



Red-eared slider (photo by TomWebber)

## The Trade in Live Reptiles: Exports from the United States

### INTRODUCTION

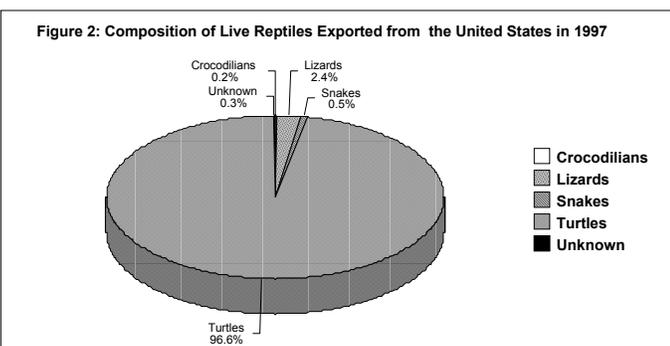
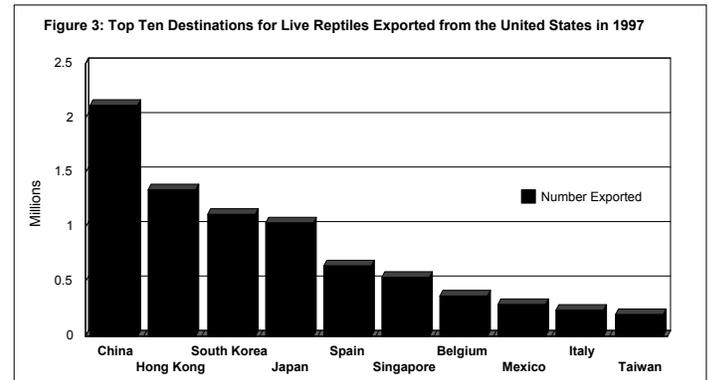
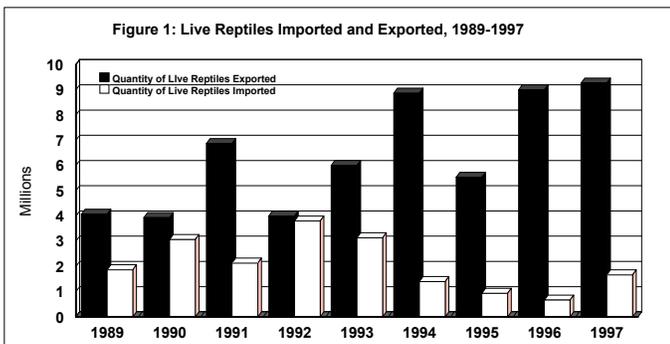
The United States plays a major role in the international trade in live reptiles not only as a consumer but also as a supplier of live reptiles to other countries. Most live reptiles exported from the United States are freshwater turtles raised on so-called farms. Others are captured from the wild in the United States, are captive-bred in the United States, or are first imported to the United States, repackaged, and then exported to other countries. Live reptiles exported from the United States are used as pets or, in the case of freshwater turtles, sold as food.

### REPTILE EXPORTS

More than 57.8 million live reptiles, representing 638 taxa, were exported from the United States between 1989 and 1997. In 1997 alone, more than nine million live reptiles were exported from the United States (1997 is the most recent year for which data are available). This is five times the number of live reptiles imported in that year (Figure 1). The demand for live reptiles to supply growing international pet and food markets has led to a doubling of the number of reptiles exported from the United States over the past nine years (Figure 1). Turtles are the most commonly exported reptile species (96.6 percent), followed by lizards, snakes, and crocodilians (Figure 2).

The most common live reptile species exported from the United States are the red-eared slider turtle (*Trachemys scripta elegans*), which originates from so-called farms in the southeastern United States (this species alone comprises 93.2 percent of live reptiles exported from the United States); the common green iguana (*Iguana iguana*), which originates from so-called ranches in central and south America; the green anole (*Anolis carolinensis*), which is collected from the wild in the southeastern United States; and map (*Graptemys spp.*) and basking turtles (*Pseudemys spp.*), which are collected from the wild in the eastern United States (Table 1).

The top destinations for live reptiles from the United States are China, Hong Kong, South Korea, and Japan. Live turtles exported to these countries are sold as food and kept as pets. Reptiles exported to European countries are kept as pets. The most common species exported to the top ten destinations was, in every case, the red-eared slider.



