

The Long Island Reptile Museum

A Critical Report by the Tortoise Trust



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Introduction

The Long Island Reptile Museum is located at 70 Broadway, Hicksville, on Long Island, New York and promotes itself as “a 27,000 sq. ft. facility with over 170 museum quality exhibits containing over 3,000 live reptiles and amphibians from around the world”. An associated reptile pet-store retails a wide range of animals to the public. A gift shop additionally offers reptile-related art and curios. There is admission to the general public, and also to corporate and school groups.

There is no doubt that public education in the field of reptiles and amphibians is a very worthwhile endeavor, and should be encouraged and supported by all those concerned at the steady loss of these species and their habitats. However, it is vital that establishments engaged in such activities maintain high standards, and that visitors are provided with a quality, safe experience. Animals utilized for such purposes should be maintained in good to excellent conditions, and should reflect the very best principles of sound captive husbandry and management in practice. It is also critical that such institutions convey a comprehensive and consistent message promoting conservation. The Long Island Reptile Museum claims to provide all of the above, however, on closer examination we believe that it fails to deliver on a single one of the critical aspects highlighted.

Following receipt by the Tortoise Trust, over a long period, of disturbing reports involving this establishment (including a near-lethal snake bite received by an employee in recent years), we made an unannounced inspection visit on Tuesday, December 5, 2000. This report details what we found during that visit, and discusses our grave concerns regarding the safety and humane treatment of the many animals housed there.

It would, of course, be unfair to highlight only the problems and to ignore the better or good aspects. On the positive side, the majority of the aquatic turtle tanks were clean, well designed, and the animals appeared healthy and well cared for. Some of the desert terrariums for snakes and lizards were also very satisfactory. The informational signs accompanying the exhibits were also generally good. Unfortunately, these positive impressions were very soon overwhelmed by a growing number of serious concerns as we progressed through the exhibit.

Our concerns may be divided into two main categories;

- 1) The quality of animal maintenance;
- 2) The educational value and conservation aspects of the operation.

These matters are discussed separately in the pages that follow.

Animal husbandry and humane issues

It is critical for the long-term health and comfort of animals that they be maintained under appropriate environmental conditions. In the case of reptiles, temperature and humidity are of prime concern, and failure to provide satisfactory levels or gradients of these parameters will seriously compromise health. At the L.I. Reptile Museum many of the cages used are deficient in a number of important respects. Specifically, almost all of the cages inspected had open tops, with animals contained by means of wire mesh grills. Each enclosure shares atmosphere, with humidity levels tending to equalize. At the time of our inspection, internal humidity within the building was exceptionally low and rain forest species were exhibited alongside desert species. While satisfactory for arid habitat species, for rain forest or tropical species (such as Green iguanas), the level of humidity provided was totally inadequate. These species require a relative humidity of 70 to 80% if dehydration and subsequent renal disease are to be avoided. Humidity levels in the building were considerably lower (approximately 20%) and due to the deficiencies in cage design would be experienced with very little variation by arid and humid habitat animals alike. The provision of small ponds of standing water, or water dishes, in some enclosures would make very little – if any – impact upon the situation. The only solution would be to install individual climate control on a room-by-room or cage-by-cage basis as is typical in well-designed professional zoological exhibits, utilizing humidifiers, sprinklers and misting systems as appropriate. The present installation is generally incapable of providing optimum (or even adequate) levels of climate control for the species on display. Many animals were observed that displayed obvious problems that are directly related to a lack of ambient humidity, specifically difficulty shedding (dyssecdysis). Some animals appeared generally dehydrated, particularly the terrestrial tortoises (*Testudo* and *Geochelone* sp.) that were maintained in extremely small “fish tank” type vivaria - a method of housing condemned by most leading authorities and tortoise organizations as unsatisfactory and inhumane.

