fanciers know this behavior as either the "Dance of Joy" or the "Weasel Wardance." Ferrets will bounce around as if on springs, with their mouths open and heads shaking from side to side, often making a bucking or chuckling sound. This is an invitation to play (it serves the same purpose as the dog's elbows-to-the-ground gesture, which many non-dog-owners find frightening). One author states,

^{105.} Cases 9, 11, 20, 21, 24, 27, possibly 29 although one must question how a ferret could manage a "single puncture wound" considering its dentition), 33, 36, 57 come most immediately to mind as these are single bites or "lacerations" (i.e., scratches?) to the hands.

^{106.} Colorado Department of Health Animal Exposure Consultation form dated 2/2/1987.

^{107.} Cases 3, 7, 14, 22 27 and 33 appear to fall into this category.

^{108.} Morton and Morton, Ferrets." Barrons, Toronto 1985 pg 65.

^{109.} Winsted, op. cit., pg 88-89.

110. Ferret World Catalog, throughout.

111 Rields Mary 4 Stee By Stee Book About Ferrets. TEU Publications Newtone New Joseph 108

^{111.} Fields, Mary A Step By Step Book About Ferrets., TFH Publications, Neptune, New Jersey 1987

"Ferrets are easily amused and, when feeling especially frisky, will do a "dence of joy," skittering sideways with mouth open in mock attack. At such times their fur stands straight out from their bodies, making them look like a big ball of fluff as they bounce from one end of the room a panic because they mistook this rather crazy behavior of their newly acquired kit for sickness."

From the descriptions given in the authors' lists of bites, we are to believe that several incidences of exactly this behavior were, in fact, savagings. However, it is far more likely that these were, as Poole puts its, attempts by ferrets to tease their companions in "an attempt to incite [them] to play."11 Poole goes on to note that while such behavior as is described here incorporates some of the behavior patterns normally seen in actual fighting, those behaviors which are related to intimidation of the opponent (which is the biological goal of aggression) are absent. "Their absence from aggressive play therefore suggests that the goal of aggression is absent from aggressive play ... Play is adapted to the strength of the opponent and avoids both pain and fear-producing situations. phasis added.]

The CDHS Report quotes a currently 'popular' myth which says that ferrets attack human infants because they are attracted to the smell of milk on babie's breath, and therefore mistake the child for prey. Not only is this tale contradicted by the fact that "attacks" were so rarely made to the nose and mouth (ears, fingers and akles are unlikely sources of breath), and by the millions of families whose children and ferrets live together in harmony. In addition, all the scientific data on what causes ferrets—or even polecats—to select anything as a prey item also contradicts this claim. Dr. Apfelbach of the Biological Institute of Tübergen, West Germany, notes that a polecat must learn the smell of appropriate prey from its mother during the first three months of its life, after which it loses interest If this is true for ferin new food smells. rets (and there is no reason to believe it is not) the only smell they will learn by this method

is that of cat chow. Apfelbach's work has also shown that objects "double the suze of a ferret or larger cuase escape reactions." Since all but the most premature of infants are more than twice the ferrets's average $2\frac{1}{4}$ to 3 pounds, these "witnessless" incidents leave the realm of being simply 'suspect' and become extremely dubious.

The CDHS Report's tables provide various pieces of information about bite incidents, but the most important points necessary to make sense of the data are conspicuously

lacking. The reader is never told:

1. Was the animal involved verified to have been a ferret? As has been shown, many persons in both official and unofficial capacities cannot accurately identify a ferret, and this point of identification is of first importance especially when the savaging animal is a stray. Weasels, raccoons, rats, skunks and even prairie dogs have been mistaken for ferrets.

2. Was the animal provoked? Considering the differences, of both legal and personal opinion, on what constitutes provocation, it is absolutely necessary for the authors of such a report not only to define provocation, but also apply this definition scrupulously to each case, but this is not done. The reader cannot do this for him- or herself because the

exact circumstances are not given.

3. What was the health status of the animal? Jill (female) ferrets, like bitches and queens, may become cranky and nippy when in heat, and jills kept under artificial light may endure their first heat at three or four months of age. Older ferrets may become diabetic, and it is not uncommon for many elderly ferrets to suffer debilitating and eventually crippling neoplasia. No information of this kind is included in the tables or text of the CDHS Report.

