

Exotic Pet Mammals: Current State of Exotic Mammal Practice

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Abstract: Increased awareness of the availability of exotic pet mammal veterinary care, along with an increase in the number of veterinarians willing to provide such care, has likely led to increased demand for veterinary services, even as ownership declined in several categories of exotic pet mammal. Ferret ownership increased from 1991–2001, along with rabbit ownership, but ownership declined for gerbils and other rodents. In 2001, ferret owners were most likely to see the veterinarian (44.9%), while rabbit and guinea pig owners were less likely, at 15.9% and 15.4%, respectively. The dollars spent per household on exotic pets is significantly less than that spent on dogs and cats, yet client expenditures have increased steadily. Educational opportunities for veterinarians have increased and board specialties have been established for avian practice, and steps have been taken towards an exotic companion mammal specialty. Online support and other educational venues, as well as legal issues, are discussed to help the exotic mammal veterinarian stay informed and aware of current issues.

Exotic Pet Mammal Ownership in the United States

The most recent US pet ownership and demographics sourcebook (2002) indicated that in 2001 more households reported owning rabbits than any other exotic mammal (1.7%).¹ In comparison, 0.7% owned hamsters, 0.5% guinea pigs, 0.5% ferrets, 0.2% gerbils, and 0.3% owned a category listed as “other rodents” (Table 1). In order to put these pet ownership statistics into perspective, in the same years 36.1% of US households owned dogs and 31.6% owned cats. Statistics from 2001 also demonstrate that most rabbit and ferret owners own more than 1 animal.

Trends over the last 10 years (1991–2001) are instructive as well. Of the exotic mammals surveyed, ownership of ferrets and rabbits actually increased, while ownership of hamsters, guinea pigs, gerbils, and other rodents reported a distinct decrease (Table 2).

The potential negative of these trends for veterinarians is dramatically overcome by another more significant trend: the likelihood of exotic mammal owners to seek veterinary care for their pets. Of the above exotic mammal categories listed above, in 2001, ferret owners were most likely to see the veterinarian (44.9%), while rabbit and guinea pig owners were less likely, at 15.9% and 15.4%, respectively. However, of the species mentioned, when compared from 1991–2001, the percentage of owners seeking veterinary care for exotic mammals decreased, with the exception of guinea pigs and gerbils (Table 3).

Therefore, from 1991 to 2001 more Americans owned ferrets, but a fewer percentage of them purchased veterinary care. Statistically, this still represents an overall increase in the number of veterinary visits for ferrets, as ferret ownership has risen dramatically in 10 years.

Pet owners who seek veterinary care spend less per household on their exotic mammals than they do on dogs and cats, but the amount spend from 1991–2001 is steadily increasing. From 1991–2001, the amount spent per household

on any specialty or exotic pet rose from \$40.10 to \$106.90. In the same time, expenditure per household for dogs rose from \$131.80 to \$257.40, and cats for rose from \$70.80 to \$156.90 (Table 4).

The dollars spent per household on exotic pets is significantly less than that spent on dogs and cats, but trends clearly show expenditures have increased consistently, and have actually exceeded the rate of increase for expenditures on dogs.

Much of this trend is likely due to increased awareness of the availability of exotic pet veterinary care, along with an increase in the number of veterinarians willing to provide exotic pet care.

In the city of Indianapolis in 1991, the telephone book directory listed only 1 clinic mentioning the availability of veterinary care for exotic pets of any kind. In 2005, there were 5, including 2 clinics advertised as exclusively treating exotic pets.

Table 1. Pet exotic mammal ownership statistics for 2001.

Exotic mammal species	Ferret	Rabbit	Guinea pig	Hamster	Gerbil	Other rodent
% households	0.5%	1.7%	0.5%	0.7%	0.2%	0.3%
Total number in millions	0.991	4.8	0.629	0.881	0.319	0.786
Number animals/household	2.1	2.7	1.2	1.2	1.9	2.5

Table 2. Pet exotic mammal population trends from 1991 to 2001.

