

## COMMENTARY

# Domestic Reptiles and Amphibians?

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Photographs by the author except where indicated.

Forty years ago, the idea of captive bred reptiles and amphibians was just a dream. In sharp contrast, today's herpetoculturists have a huge assortment of captive-bred herps from which to choose — Rat Snakes (*Pantherophis*), King Snakes (*Lampropeltis*), pythons (Pythoninae), boas (Boinae), Bearded Dragons (*Pogona vitticeps*), Leopard and Fat Tail geckos (*Eublepharis*), Day Geckos (*Phelsuma* sp.), chameleons (*Chameleo, Furcifer*), horned frogs (*Ceratophrys*), White's Treefrogs (*Litoria caerulea*), and on and on. Most of these are available in forms or color patterns that nature never intended. Among the King (*Lampropeltis*), Gopher (*Pituophis*), Milk (*Lampropeltis*), and Rat (*Pantherophis*) snakes, myriad hybrids also are available. This also is true for Horned Frogs (*Ceratophrys*) and probably Bearded Dragons. Furthermore, many herp enthusiasts swear that their charges are "tame."

The dictionary tells us that a "tame" animal is, "reduced from a state of native wildness, esp. so as to be tractable and useful to man." Tameness, then, is a quality of an individual animal. However, I would suggest that many herps not only have the ability to become "tame" (useful as a pet), but some actually come under the label of "domestic." Most definitions of domestic involve qualities such as having an animal's breeding controlled



A captive-bred amelanistic Black Rat Snake (*Pantherophis obsoleta*) would almost certainly fall victim to a predator in nature.

by humans, having a human-desired purpose for the breeding, and having changes take place in the species so that it is no longer



A captive-bred "apricot morph" of the Pueblan Milk Snake (*Lampropeltis triangulum campbelli*).





Natural variations in patterns, such as in these wild-caught Ball Pythons (*Python regius*) provide a palette from which breeders can generate morphs never seen in nature.

exactly like the wild form. Other qualities that have been considered include hardiness, an inborn liking for man (are honeybees domestic? How about cultured pearl oysters?), comfort loving, having a flexible diet, fast growing, and with a modifiable social structure. Authorities who have tried to define domesticity include Jared P. Diamond, Pulitzer Prize winning author of *Guns, Germs, and Steel* and *Collapse: How Societies Choose to Fail or Succeed*, and Francis Galton, child prodigy, world explorer, author, British Knight, and half cousin to Charles Darwin. Some animals have been domesticated for a long time. Examples are the dog (14,000 years), cat (5,000–8,000 years), horse (5,000 years), and goldfish (1,700 years). However, some species have achieved domesticity

in shorter periods. Parakeets have been around for 160 years in captivity, hamsters for 75, and guppies for 80.

What about reptiles? Consider that Crested Geckos (*Rhacodactylus ciliaris*) were being bred in captivity in fairly large numbers by 1993. Ball Pythons (*Python regius*) have been commonly captive-bred for close to 15 years, and Corn Snakes (*Pantherophis guttatus*) have been bred in captivity for more than 30 (I communicated with zoos in the early 1970s about the best way to breed Corn Snakes). Much of this breeding was done with amateur herpetoculturists in mind, making animals that fed better, bred better, were “prettier,” and were more “handleable.” Animals that would survive captive rearing were the ones with the simplest requirements and the most flexible habits.



One of many captive-bred Leopard Gecko (*Eublepharis macularius*) patterns; albinos, orange forms, and leucistics also are available.



Many Crested Gecko (*Rhacodactylus ciliaris*) morphs have been produced by selective captive breeding.





Tens of thousands of Bearded Dragons (*Pogona vitticeps*) are bred annually and the species has been selectively bred in captivity since the late 1980s; at least seven distinct color forms are mentioned in one popular care manual.