It was noted that full spectrum UV-B lighting was provided in many exhibits, based upon either Vitalite® or Zoo-Med® fluorescent tubes, however, in many cases the distance of these tubes from the basking sites provided was several feet. In one iguana cage, the distance from the UV-B lights to the basking site was in excess of 6 feet. At such distances, negligible UV-B is received. In order to perform effectively, the distance from UV-B fluorescent tubes to basking sites should be no more than 24”, and preferably within 18”. This appears to be acknowledged in at least some of the cages, as efforts have been made to provide raised basking platforms. Regrettably, this seemed to be the

exception rather than the rule, however. Tubes also need to be changed at least every 6 months in order to maintain their UV-B output at optimum levels. Many of the tubes observed at the Long Island Reptile Museum appeared to exhibit obvious signs of old age (burning in the region of the excitors), as such it is doubtful if adequate levels of UV-B were being provided to many of the animals on display. Given the design of the enclosures, a much better lighting option would be self-ballasted mercury vapor lamps (“UV-B Heat”) that provide higher levels of UV-B at much greater distances than is achieved by use of fluorescent tubes.

Incandescent lamps are the prime source of basking heat provided at the museum. These can be entirely adequate if installed properly. Unfortunately, in many cases the lamps are positioned very poorly and would be liable to cause over-heating or injury. One Green iguana was observed in very close proximity to such a lamp (installed at a dangerously low level) and this animal exhibited very clear evidence of severe contact burns to the front limbs and body (illustrated). While basking facilities in some enclosures were good, in others they appeared seriously deficient or positively dangerous.

Overall lighting levels in some exhibits were very poor indeed. Perhaps the worst example is the central ‘amphitheatre’ or ‘petting area’ housing a mixed display of Seychelles, Leopard and Sulcata tortoises. This area was extraordinarily dull and poorly lit – no proper overhead lighting of any kind was evident. These are savannah species, and require exceptionally bright lighting. The lighting actually provided comprised four 48” wall mounted fluorescent tubes and a few incandescent basking lamps located at random around the walls. This is in no way satisfactory or adequate for these animals – that should, ideally, be housed outside in natural sunlight in an appropriate climate. The year-round indoor maintenance of giant tortoises is simply unacceptable in the view of the Tortoise Trust. The area provided for these extremely large tortoises is also absolutely inadequate. At the Long Island Reptile Museum, two fully-grown Seychelles giant tortoises share an area no larger than an average household living room with several large Sulcata and Leopard tortoises (illustrated). These are also grazing species, and to maintain digestive health, and to sustain overall nutrition, regular access to fresh grass and hay is mandatory. At the Long Island Reptile Museum no such access appeared to be provided. This is a very disturbing and unsatisfactory situation, and humanity demands that these animals should be removed as soon as possible to a more suitable environment.

Overcrowding is also very evident in the iguana exhibits, where inter-male aggression is resulting in severe biting injuries (illustrated). Females too (including pregnant females) were observed to be chased and bitten by cage-mates. While this behavior is, to a degree, natural, it is exaggerated by overcrowding and inadequate sized housing. The housing together of adult male iguanas is always apt to prove problematic due to the highly territorial nature of this species. A considerable amount of space is demanded by these animals when housed in groups to permit retreat and the establishment of personal territory. In our view, the iguana exhibits at the Long Island Reptile Museum had too many animals in too little space. Where severe injuries are resulting from combat, the animals should be separated as soon as possible. Gravid females should never be subjected to undue aggression or stress, or there is a likelihood of egg-retention (dystocia)

occurring. A highly gravid female Green iguana was observed on the bottom of one enclosure, but no nesting box or egg-laying facility was evident, and to us, she appeared in some distress. We find this extremely disturbing in a supposedly professional collection, as egg-peritonitis is a very possible outcome if adequate nesting facilities are not provided.

The iguanas observed on display were also severely infected with red “snake mites” (typically *Ophionyssus* sp.). These are a major – and serious – problem. They are highly contagious and spread rapidly from cage-to-cage, and are potentially a vector for a number of serious pathogens, including retroviruses and gram-negative bacillus. Snakes in adjacent cages were also observed to harbor these parasites, which can generally be assumed to be endemic throughout the entire collection due to the open-topped style of housing employed and lack of any form of adequate isolation from one enclosure to another.