Export information is based on an HSUS analysis of U.S. Fish and Wildlife Service data on live reptile exports from the United States.

**Table 1: Top Five Species of Live Reptiles Exported from the United States in 1997**

	<p><b>Red-Eared Slider (<i>Trachemys scripta elegans</i>)</b></p> <p>Red-eared sliders are omnivorous freshwater turtles, native to rivers, streams, and lakes of the southeastern United States. The species is reared in massive numbers on so-called farms located in the southeastern United States, principally Louisiana. More than 8.7 million red-eared sliders were exported from the United States in 1997, constituting 93.2 percent of all live reptile exports that year. The largest numbers were exported to China.</p>
	<p><b>Common Green Iguana (<i>Iguana iguana</i>)</b></p> <p>Common green iguanas are one of the largest species of iguana, growing to six feet in length. Found in Central and South America, they inhabit rain forests, woodlands, and savannahs and as adults eat only vegetation. Common green iguanas are imported to the United States, repackaged, and exported to foreign countries. In 1997, 83,686 common green iguanas were exported from the United States, constituting 0.9 percent of all reptile exports for that year. The largest numbers were exported to Japan. (photo by Diane Weber)</p>
	<p><b>Green Anole (<i>Anolis carolinensis</i>)</b></p> <p>Green anole lizards, the only anole native to the United States, can be found from southern Virginia to the Florida Keys and west to Texas and Oklahoma. They are carnivorous and highly territorial and can change color, turning bright green when defending their territory and turning brown in cool temperatures. In 1997, 58,095 green anoles were exported from the United States, constituting 0.6 percent of all live reptile exports that year. The largest numbers were exported to Canada. (photo by H. Vannoy Davis)</p>
	<p><b>Map Turtles (<i>Graptemys spp.</i>)</b></p> <p>Map turtles are aquatic turtles, comprising 13 species that live in rivers, streams, and lakes in the eastern United States, from Florida and Texas north to the Dakotas and Quebec. Map turtles are highly prized by collectors for their coloring and distinctive shell markings. The main threats to the species are habitat destruction and degradation, particularly water pollution, and collection for the pet trade. In 1997, 53,105 map turtles (species unidentified) were exported from the United States, constituting 0.6 percent of all reptile exports that year (this does not include exported map turtles that were identified at the species level). The largest numbers were exported to Italy. (photo by George W. Robinson)</p>
	<p><b>Basking Turtles (<i>Pseudemys spp.</i>)</b></p> <p>Basking turtles—a general category that includes painted, slider, and river cooter turtles—are found from Canada to northern Mexico in shallow ponds, lakes, and streams. The main threats to the species are habitat destruction and degradation, particularly water pollution, and collection for the pet and food trades. In 1997, 33,899 basking turtles (species unidentified) were exported from the United States, constituting 0.4 percent of all exports that year (this does not include exported basking turtles that were identified at the species level). The largest numbers were exported to Taiwan. (photo by John White)</p>

## CONSERVATION CONCERNS

Reptiles play an important role in their ecosystems. Reptiles consume insects, insect larvae, and rodents and help to keep populations of these species in check. Reptiles, particularly eggs and young, are important food sources for a number of other animal species. Depletion of reptile populations may have negative and irreversible effects on ecosystems.

The collection of reptiles for trade has seriously harmed many wild populations of reptiles. Many reptile species have very slow reproductive and recruitment potentials. Their populations cannot recover quickly from over-collection and can easily become depleted. One example is the bog turtle (*Clemmys muhlenbergii*), native to the eastern United States. Due to its rarity, unique coloring and small size, the bog turtle is highly prized by collectors. Wild populations declined to such low levels due to over-collection that the species is now federally protected as a threatened species under the Endangered Species Act (ESA). In addition to federal protection, the species is listed as endangered in seven states and threatened in five. Unfortunately, collectors continue to offer top dollar for the species, and illegal trade continues to take a toll on wild populations. Several other American turtle species that have been detrimentally affected by collection for the pet trade are box turtles (*Terrapene spp.*), wood turtles (*Clemmys insculpta*), and spotted turtles (*Clemmys guttata*).