Many herps have fairly long generation times for small animals, breeding at 2 or more years of age. This means that 30 years (time since Corn Snakes have been captive bred) would give us time for 15 generations to be “selected” by captive breeding. Some of the smaller lizards like Crested Geckos (*Rhacodactylus ciliaris*) can breed at one year of age, allowing more generations in less time, so quicker selection by breeders. Let’s look at some of the prime herp candidates for domestic classification. Corn Snakes are my nominee for number one. They have been bred for decades and occur in at least 30 different color and pattern morphs. Tens of thousands are bred annually for the pet trade, and every pet shop that handles herps has or can get Corn Snakes. All ages tend to feed well on domestic mice. Most individuals are handleable, and skin shedding takes place with few problems. Corns can be easily raised and bred in very simple habitats with a substrate, heat source, hide box, and water dish. Several of the color phases are showy enough that they would probably be lost to predation in the wild. Hundreds of hatchling Corn Snakes may be seen at any decently sized herp expo.

Leopard Geckos are probably domestic #2. An awful lot of Bearded Dragons are bred every year, but Leopard Geckos have been around in numbers for a longer time. Many years ago, I received a call from a Texas university wondering if I had these animals available in quantity as they were trying to diversify their research colony. A look at the internet or printed price lists shows at least 30 available Leopard Gecko varieties, with an estimated 200,000 individuals bred worldwide each year. This doesn’t quite compare with the 350 dog breeds, but it’s still pretty amazing.

Bearded Dragons are another “domestic” breed. They seem more prevalent at some herp shows in the Midwestern United States than even Corn Snakes or Leopard Geckos. Surely thousands of these are bred annually. In the U.S., the initial breeding work was done in the late 1980s, perhaps 20 years ago. Bearded Dragons are naturally rather phlegmatic and handleable as adults. At least seven distinct color forms are mentioned in a popular care manual, and breeders are constantly creating and naming new ones. As with Leopard Geckos, commercially formulated artificial foods are available, although supplementation with insects and other vegetation often is recommended.



Captive breeding can generate hybrids that combine pattern elements of two different parental species. This is a captive-bred hybrid Corn Snake and California King Snake (*Lampropeltis getula californiae*); both parents were albinos.

The next domestic herp candidate is the Crested Gecko. Described in 1866 and presumed extinct prior to the early 1990s, the Crested Gecko is certainly bred by the thousands annually in the U.S. Similar to the three above-mentioned creatures, online forums and breeders of this lizard are numerous. Formulated diets that are



Captive-bred Ornate Horned Frogs (*Ceratophrys ornata*) speak eloquently to the fact that reptiles are not the only “domesticated” herps.



A Variable King Snake (*Lampropeltis mexicana*), “thayeri” phase with a pink ground color.

sufficient to raise the species through several generations are commercially available. Color and pattern varieties are constantly being discovered and interbred. At least three major color groupings are available with as many as 11 described colors. At least nine different patterns have been described. Crested Geckos are available in pet shops (including chains), although in my area of the Midwest, they are not seen at swap meets in such substantial numbers as the other three domestic herps.

Although many other species might be nominated as “domestic” (see the list at the beginning of this article), the above four (Corn Snake, Leopard Gecko, Bearded Dragon, and Crested



This mixed clutch of Corn Snakes (*Pantherophis guttatus*) provides a glimpse of the available color patterns that include normal, ghost, hypomelanistic, and anerythristic color morphs.

Gecko) are my favorites based on number produced, commercial availability, preponderance of information on the web in forums and dealer websites, number of publications on their care, generations of captive breeding, commercial availability of foods, and variety of morphs. California King Snakes (*Lampropeltis getula californiae*) (many, many color varieties), Ball Pythons (one popular book has 139 pages of different ball python color/pattern morph photos), and tri-colored milk snakes like the Pueblan Milk Snake (*Lampropeltis triangulum campbelli*) are herps that might give the big four a run for their money.

Not all definitions of domesticity include tameness (consider commercially raised pearl oysters, honey bee colonies, and some of the more territorial dog species). A number of types of domestic livestock are large enough to be a hazard to the unwitting human. According to the 2007 American Pet Products Manufacturer’s Association’s National Pet Owner’s Survey, 13.4 million reptiles are kept as pets in the U.S., compared with 13.8 million horses. Based on their history, use by mankind, active captive breeding, and number kept in captivity, surely at least some herps deserve to be admitted to the ranks of the domestic!

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