Substrates (“tank litter”) used in the many of the exhibits varied from calci-sand to wood mulch to compost type material. On the whole, tank hygiene was adequate to good. Some animals, however, were maintained on incorrect substrates, e.g., a Chaco tortoise (*Geochelone chilensis*) on a white sand substrate in a fish-tank type vivarium, and a Russian tortoise (*Testudo horsfieldii*) on what appeared to be a thin layer of cypress mulch. Both of these species burrow in nature, and if maintained on very hot, dry substrates where they are deprived of the more humid microclimate experienced in their burrows will stress and dehydrate very quickly. An open-topped box turtle display was also extremely dry – although a source of soaking water was available in this instance.

The museum, in its promotional literature, cites “The natural habitat exhibits have been created so that the animals feel right at home. The museum is state-of-the-art and in touch with the latest scientific data and knowledge concerning the animals we are presenting”.

The reality is that enclosure design at the Long Island Reptile Museum is, by modern standards, seriously inadequate and out-of-date. There is an overall inability to regulate climate to provide optimum, or even safe, levels of temperature, lighting and particularly humidity for the animals on display. Many of the exhibits are also utterly unacceptable, in our opinion, on humane grounds due to lack of size and overcrowding. The exhibits frequently convey an entirely incorrect impression of how the animals exist in nature, and therefore are of extremely dubious educational value.

One is also moved to ask, if this is “state of the art”, why entirely different species are mixed together in the same enclosures? Why are Leopard tortoises and Sulcata tortoises mixed with Seychelles tortoises, and why are North American box turtles exhibited in the same enclosure as an African hinge-back tortoise? What does this teach the casual visitor and why does the museum appear to be entirely ignorant of the extremely grave risks of (especially viral) disease transmission that such mixed species groups are notorious for? Such practices are widely acknowledged to be highly inadvisable, and set a particularly poor example to the pet-keeping public. Why are tortoises housed in “fish-tank” type

vivaria that are, in our opinion, too small by a factor of at least 10 for the size of animal, and how does this accord with the claims that the exhibits are “state-of-the-art” and designed to make the “animals feel right at home”? Why is cross-contagion with parasitic pathogens such as mites clearly such an obvious problem in this “state-of-the-art” collection? These are questions that need to be addressed, and addressed urgently.

Conservation values and educational aspects

The museum offers a range of options for group “education” both on-site and off-site. Costs for off-site activities range from a 1-hour program with eight live reptiles and amphibians for \$450 to a full-day program with 12 live reptiles for \$750. School visits are also available for 10-100 children at rates from \$6.95 to \$5.00 per child.

While attempts to educate the public are laudable, given the situation with regard to the condition of the animals as outlined above, one must seriously question what – exactly – is being learned here. It is certainly not, in our opinion, how to care for animals in a safe and humane manner. We believe that the example set is quite the opposite.

If not proper animal husbandry, then what is taught on conservation must be considered. The authors of this report do not have direct knowledge of the quality of education offered on this subject so are unable to comment in detail. It may be that conservation values and respect for animals and their natural habitats are adequately conveyed. However, if one examines the activities of the L.I. Reptile Museum in detail, one finds that certain aspects appear to conflict in a very disturbing way with the ethos of “conservation” and responsible care for captive animals that is supposedly being promoted.

The museum’s promotional literature states, for example, that the associated pet store “offers reptile and amphibian babies produced by the museum breeding program”. This is only partially true. The pet store simultaneously sells a wide range of wild-caught, non-captive-bred animals. One must therefore seriously question the commitment of this institution to conservation. Why are so many wild-caught animals on sale if there is any real commitment to the principles of reptile conservation?

The choice of species being offered is also very disturbing. These include *Geochelone sulcata*, one of the largest terrestrial tortoises in the world, and a species that is already presenting rehoming organizations with considerable difficulties as juveniles very quickly outgrow the facilities most purchasers can hope to provide. This species can attain almost 200 pounds in weight and requires a very substantial outdoor area in summer, and costly indoor accommodation over winter. The Tortoise Trust and American Tortoise Rescue have both issued warnings to the public to be aware of the dangers of buying this species and the difficulties in rehoming unwanted animals. This is a situation that will only get worse.

