

## EXOTIC PET PRACTICE IN THE USA

Mark A. Mitchell, DVM, MS, PhD, DECZM (Herpetology)  
University of Illinois, College of Veterinary Medicine  
Department of Veterinary Clinical Sciences, Urbana, IL USA

---

Exotic animal veterinary medicine in the USA has made great strides over the two decades that the author has been in practice. Much of the change coincides with the dramatic changes seen in domestic and production species medicine that occurred at the same time and revolves around the evolution of the human-animal bond and the economics of producing animal products for consumption. The former is most responsible for the approach clients take with their pets, while the latter is responsible for directing more veterinarians into the field.

Over the past 80 years the US population has shifted from rural to urban communities. Over this time, US citizens have also “shifted” the way that they look at animals. Originally, like many cultures, animals served as a food source or as assistance as working animals. The only non-domestic animals to serve this function were those species used for hunting purposes (e.g., raptors). The shift to urban communities removed the access most people had to production species but not domesticated dogs and cats. Over time, these “working species” moved from living “on the farm” to “in the house”. This change led to individuals having increased contact with these animals and the development of a relationship where the animals became “members of the family”. For many this has become especially relevant during times of disaster. While at Louisiana State University, the author experienced firsthand the expectations individuals have for their pets during Hurricane Katrina. Individuals being rescued from rising waters would not leave without their pets. In addition to this, thousands of animals, domestic pets and exotics, were re-located to the Louisiana State University campus for care during the aftermath of the storm. This change in the perception for what animals represent to a population has shifted from perceiving animals as a “means to and end” to something to provide “emotional support” has occurred over a short period of time. This rapid change has also transcended to exotic species too.

Imagine talking with individuals during any of the great plagues about their perception of rats. These animals are now considered cherished pets by many and when we talk of diseases as veterinarians we focus on Mycoplasma and fibroadenomas. Rabbits? When the author started practice in 1992 the diets available for rabbits had protein levels in excess of 20%, fat levels in excess of 12%, and fiber levels lower than 15%. These diets did their job. Grow rabbits large; quickly. The diets were intended for meat and fur rabbits. Individuals producing the diets saw an opportunity to market the diets for the growing pet rabbit segment. Unfortunately, these types of diets led to health problems for these animals. In only two decades these diets have changed dramatically. Protein levels lower than 15%, fat levels less than 2%, and fiber levels higher than 30%. These diets also do their job. Provide rabbits

lower calorie diets that allow gradual growth so these animals can live out their lives to ripe old ages of 10-14 years. Rabbits and rodents are one of the segments we have seen some of the most dramatic change as it relates to practice. In addition to changes in diet, there have also been dramatic changes in other aspects of husbandry, such as housing. Historically, rabbits were housed outdoors, similar to dogs and cats. Over the past two decades, however, these animals have moved indoors. Similar to dogs and cats, this type of relationship has led to increased direct contact with the pet rabbit. When it was outdoors, contact was limited; however, once indoors, exposure is constant. The dramatic change in the human-rabbit bond that has formed is quite interesting. At the University of Illinois practice, it is not uncommon for rabbit owners to pursue a wide range of diagnostics and therapies, including advanced surgeries. Average case costs range in the hundreds of US dollars, while it is not uncommon for some clients to spend thousands of dollars for their cherished pet. Again, the dramatic change that has occurred over such a short period of time is quite interesting and worth investigation unto itself.

Similar changes in diet (e.g., all seed to diverse diets), husbandry, and the approach to people take with their pet psittacine birds has also occurred over this time. For example, it is rare that the author now needs to explain to a veterinary student the difference between a closed and an open leg band. It is similar to trying to explain to them what Atari is, when they have only ever known Play station, X-box, or Wii. Psittacine bird management may represent one of the most dramatic changes in exotic pet practice in the US over the course of the author's tenure as a veterinarian; experiencing both growth and decline over this short period of time. While rabbits and rodents have long been raised in captivity for food, fur, or laboratory research, parrots only began to be reproduced in captivity in large numbers over the last quarter of the past century. Captive bred animals led to an explosion of popularity across the US. Unfortunately, this also has led to dramatic increase in unwanted animals and hoarding. What appeared to be fast initial growth within this segment appears to be slowing. Much of this, especially with the larger parrots, is related to the natural behaviors of these animals and the high level of care they require.