The vast majority of reptiles exported from the United States are not protected by local, state, federal, or international law from over-collection due to trade. For example, only 1.4 percent of the reptiles exported from the United States are protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Table 2). CITES is a treaty that protects listed animal and plant species from over-exploitation due to international trade. CITES protection includes protection from inhumane treatment during overseas shipping. While the ESA prohibits the commercial export of listed species, no other federal wildlife laws apply to reptile exports. Few states have restrictions on the collection and export of reptiles species, and only five—Florida, Nebraska, Nevada, Louisiana, and Texas—have endeavored to collect and report information on the numbers of reptiles collected from the wild and exported. No wild populations of American reptile species are managed to ensure that collection for export does not cause a detriment to wild populations. Several states, including Ohio, Illinois, and Indiana, have banned commercial collection of reptiles due to declining wild reptile populations. However, there are exemptions to these laws. For example, Ohio still allows the collection of softshell and snapping turtles for sale as food.

Reptile Type	Number of Animals Exported	Number of Animals Protected by CITES (percent of total for each type)	Number of Taxa Exported	Number of Exported Taxa Protected by CITES (percent of total for each type)
Crocodylians	20,209	20,154 (99.7)	7	6 (99.1)
Lizards	222,705	101,201 (45.4)	212	67 (31.6)
Snakes	43,650	4,572 (10.5)	140	36 (25.7)
Turtles	8,990,699	6,419 (0.07)	90	33 (36.7)
<b>Subtotal</b>	<b>9,277,263</b>	<b>132,346 (1.4)</b>	<b>449</b>	<b>142 (31.6)</b>
Unidentified Species	27,925	Unknown	Unknown	Unknown
<b>Total</b>	<b>9,305,188</b>	<b>132,346 (1.4) (minimum)</b>	<b>449 (minimum)</b>	<b>142 (31.6) (minimum)</b>

In addition to the harm to wild reptile populations caused by over-collection, some collection techniques are also harmful to the environment. For example, noxious chemicals are sometimes used to drive reptiles from their burrows or hiding places. These chemicals, such as gasoline, are highly toxic, contaminate the environment, and render the hiding places useless to other wildlife. Another example is the use of crowbars to open burrows or rock crevices, which destroys hiding places used by a variety of wildlife.

Most reptiles exported from the United States are not collected from the wild, but this does not eliminate conservation concerns about the trade. The vast majority of reptiles exported from the United States, more than 93 percent, are red-eared sliders raised on so-called farms in the southeastern United States, principally Louisiana. These are not farms in the true sense of the word because they are not captive-breeding facilities. Instead, adult turtles are captured from the wild to stock ponds on the farms. Eggs laid by the wild-caught adults are collected and reared intensively to produce quarter-sized hatchlings, or “baby turtles,” which are exported from the United States by the millions. The impact of the collection of vast numbers of adult red-eared sliders from the wild to stock these farms is unknown.



Corn snake (photo by Tom Webber)

## HUMANE CONCERNS

From the time wild reptiles are captured, they are subjected to various forms of harm and neglect that result in the loss of many animals before they reach their destination. A reptile collector’s main concern is to capture as many animals as possible and keep them alive at minimal cost until they can be supplied to a farm (in the case of red-eared sliders) or exported. Collectors are not

overly concerned with reptile fatalities, injuries, or illnesses because the animals cost them virtually nothing to obtain. Huge

quantities are collected because deaths are anticipated due to neglect and ill treatment. Injurious capture techniques include pitfall traps, noxious chemicals used to drive animals from their hiding places, metal rods with hooks at the end used to drag animals from their burrows, stunning with blow guns, underwater turtle traps, and bait and hook on a line used to catch aquatic turtles. Once captured, reptiles are often kept confined in cloth bags for long periods while the collector continues his work for the day. These bags may contain many individuals and/or many species of reptiles. Injury and stress are inevitable.



Softshell turtle (photo by John Tashjian)

Reptiles destined for foreign countries are transported to holding facilities to prepare for shipment. Holding facilities are often over-crowded and filthy places where reptiles do not receive adequate food, water, space, or veterinary care. Over-crowding causes fighting between the animals that often results in injuries or, at the very least, high levels of stress that further weakens the reptiles’ immune systems. Disease is rapidly spread under these conditions. Once a customer’s order is complete, the reptiles are packaged into shipping containers. Since all live reptiles exported from the United States are shipped by air (with the possible exception of overland shipments to Canada), the voluntary shipping standards of the Live Animal Regulations of the International Air Transport Association should be followed. However, these regulations are enforced only for species listed under CITES. As noted above, only 1.4 percent of exported reptiles are covered by CITES. Consequently, most exported reptiles are not protected from inhumane shipment. Even those species protected by CITES may be shipped under poor conditions because understaffing at ports where shipments are inspected means that the regulations are not fully enforced.