4. Did the ferret have a history of abuse or neglect? Like any animal species, ferrets are on rare occasion abused, and thus any hostility they may harbor toward human beings may be entirely justified. However, no such information is given in the tables or in

the text.

Mention is made that entire hobs are

^{112.} Winsted, op. cit., pg 88. 113. Poole (1966) op. cit. pg 27. 114. ibid. pg.. 34 115. Apfelback, R. "Olfactory sign stimulus for prey selection in polecats (*Putorius putorius* L)" Z. Tierpsichol. 33(270-273 1973.

^{116. ---} and Webster, U. "The quantitative effect of visual and tactile stimuli on the prey-catching behavior of young ferrets." (Putorius furo L.)." Behav. Proc. 2:187-200 1977.

more "aggressive" than gibs (neutered hobs). but without the qualifying statement that their agggression is directed entirely toward other hobs, and not toward humans or other ferrets.

The CDHS report cites statistics from Arizona and Oregon as showing that ferrets are "habitual biters," but do not actually present any data, except for a list of "numbers of attacks" which could have come from any source (and without defining what constitutes an "attack"). Many of the individual cases are also suspect, as follows:

Case number 1 (Table 1, page 40) is, we are told, a child bitten severely by two polecat-ferrets (a crossbred). However, this is only a reconstruction; neither animal was actually on the child when the child was discovered. The case is also one of phenomenal negligence on the part of the parents, both toward the child and toward all the animals in the household (which consisted of not only the polecat-ferrets but a dog, a snake and several other small pets). The ferrets were housed in a makeshift cage; their food had grown mold by the time the incident occurred. The parents left the six-month old child sleeping on a cot while they left the house for several hours (they did not return home until midnight). As stated previously, the coroner in the case cited not the "viciousness" of the animals but the "great deal of irresponsibility, and great deal of negligence" of the parents.

Other extremely dubious cases include Cases 4 and 5, which sound as if the ferret involved were trying to escape the man who was chasing evidently chasing it; Case 7, where we are told that the ferret was "found dead the next day"—could this be a case of someone who realized that the animal they had was not a ferret after all? The many Arizona cases on page 41 which supposedly happened in 1981 are only referred to by 1986 reports (in a paper such as this, one would hope for firsthand evidence); the several areas where "bitten" is in quotes—is this just an assumption of a savaging? In Case 31, we are told that a ferret "umped onto the face of a child while she was on the toilet", but we are not told how the ferret (whose legs are only 2" long) managed such a prodigious feat. Other cases (such as numbers 29 and 33) are "single puncture

wounds," with no evidence given as to what qualifies these actions as "attacks", and no explanation of how a ferret, with a small mouth and small teeth close together, could have inflicted a "single" puncture wound. Associated Press (case 23) cannot be considered an objective source. In Case 42 a ferret was found "near screaming child"—there is no proof that the ferret was involved. Yet the authors offer this table as "proof" of the ferret's "vicious" nature.

The situation above, it should be pointed out, is indicative of every attack made on ferrets—the statistics about bites are neither defined (as to exactly what it is that constitutes a "bite") nor put into their proper perspective (in terms of number of bites per unit population of species compared to the same statistic about other commonly held species). This tends to scare the public, excite the press, and libel ferret fanciers; one can only hope that this was not, in fact, the authors' intent.

The statement that "bites are inflicted with machine gun rapidity" which appears on line 23 is unsupported by any of the scientific papers on ferrets, and appears only in popular accounts. In fact, seemingly contradictory statements are made even by the Report's authors. On line 25 of page 1 we are told of ferrets "tenaciously refusing to let go of their victims." It is true that a ferret who feels its balance threatened will hold on to something with its teeth. Fanciers and ferreters alike have observed that many ferrets are acrophobic, and if lifted off the floor by a sock they are attempting to steal will cling to the sock for dear life. Classing an instinctive grasping for security with aggressive behavior is a disservice both the animals and to the public.

The reader is told, on line 2 of page 2, told that "the propensity of ferrets 'to attack and kill children in the cradle' is longstanding." So is the supposed propensity of cats to suck out the breath of babies in their cribs. Both claims can be discounted because of the lack of objective data to support them. It should be remembered that Bufon, considered the greatest naturalist of his day, said in the eighteenth century of the cat.

^{117. &}quot;Warning by RSPCA after ferrets kill baby." The (London) Times, October 25, 1978.

118. "License ferrets call after baby's death" The (London) Daily Telegraph I February 1979.