Because of the author's particular interest in reptiles, amphibians, fish, and invertebrates, changes in the attitudes towards these species are the most interesting. Again, similar to the earlier question posed about rats, how many people over time would likely consider reptiles, and more specifically snakes, or invertebrates (e.g., cockroaches and arachnids) as pets? These animals have long held negative connotation in many cultures. Today, individuals may maintain dozens or hundreds of these animals within their domicile. In the USA, there tends to be two types of caretakers for these species: those that maintain them as pets and those that maintain them as a business. In both cases, veterinarians are asked to work these animals; however, the level of care provided can vary. As with the other aforementioned species, the level of care being offered and requested for exotic species has grown dramatically. When the author first became involved with exotic animals, it was not uncommon for clients to weight the replacement cost of the pet against the cost of service. This has been one of the major changes noted not only at the author's practice but across the USA. The development of the human-animal bond has led the caretakers of these animals to not see the cost of the animal as its value but instead its inherent emotional value to them as what they believe it represents to them (and are willing to invest back into it). Certainly, there are still those cases where the animal's replacement value is still an important consideration, but this remains for cats and dogs too.

The American Veterinary Medical Association (AVMA) and the American Pet Product Manufacturer's Association (APPMA) are two organizations that routinely survey the pet population landscape in the United States. Their surveys provide an estimate of the number of households that maintain companion pets in the United States and also attempt to estimate the number of animals in a given household. This information is derived primarily by these two organizations to provide their respective industries with the information they need to develop future strategies regarding the sale and care of pets in the United States; however, it is also invaluable to professional associations working with these species, such as those joined at the current meeting for developing long term plans for their respective members. The last published report by the AVMA was in 2012. The results of the survey suggested that exotic pets are not uncommon in U.S. households. Of all the exotic species included in the survey, fish represented the largest group being kept as pets (57.75 million). This is interesting because veterinarians in the USA still play a limited role in providing health care for ornamental fish. Birds represented the second largest group of exotic animals being kept as pets (approximately 8.3 million); however, according to the survey, the number of birds kept as pets had decreased by almost 27% compared to the number found 5 years earlier (2007). Reptiles (lizards, snakes, chelonians, and others) accounted for approximately 5.2 million animals in the survey. Rabbits were the next largest group with 3.2 million animals. If all rodents were combined (e.g., hamsters, gerbils, guinea pigs, other rodents), the total number of these animals being kept as pets was approximately 3.8 million. Ferrets represented the smallest number of animals being kept as pets (approximately 750,000); however, these animals are illegal to own in California and the survey probably underestimated the true number of ferrets in the USA. When attempting to derive estimates of a pet animal population from published surveys, it is important to recognize that these types of surveys can underestimate the actual number of cases. For example, the 2001 AVMA survey suggested that approximately 2.9 million reptiles were being kept as pets in the United States, whereas the 2000 APPMA survey suggested the number might be as high as 9 million. This represents a 68% discrepancy in the number of proposed animals. With over 1 million animals being imported annually, it would suggest that more reptiles are being kept as pets than the AVMA survey suggests. Although it is arguable that many of the imported animals succumb during transport, these numbers do not account for the thousands of captive-born reptiles being sold in the US market. Regardless of the source, it appears that exotic pet numbers are going to continue to rise in the USA. With this increase in animal numbers, it is important that veterinarians take advantage of the opportunities to gain new knowledge and contribute to the scientific literature to expand our knowledge regarding these species. For the author, the past twenty years have been filled with excitement and discovery, and much of the same is expected over the next twenty years of practice.