Reptile exporters utilize the cheapest and most convenient method of packing and transport possible, giving little if any consideration to the welfare and comfort of the reptiles that are being shipped. Taking measures to ensure humane shipping conditions would cut into their profits. The death of reptiles during shipment is acceptable to the dealers and is anticipated by many who overload reptile shipments to make up for animals that perish. Often, hundreds of reptiles are crammed into cardboard boxes for shipment. Turtles may be stacked on their side, prohibiting them from any movement or even emerging from their shells. Shippers attempt to jam as many reptiles as possible into a shipment and therefore take measures to restrict the animals' movement as much as possible. Lizards may have their limbs taped together; turtles may be completely taped into their shells.

During transport, reptiles may be subjected to temperature extremes, delays in travel and they are left completely unsupervised without food, water, or veterinary care for the duration of their journey. If a shipment is found by port inspectors to be packaged improperly or without proper documentation, the shipment may be either delayed significantly or sent back to its place of origin. Often, no consideration is given to the fact that the shipment consists of live animals. Reliable data on reptile mortality during international shipment is scarce. Reptile dealers and pet store owners who receive reptile shipments would have the most complete information on reptile mortality during shipping, but for obvious reasons they do not reveal it. It is certain, though, that large numbers of reptiles die in transport. Many inspected, confiscated or abandoned reptile shipments have revealed that the animals are often packaged improperly and that frequently entire shipments perish during transport to their destination. One study on reptile mortality of 139 reptile shipments of 104,954 reptiles imported to Germany found that reptile shipments from the United States to Germany had, on average, a 3.1 percent mortality rate upon arrival. However, some American species suffered very high mortality rates on arrival. For example, 35.7 percent of Florida softshell turtles (*Apalone ferox*) and 32 percent of map turtles (*Graptemys spp.*) were dead on arrival.



Juvenile map turtle (photo by John White)

Many of the reptiles that survive long enough to be purchased as pets become ill and die from the trauma they have suffered prior to sale. This explains why many reptiles purchased as pets

suddenly die or simply waste away even with the best of care. Illness and injury in reptiles is not readily apparent as it may be in mammals such as dogs and cats. Reptiles are able to sustain serious injury, stress and illness for extended periods of time before appearing sick or finally succumbing. Based on the few available studies, it is estimated that ten percent of captured reptiles die between capture and export, three percent of exported reptiles die during transport, and ninety percent of reptiles that arrive alive at their destination die within a year.

As noted above, many exported turtles are destined for Asia, or Asian markets in other areas of the world, where they are sold in live animal markets as food. These markets offer living turtles, frogs, fish, chickens, and other animals. They are notorious for the neglect and brutal treatment of the animals. Live turtles have their shells torn off while they are fully conscious (in fact, no humane slaughter method exists for turtles). Several foreign companies and individuals that service such markets have standing orders for up to one ton of live turtles per week from United States suppliers. Florida softshell turtles and red-eared sliders are two of the most common turtle species exported for this purpose. In 1998, the Ontario Society for the Prevention of Cruelty to Animals investigated Canada's live animal food markets and documented the shocking abuse and filth at these businesses. Canada has since banned the sale of live turtles and frogs on food premises and prohibited the importation of softshell turtles from the United States due to inhumane shipping conditions.



Two Florida softshell turtles are removed from a live animal food market in Canada. Both died shortly after seizure due to massive skin infections, dehydration and starvation they suffered during transport and holding at the market. (photo by Ontario SPCA)

## CONCLUSION

The export of live reptiles from the United States causes significant conservation and animal welfare problems. Millions of reptiles suffer every year due to brutal treatment in this trade that supplies foreign markets with reptile pets and food. Although The Humane Society of the United States understands the widespread interest in reptiles, we conclude that reptiles should not be kept as pets by members of the general public. Moreover, the practice of exporting living turtles in order that they may be sold as food in live animal markets is unacceptable considering the suffering caused by this practice.

For additional information see the HSUS report, *Reptiles as Pets: An Examination of the Trade in Live Reptiles in the United States*.

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