^{119.} Letter to George Story from Robert L. Smith, 20 November 1986.

"The cat is an unfaithful domestic, and kept only from the necessity we find of opposing him to other domestics still more incommodious, and which cannot be hunted; for we value not those people, who, being fond of all brutes, foolishly keep cats for their amusement." [Emphasis mine].

The CDHS Report's authors speak in many places of training ferrets not to bite, as if only ferrets must be taught to do so. Those who have raised puppies or young children know that both must also be taught not to bite.

Dr. Constantine himself is quoted in comparing the bite frequency of ferrets to those of other animals he deems as wild against the "bite frequency" of dogs. We have already seen that dogs are over eight times more likely to bite (i.e., to inflict exsanguinous wounds as opposed to gentle mouthing in play) than ferrets are; but if his claims were true, surely the authors would have been able to have found another authority to cite.

Finally, the question of whether ferret bites are under-reported or over-reported. The CDHS Report maintains that they must be under-reported, mainly because of the fear on the part of ferret owners that their "illegal" pet is likely to be confiscated and killed (for the moment we will ignore the fact that ferrets are legal pets in 46 states). However, it should also be noted that many officials also fear that dog bites are under-reported by at least a factor of two (the reported bites total at about one million, but it is felt there must actually be about three million per year)¹²¹. Sadly, since data on the motivations of those who report individual bites is entirely lacking, nothing definite can be said; however, dogs are a familiar animal, as is the idea that puppies and even older dogs will nip in play. Ferrets, on the other hand, are unfamiliar to most people. and just as the "Dance of Joy" is often mistaken for disease or attack, the same type of bite which in a dog would be shrugged off is likely viewed as a vicious attack by the inexperienced. Such people are more likely to report a non-serious bite as an attack-and thus the proportion of play bites reported for young ferrets is probably much higher than the proportion of play bites for puppies and kittens.

We are told in the CDHS report that 64 of the 425 bites recorded in 18 states were inflicted on children, and further told that this "high" percentage (15%) of bites was done because ferrets "recognize babies as prey." There is simply no objective evidence that this might be the case. It also turns out that this proportion is not particularly high when compared to the ages of persons bitten by dogs, about half of which are to children less than ten years old (50%), and ten percent require some form of hospitalization or suturing 122

In addition, the idea that ferrets go after babies because babies remind them of the suckling rabbits that they prey on "in the wild" is absurd as ferrets have not been in the wild for 3,000 years, and even hunting ferrets may go through their entire career without catching or killing a rabbit.

Before leaving the subject of animal bites, it is probably well to heed a warning quoted from Cornell University College of Veterinary Medicine's Animal Health Newsletter:

"If all this discussion of the danger of animal bites seems troublesome, be reminded that the greatest potential for causing serious infection comes not from dogs or cats, but from humans. The human mouth contains the largest variety of bacterial species, and these are specifically adapted to infect humans... there is an absolute 100% infection rate in clenched fist human bite injuries sustained when people punch others in the mouth while arresting or otherwise restraining them against their will."

This warning makes the statistics from the New York City Health Department, citing 1,951 human bites and only 5 ferret bites in 1985 all the more important, and makes concern over ferret bites seem all the more out of proportion with the actual problem, such as AIDS, an agency such as the California Department of Health Services is likely to face.

^{120.} Bufon, François, Compte de. Natural History, translation by William Smellie. London edition, 1791.

^{121.} Animal Health Newsletter, 7(2):6-7, 1989.

^{122.} ibid.

^{123.} Wellstead, pg. 119

In Conclusion...

Why was the California Department of Health report castigating domestic ferrets prepared? According to Dr. Constantine it was at the request of Jack Parnell, the then Director of the California Department of Fish and Game, who contacted the CDHS with the request that they prepare a report supporting the CDFG's position, which was to maintain the existing ban on domestic ferrets in California. Not, mind you, to do an objective study to determine if there was any validity to their position, but rather to SUPPORT their position.

The report itself is a study in biased, pseudoscientific analysis. To arrive at their conclusions the Report's authors had to wade through literally hundreds of articles, periodicals, and books, the vast majority of which are quite favorable to the domestic ferret in all aspects, in order to select out the few cites he needed for his publication supporting the CDFG.