Exotic mammal species	Ferret	Rabbit	Guinea pig	Hamster	Gerbil	Other rodent
Population in millions 1991	0.275	4.57	0.838	1.31	0.619	0.875
Population in millions 2001	0.991	4.810	0.629	0.881	0.319	0.786

Table 3. Percentages of exotic mammal owners seeking veterinary care by species from 1991 to 2001.

Exotic mammal species	Ferret	Rabbit	Guinea pig	Hamster	Gerbil	Other rodent
Households seeking veterinary care, 1991	56.3%	16.0%	12.7%	5.0%	2.0%	11.6%
Households seeking veterinary care, 2001	44.9%	15.9%	15.4%	3.6%	5.8%	8.7%

Table 4. Increase in dollars spend per household on exotic and specialty pets vs dogs and cats during the time period 1991–2001.

Species	Exotic and specialty pets	Dogs	Cats
1991	\$40.10	\$131.80	\$70.80
2001	\$106.90	\$257.40	\$156.90

Opportunities for Education and Advancement in Exotic Companion Mammal Medicine

Of veterinary schools in the United States, nearly all now offer some exposure to exotic mammal medicine. However, conversations with senior students from 6 US veterinary schools completing internships at the author's clinic indicated they were overwhelmingly of the opinion they were ill prepared in any aspect of exotic animal medicine and surgery.

A casual survey of 10 veterinary schools with some reputation for offering exotics training revealed a wide range in the quantity and quality of avian and exotic course work available for students, and exotic medicine and surgery services offered in school-associated veterinary clinics. It is very difficult to compare programs and services, as not all schools are able to quantify educational opportunities in the same way. Of interest is the number of faculty members dedicated solely or primarily to exotic companion mammal medicine, which ranged from 0 to 6.

A number of institutions and private practices offer intern and externship opportunities in exotic animal medicine. Facilities specifically listing exotic/wildlife/zoo internships opportunities with the Veterinary Internship Residency matching Program (VIRMP) include 6 universities (Kansas, Louisiana, Oklahoma, Tufts Cummings School of Veterinary Medicine, Western College of Veterinary Medicine, and the University of Guelph in Ontario,) and 8 private practices. Four universities (Davis, Cornell, Tennessee, and Wisconsin) and 2 privately owned practices listed residency opportunities.²

The number of continuing education opportunities continues to climb, as state, university, and private organizations add exotic sessions to their educational line up. A few are even exotic-only, including the 4-day International Conference on Exotics.³

In 2006, the North American Veterinary Conference offered 3 entire days of continuing education dedicated to exotic companion mammal medicine, comprising 27 individual sessions taught by 7 internationally known speakers.⁴ Attendance at small mammal sessions is on average higher than at avian, zoo, or wildlife sessions, and has increased by nearly 50% from the years 2004 to 2006. Ten years ago, programs were generally limited to 1 day each of small mammal, avian, and reptile medicine (S. Barten, personal communication, May 2006).

In 1993, the American Board of Veterinary Practitioners (ABVP) established a board specialty for avian practice, with rigid requirements for certification, and in 2006 listed 118 board-certified avian specialists from the US, Canada, and the Netherlands.⁵ In the same year, the European veterinary community established ECAMS, the European College of Avian Medicine and Surgery.⁶ In 2005, the Association of Exotic Mammal Veterinarians began steps for establishment of an Exotic Companion Mammal specialty through ABVP.⁷ An update on the current status of this project will be presented at this conference.

The American College of Zoological Medicine (ACZM)⁸ also offers an opportunity to become board-certified in all classes of exotic animals, including pet mammals.