A question any objective medical or veterinary professional must ask is, "Why did he (Constantine) have to resort to articles written in 1837 and 1841 (concerning for the most part Polecats, Mustela putorius, by the way, not domestic ferrets, Mustela furo) as examples of domestic ferret behavior and temperment?"

Surely the introspective intellect must be bothered by the fact that Dennis Constantine, D.V.M, seems totally unable to distinguish between domestic ferrets and wild polecats, two different animals, similar in appearance, like wolves and German Shepherds, but entirely distinct in temperment. According to Dr. Constantine, such distinctions are just "splitting hairs". Basing a report published under the California Department of Heath logo (which to the uninitiated and unwary should carry some sort of scientific validation by its very title) on such biased "research" and shoddy analysis is to make a joke of the scientific process.

The problem is that most people reading the CDHS Report won't take the time to look into the motivating factors of its' authors, and review the available data for themselves. They just say, "The California Department of Health said ... " and the myth continues to spread. This is frightening, because if the CDHS was so biased and politically motivated in their reporting on the alledged "dangers" of domestic ferrets, just what might they be doing in their reports on AIDS? How far can the public trust any governmental agency, supposedly an agency basing its decisions and releases on scientific fact, that is so easily swayed by political interests that they forsake all scientific objectivity?

Fortunately for the citizens of the State of California Dr. Constantine retired from state service shortly after his report was released. Now all they have to worry about is that if his research into the "dangers" of domestic ferrets is this suspect, just how many of his other research efforts are being relied upon in the public health field? Recently, in telephone conversations with Dr. Kent Marshall, D.V.M. of Lyons, New York, the authors of the CDHS report freely acknowledged they were engaged to write a biased report in

order to discredit the use of ferrets as pets. Specifically, their instructions were to "write a sensationalistic, National Enquirer type report" which would put the domestic ferret in a negative light.

Why would these two individuals be selected? Because they, and specifically Dr. Constantine, have been long time foes of keeping domestic ferrets as pets, and the CDFG Director Parnell knew there would be a complete lack of objective scientific inquiry where domestic ferrets were concerned.

The Report's authors, who totally ignore the gross irresponsibility of the adults in each case cited, choose to focus on the less than one dozen incidents in the last ten years which, while resulting in what could be termed severe injuries, are certainly less severe then those inflicted by even small dogs literally thousands of times each year and are nonetheless considered an "acceptable risk."

It is strange that Dr. Kenneth Kizer, who readily admits that the numerous injuries and deaths of children attributable to dogs are the result of parental neglect and irresponsibility. cannot seem to make the same connection when it comes to injuries, rare as they are, inflicted by ferrets. He acknowledged that the incidents involving dogs were the results of leaving hungry or abused dogs alone with unsupervised children and infants, and the dogs "chowing down on the kids." But, according to Dr. Kizer, "ferrets are somehow ... different." It should be noted that any objective analysis of available data will clearly demonstrate the only difference is that ferrets are much less likely to attack and injure children that are dogs.

There is a saying that seems ap-

propriate when applied to the Report's authors' use of percentages and statistics relating to ferret "attacks" on children. That is, "There are lies, damned lies, and statistics." They refer to x percent of children who were bitten on the ____, and y percent had multiple bites, and ___ percent had etc. One is reminded of Ambrose Bierce's definition of "Marriage" in The Devil's Dictionary: "Marriage, n. The state or condition of a community consisting of a master, a mistress and two slaves, making in all, two." Regardless of the uses of percentages, a careful and analytical reading of these figues will reveal that the Report's authors are, no matter how they try to conceal the fact, still only referring to a statistically insignificant number of incidents over a ten year time span. To consider this a significant threat to anyone is nothing less than unsupportable and unprofessional hysteria.

What makes this all so ridiculous is that the very reasoning used by the California Department of Fish and Game in prohibiting domestic ferrets in the state in 1935 was not supported by any research or evidence, and has resulted, at the very least, in far more damage to the ecological balance of California than had they properly "allowed" domestic ferrets to be kept, along with dogs and cats, as pets in California. Any unbiased and objective wildlife biologist will acknowledge that the domestic animal most destructive to indigenous wildlife species is the domestic cat, Felis catus. Of all our domestic animals, the common housecat is unequaled in its destructive capabilities on small to medium sized wildlife and domestic stock; a recent study of British housecats pointed out that that country's 5,000,000 cats took

an annual toll of 70,000,000 birds and small mammals per year. To compound the problem there are literally millions upon millions of feral house-cats—and feral dogs, which attack and have been known to kill animals as large as draft horses—in the United States.

What makes domestic ferrets different from domestic cats and dogs in this regard are two major points. The first is that while the majority of cat owners and many dog owners allow their pets to be free roaming, domestic ferret owners NEVER intentionally allow their pets to roam at large. This, in and of itself, is a significant point in that the occasion for pet ferrets to interface with wildlife is the exception to the rule, and for domestic cats, such interfacing IS the rule.

The second point is that almost any cat or dog can and will (if given the opportunity) turn feral, survive, and reproduce in the wild. Ask any game warden or wildlife officer about the impact of feral cats and dogs on wildlife. Domestic ferrets, on the other hand, in their 300 year presence in this country, have NEVER established a successful feral colony.

Let us assume for illustration that domestic ferrets were legal in California for the last 20 years, and five million households had chosen a pet ferret instead of a pet cat. The result on the environment would have been a shift of five million cats, of which it is safe to say 90 percent, or 4.5 million, would have been allowed to roam free a great proportion of the time, with the resultant feral cats and their successive generation of cats, to five million domestic ferrets, which are never intentionally allowed to roam. It doesn't take a wild-life biologist to appreciate the impact

this reduction in free roaming cats would have on the wildlife populations of the state.

What about escaped (read lost) ferrets? The only real yardstick we have to go by is that in the last 300 years, in spite of the fact that they are legal as pets, as well as used in agriculture for pest control, in 45 states, they have never established a successful feral colony anywhere in the country. There is no evidence they will be able to do so.

One small point that is particularly aggravating to the current authors is the question of ferret's "escaping" from their owners. The term "escape" engenders visions of some wild thing yearning for freedom, making a mad dash at the first opportunity. This is not what occurs with domestic ferrets. Ferrets are curious by nature, delving into everything they can reach, and never missing any opportunities to explore their surroundings. An open window or door is a perfect excuse to go exploring, and they will.

Ferrets are only about four to six inches tall at best, and when you combine that fact with their extreme nearsightedness, there is a strong tendency to get lost. They never wander far, and with any luck will follow the scent trail home in a few hours or days, if they are fortunate enough to survive heat or cold, loose dogs and cats, automobiles and starvation.

That almost every ferret who wanders off is picked up within a few days is related directly to the fact that domestic ferrets naturally gravitate towards humans and the sights, sounds and smells of human habitations. This is because ferrets associate these things with food, security and playmates. Unfortunately, if the humans it comes in

contact with are not familiar with ferret greetings and play patterns, the ferrets' rather unusual play habits often result in ferret "attack" stories.

One such story was the man and his son who allowed a ferret they saw hopping along the roadside to get into their car. When the poor ferret started jumping and (play)biting at their ankles, they took his behavior for an attack and the animal was killed. Enter another "attack" statistic, faithfully recorded by Dr. Constantine who, never having any first hand experience with a ferret, had no basis for interpreting the description of the ferret's behavior, and credited it to the "dangerous" proclivities of the species. One should be extremely circumspect when deciding just how credible is an "expert" with no first hand experience with the subject animal.

The often mis-cited work by Dr. Carolyn King, Immigrant Killers, the history of introduced exotic species to the North and South Islands of New Zealand, graphically illustrates that even though domestic ferrets were introduced and deliberately released in the tens of thousands to control exploding populations of European Rabbit, they died out almost immediately. Even with no indigenous predators to control their numbers they failed to establish! It was necesary to introduce thousands of stoats (Mustela nivalis) and polecats (Mustela putorius) to control the plague of rabbits.

It is plainly apparent that those who most often cite Dr. King's book in opposition to keeping domestic ferrets as pets have never read the book itself. This is because what they are citing from is a book review wherein the reviewer misquoted the book making it readily apparent he/she had not read the book either.

The problem is that the misquoting in the book review is representative of the entire case of opponents of domestic ferrets. Their research is shoddy, shallow, and biased. Were they submitting a thesis for their degree of the same quality as the CDHS Report on ferrets, it is highly unlikely any of them would graduate. The real tragedy is that any agency or official that relies on their report is relying on tainted, inaccurate data which cannot stand up under close, objective scrutiny.

In conclusion we would remind the reader of what we consider to be the three major flaws in the CDHS Report.