Support and Resources for Exotic Mammal Veterinarians

The number of textbooks on exotic pet medicine has increased dramatically since Harkness and Wangner's 1977 first edition of *The Biology and Medicine of Rabbits and Rodents*. A casual count revealed over 60 specialty books and journals, many of them specifically for exotic companion mammals, including 1 textbook dedicated specifically to rabbit and rodent dentistry.^{9,10}

In the United States, the Association of Avian Veterinarians (AAV) began in 1980 as a group of 175 veterinarians.¹¹ Today, membership tops 3300 veterinarians from 43 countries.¹¹ The Association of Exotic Mammal Veterinarians (AEMV) was formed in 2002 and now claims nearly 500 members.⁷

On-line support includes Veterinary Interactive Network (VIN), and professional forums such as the Exotic Forum sponsored by ExoticDVM.^{3,12}

The Legalities of Exotic Mammal Pet Ownership

Ownership of exotic mammals is not always clear cut, and may fall under regulatory control. States, townships, and communities may choose to define what it considers acceptable and unacceptable pets.¹² While the keeping of mammals generally considered domestic, such as the rabbit and guinea pig, is seldom challenged, other exotic mammals may not fare the same.

The AVMA has struggled for years to come up with recommendations on exotic pet ownership. The Council of Public Health and Regulatory Veterinary Medicine has suggested AVMA state "The American Veterinary Medical Association opposes keeping wild animals as pets."¹³ The deficiencies of such a simple statement are readily apparent. The general banning of "wild" animals completely ignores wide differences in general pet suitability.

AVMA has published a draft position statement on the keeping of wild indigenous and exotic animals that appears to make distinctions based on pet suitability, safety, and husbandry requirements.¹⁴ A supplement to the draft position specifically lists a number of exotic mammals classified as high-risk potential or as having unique husbandry requirements and therefore not recommended as pets (Table 5). AVMA supports the development of minimal standards required for ownership of these classes of animals.

Updated draft versions can be viewed at www.avma.org/issues/policy/default.asp.

Table 5. Supplement to the AVMA draft position statement on the keeping of wild indigenous and exotic animals: mammal species with high risk potential or unique husbandry requirements.

Large carnivorous members of the family <i>Felidae</i> except <i>Felis domesticus</i> (domestic cat)
Large carnivorous members of the family <i>Canidae</i> except <i>Canis domesticus</i> (domestic dog)
Any member of the family <i>Ursidae</i> (bears)
Any member of the family <i>Elephantidae</i> (elephants)
Any member of the family <i>Rhinocerotidae</i> (rhinoceros)
Any member of the family <i>Hippopotamidae</i> (hippopotamus)
Marine mammals
Non-human primates

Barriers to Exotic Mammal Practice: Lack of Information

Practitioners have access to a myriad of continuing education opportunities, including conferences, specialty course work, and published resources. As in every other technical field, some sources of information are superior to others. A number of well-known and popular resources contain information best described as anecdotal, and repeated from source to source without the backing of research or clinical data. In some cases, research and clinical data simply does not exist, a situation common in any emerging field. Practitioners must evaluate sources of information critically and take the time to examine a writer or speaker's reference material in order to distinguish between information presented as anecdotal or experience based, and that which can be considered more "evidence based."

Every year, researchers and others publish research and case reports of interest and benefit to exotic mammal practitioners. However, almost none are published in journals typically read and accessed by practitioners. During research for a paper on hedgehog diseases, the author discovered 18 relevant papers on hedgehog neoplasia and other diseases. Not one was published in a journal typically read by practitioners. Articles were found in the *Journal of Comparative Pathology*, *Journal of Zoo and Wildlife Medicine*, *Veterinary Clinical Pathology*, and the *Journal of Parasitology*.

An enormous amount of data is generated by the laboratory animal community, and much of it is of benefit to the exotic mammal practitioner. However, not all information is applicable, as there are often significant differences between common diseases in pet mammals and those seen in laboratory animals.⁸

Solutions to the information barrier include encouraging practitioners to write and publish well-documented clinical case reports, and encouraging those in research and academia to publish in journals likely to be read by practitioners. Practitioners must also consider accessing research-based journals either through direct subscription or through a journal abstract service or on-line resource such as PubMed (www.pubmedcentral.nih.gov). Several exotic animal-oriented publications such as the *Journal of Exotic Pet Medicine* (www.elsevier.com/wps/find/journaldescription.cws_home/707222/description#description) review abstracts from the literature that are of benefit to practitioners.

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