- First, neither author had any first hand experience with domestic ferrets from which to draw their conclusions;
- Second, the authors constantly anthropomorphize ferret behavior, which, simply put, does not equate;
- Third, the original charter under which the report was prepared was to totally ignore any semblance of objectivity, and prepare a report supporting a pre-existing regulation.

These three points, any one of which should totally discredit the objectivity and validity of any "scientific" report to which they apply, when taken together should not only discredit the report, but should offend all fair minded readers.

About the Authors:

William B. Phillips is an attorney in private practice in Healdsburg, California. He graduated with a B.A. from Willamette University, in Salem, Oregon in 1970, and from Lewis and Clark College, Northwestern School of Law with a Juris Doctorate in 1974. For the last seven years he has made an extensive study of domestic ferrets, in the process acquiring one of the largest ferret information data banks in existance. He has a ferret of his own under a permit from the California Department of Fish and Game. He has written extensively and lectured on ferrets throughout California, and has mounted ongoing legal challanges to the ban on ferrets in that state. In 1986 he founded the California Domestic Ferret Association, and has acted as coordinator for the various domestic ferret associations in California, including F.U.R.R., the Ferret Underground Rail Road, a rescue operation that assists in the removal of any domestic ferrets seized or discovered in California to adoptive homes in surrounding states. Mr. Phillips is married, and fortunately his wife, Trudy, a Physician's Assistant, is extremely supportive of his work.

Fara M. Shimbo is an ethologist living outside Boulder, Colorado. She graduated with a B.S. from Brooklyn College in 1976. Over the past nine years, she had owned or served as a half-way house for over forty ferrets, and has produced two books (*The Ferret Book*, published in 1984 and *The Ferret Fancier's Sourcebook*, currently in press) and numerous articles on the subject of ferrets, their genetics and their behavior. She is now the Director of the Office of Information for the Ferret Unity and Registration Organization, and edits The Weasel Help Quarterly, FURO's newsmagazine. Ms. Shimbo has also given expert witness testimony on behalf of ferrets, and is Rehabilitation Director for Colorado Ferret Rescue. She shares her home with husband Robert, an electrical engineer; Ruby, a blue-eyed striped ferret; Mong, a siamese cat; and Official Dude, a Thoroughbred Hunter.

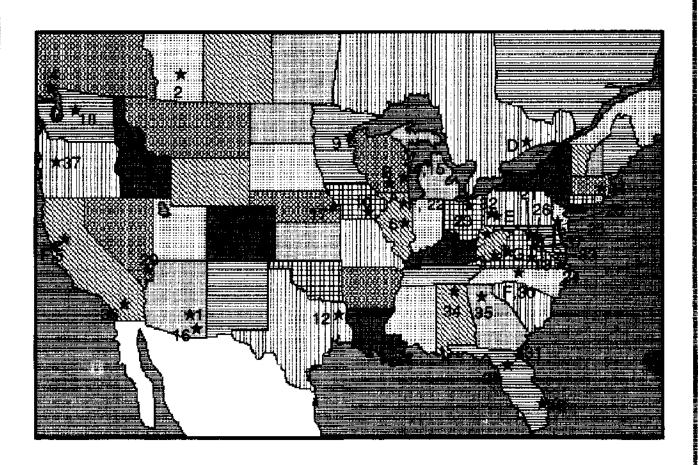
Deborah W. Kemmerer is a veterinarian living in Gainsville, Florida. She recieved her BA in Zoology from the University of Texas and her DVM from Texas A & M University. She is a contributing author for The Ferret, a quarterly journal for veterinarians interested in ferret medicine and has published numerous papers on the subject. She will be a speaker on Ferret Medicine and Surgery at the American Veterinary Medical Association's annual meeting in 1989 and at the Bastern States Veterinary Conference in January, 1990. Her practice consists partially of referrals of ferret cases from all over the Gulf and Atlantic Coast states, and she has bred and owned ferrets for many years. She is currently the Consulting Veterinarian for the Ferret Fanciers' Club of America.

The authors would like to express their gratitude to Mary Van Dahm of the Greater Chicago Ferret Association, Ian Chadwick of the Domestic Ferret Association of Canada, and the members of theNorth Carolina Ferret Association, who supplied valuable papers, citiations, and personal contacts invaluable in the preparation of this document.

Ferret Clubs and Organizations

Perhaps the greatest testament to the popularity of the Domestic Ferret in both the United States and Canada is the number of Clubs and Private Shelters which have arisen in these countries. Ferret Clubs range in size and scope from international non-profit educational corportations (such as the Ferret Unity and Registration Organization Inc.) and veterinary associations (the American Ferret Veterinary Association) to small local clubs meant specifically for ferrets of a certain color or type of ferret, to electronic bulletin boards which are either entirely devoted to ferrets or which maintain a "ferret forum."

On the following pages are the names, addresses, telephone numbers and CompuServe PPNs (denoted CIS, for forwarding of electronic mail) where applicable. The map provided below gives a general idea of the locations of these clubs for your convenience.



Ferret Organizations

The following 50+ local, national and international organizations offer information of all types concerning ferrets. This list is by no means complete; it is only what is known to the current authors at this time.

National and International Organizations

A. American Ferret Breeders' Association Janice Miller, Pres. 505 Racine Lane Bolingbrook, Illinois 60439 (312) 739-0014

B. American Ferret Veterinary Association

Dr. Mike Kohn 1014 Williamson Street Madison, Wisconsin 53703

C. Canadian Ferret Breeders' Association 11891 No. 2 Road Richmond, BC V7E 2E9 Canada

D. Domestic Ferret Association of Canada

47 Oakcrest Avenue Toronto, Ontario, M4C 1B4, Canada (416) 698-8666 (416) 698-8880 (FAX) CIS 70735,1010

E. Ferret Fanciers' Club 711 Chatauqua Ct. Pittsburg, PA 15214

F. Ferret Unity and Registration Organization

(Non-Profit Corporation)

Membership/Administration Office
John R. Armshaw, President
P.O. Box 884
Elon College, NC 27244
(919) 342-7748
CIS 72500,327

Ministry of Publications, Office of Information.

Fara M. Shimbo, Director P.O. Box 11216 Boulder, Colorado 80301 (303) 530-9246 9AM-5PM Mountain Time CIS 70260,231

Ministry of Mercy (Ferret Shelters) Mary K. Van Dahm, Director 237 S. Lincoln Westmont Illinois 60559

237 S. Lincoln Westmont, Illinois 60559 312-968-3189 9AM-5PM Central Time

Ministry of Defense (Legal Department)

William B. Phillips, Director P.O. Box 1868 Healdsburg, California 95448 (707) 431-2277 CIS 71141,537

Ministry of Shows:

Kevin R. Craig, Director 2650 University Avenue #C Morgantown, WV 26505 (304) 296-8096 CIS 72077,2570

G. International Ferret Association

P.O. Box 552 Roanoke, VA 24003 (704) 344-5889

H. United Ferret Organization

6 Water Street, Box 555 Ansonnet, Massachusetts 02702

Regional, State and Local Clubs

Adopt-A-Ferret P.O. Box 43513 Tuscon, Arizona 85733

2. Alberta Ferret Association

4801 50th Avenue Wataskawin, Alberta T9A 0S1 Canada

3. Blue Ridge Ferret Association

1210 Fourth Street Blue Ridge, VA 24064

4. British Columbia Ferret Association

11891 No.2 Road Richmond, British Columbia V7E 2E9 Canada

5. California Domestic Ferret Association P.O. Box 1868 Healdsburg, CA 95448

6. Central Illinois Friends of Ferrets P.O. Box 564 Urbana, Illinois 61801

7. Colorado Ferret Fanciers' Association P.O. Box 11216 Boulder, Colorado 80301

8. **Colordao Ferret Rescue** P.O. Box 1894 Boulder, Colorado 80306 (303) 444-7364

9. Domestic European Ferret Fanciers' and Breeders' Association of Minnesota 14920-14926 Paul Avenue Marine on St.Croix, MN 55047-9751 (612)433-5993

10. East Iowa Ferret Association Rt 1 Box 153AA West Branch, IA 52358 (319) 643-7429

12. East Texas Ferret Association P.O. Box 12280 Longview, Texas 75607 (214) 735-2385

13. Ellicot City Ferret Club 8751-C Town and Country Blvd Ellicot City, MD 21043

14. Ferret Fanciers' Association 5959 N 37th Street Milwaukee, Wisconsin

15. Ferret Fanciers of Greater Milwaukee 4264 N. 84th Street #3 Milwaukee, Wisconsin 53222

16. Ferret Friends Virginia Childs 1067 W. Miracle Mile #4

40 Mabel Street Trenton, NJ 08638

21. Gainesville Ferret Meisters P.O. Box 15176 Gainesville, Florida 32604 (312) 968-3189

22. Greater Chicago Ferret Association

P.O. Box 7093 Westchester, Illinois 60154 (708) 357-8682

23. Greater Cleveland Ferret Club P.O. Box 09418 Cleveland, Ohio 44109

24. Hampton Roads Ferret Association 14 White Lane Newport News, Virginia 23606 (804) 599-9535

25. Loudon Area Ferret Fanciers 902 N. Watford Street Sterling, Virginia (703) 430-6329

26. Maryland Ferret Association 1121 Grandin Avenue Rockville, Maryland (301) 251-0518

27. **Montgomery Ferret Club** #5 Honey Brook Circle Gaithersburg, MD 20878 (301) 330-5492

28. Mountaineer Ferret Association 821 Coleman Avenue Fairmont, WV 26554 (304) 366-6652

29. **Nevada Ferret Association** P.O. Box 44297 Las Vegas, Nevada 89116 (702) 438-5339

30. North Carolina Ferret Association P.O. Box 18193 Greensboro, NC 27419 (914) 342-7748

31. North Florida Ferret Association 3000 Beutlich Road Middleburg, Florida 32068 282-5162

32. Pennsylvania Ferret Association P.O. Box 360 Library, PA 15129

33. Pet Pals Ferret Rescue 7402 Joseph Court Annandale, Virginia 22003

34. Rocket City Ferret Club Box 5537Huntsville, Alabama 35814 (205) 828-6018

35. Son of a Fitch Club 3604 Reese Circle Talmo, Georgia 30575

36. Southern California Ferret Association 12134 4th Street Yucaipa, CA 92399

37. Virginia Ferret Fanciers 8417 Leaf Road Alexandria, VA 22309

Ferret Shelters:

Atlantic Coast:

Athena McBride, Box 770, College Park, MD 20740 Vicki Waldren, 1121 Grandin Avenue, Rockville, MD 20851

Southern:

North Carolina Ferret Association Pet Pals Ferret Rescue

Great Lakes:

Greater Chicago Ferret Association

Midwest:

East Iowa Ferret Association

Gulf Coast:

Gainesville Ferret Meisters

Rocky Mountains:

Colorado Ferret Rescue

Desert Southwest

Ferret Friends Adopt-A-Ferret Nevada Ferret Association

Pacific Coast:
Ferrets Northwest

Eastern Canada:
Domestic Ferret Association of

Canada

In December 1988, the California Department of Health published a report entitled "PET EUROPEAN FERRETS: A HAZARD TO PUBLIC HEALTH, SMALL LIVESTOCK AND WILDLIFE."

The following excerpts are from that report:

"Ferrets develop feral populations and are especially destructive of poultry and small wild animals such as rabbits. As a result of this well recognized problem, the keeping of ferrets as pets was outlawed in California in 1935." (CDH 12-88 Report, p. 11)

"DFG had restrictions against entry of pet ferrets into the State ... due to the knowledge that escaped ferrets develop feral populations that have a tendency to ravage wildlife and small livestock (e.g., poultry and rabbits)." (CDH 12-88 Report, p. 2)

"It must be emphasized, though, that feral ferrets abound in other states with climates far more severe than occurs in most of California, and that California's poultry producing and game bird producing areas provide habitats especially attractive to ferrets." (CDH 12-88 Report, p. 15)

The reality is that literally no effort was made to determine the accuracy of these statements. They are what the Report's authors wanted to believe, and what they wanted the public to believe, and so the report was published without any regard for the truth. This elitist attitude is, "After all, the public will believe it to be true because we (the CDH) say it is true." Sadly, not only much of the public, but many other public health officials willingly embraced the lies.

The attached 100 + letters from the Departments of Agriculture and Departments of Wildlife from all 50 states demonstrate graphically the total falsehood of CDH's allegations. They should raise a serious question in the mind of any objective and responsible person about the ethics and acumen of the authors of the CDH 1988 Report.

In Summary, despite the fact that ferrets have been in the United States for at least 300 years:

- Feral Populations of Mustela furo in the United States: NONE.
- Agricultural damage due to feral or stray *Mustela furo* in the United States: NONE.

Source: The Departments of Wildlife and Departments of Agriculture of all States in the Union, statements attached.