A very similar scenario applies to other species offered at the museum's store, including Asian Water Monitors, a lizard that can grow to 7 feet long and can weigh 135 pounds, and Burmese Pythons, a snake noted not only for its enormous dimensions (up to 20 feet long, weighing up to 200 pounds) but also for its particularly aggressive and dangerous disposition. This particular species of snake has been involved in some quite notorious incidents, including the well-known case in Colorado where a 14-year-old boy was attacked and killed by his family's 8-foot specimen. Even the 'common' Green iguana (adults and juveniles are sold at the Museum's store) pose major husbandry and ultimately rehoming problems for the average purchaser. Each of these species regularly feature on lists of "least suitable reptile pets" issued by leading humane societies and responsible reptile educators. Even many stores decline to stock and sell these particular species due to their lack of suitability. So why is the Long Island Reptile Museum actively promoting them? This is not a position remotely consistent with responsible pet ownership or with the role of reptile educator. Any institution that took such a role seriously would, in our submission, be cautioning the public *against* purchasing these particular species – they would not be seeking to profit by encouraging ownership. Other, far more suitable species, exist that can legitimately be offered as pets. We are therefore incredulous that anyone claiming to "educate the public" about reptiles should instead choose to offer the species listed above.

The quality of information available to would-be purchasers in the pet store section is also very poor. Why, for example, when the Green iguana exhibit (correctly) states that these animals are exclusive herbivores in nature, does every book sold in the store insist that they are "insectivorous" or "omnivorous"? Again, we find this in conflict with the stated aims of the museum to "educate". How is providing false (and ultimately damaging) information to purchasers educating them?

Animals exhibiting serious (but avoidable) nutritional deformities are on display in the main exhibits, and were also being offered for sale in the retail pet section, but nowhere were the causes of these conditions discussed on signs, and nowhere was information presented on how to prevent the problems arising. These deformed specimens included iguanas with severely deformed spines, jaws and limbs, and tortoises with deformed shells. The fact that the animals were abnormal was not disclosed. Here is a genuine opportunity to educate - and it is missed. The exhibition of deformed and/or injured animals can prove distressing to visitors, and is of questionable value except as discussed above.

Conclusion

In our opinion, the situation pertaining at the Long Island Reptile Museum is highly disturbing and is unsatisfactory in a number of critical areas. We would strongly discourage supporting this institution with revenues from paid visits, donations or purchases until such time as marked improvements in animal care and accommodation have been instituted and sustained. We do not believe that the premises offers or is capable of offering a satisfactory potential for the housing of giant or large tortoises, and we believe that these should be removed to a place where appropriate and humane care can be provided as a matter of urgency. We also believe that the pet store that is part of the operation is functioning in a manner that is entirely inconsistent with responsible pet ownership or with the conservation and protection of wild reptile populations. We hope that by publishing this report, the necessary changes will be facilitated as quickly as possible. The building itself is certainly quite suitable for the holding and exhibition of certain species, amphibians and snakes, for example, but some of the species currently being maintained are totally unsuited to the types of environment it is possible, in our opinion, to create within the present structure. With extensive modifications to the animal housing, and with a major improvement in overall standards of husbandry, we believe that the museum could perform a valuable function. We do not believe that this is possible, however, unless wide-ranging improvements to both physical structure and the quality of captive maintenance and husbandry are initiated and fully carried through.

We would very much like to be able to offer our support to institutions that set out to educate the public about reptiles, but the situation we encountered during our inspection visit to the Long Island Reptile Museum was so profoundly disturbing that we believe that only by making our concerns public can conditions be improved for the animals currently held there.

Summary of Recommendations

1. The Aldabra (Seychelles), Sulcata and Leopard tortoises should be removed to a location where they can receive natural light and can access a natural grazing area when weather permits. Their current situation is entirely unacceptable.
2. The Green iguana enclosures are too small for the number of animals they contain, and the environmental facilities they offer in terms of lighting, nesting boxes, and humidity are seriously inadequate.
3. Attention needs to be paid to cross-infection and cross-contagion issues within the collection, especially with regard to mite control.
4. Tortoises and larger lizards currently maintained in small “fish-tank” or “aquarium” type tanks should be removed to more appropriate housing facilities where their needs can be properly met.
5. The physical condition of many animals gave rise to serious concern. In our opinion, the prompt provision of professional veterinary attention appeared to be lacking, with some animals displaying injuries that appeared to us to have remained untreated for an extended period of time. We believe that some of the Green iguanas in particular should be removed to a more satisfactory environment where treatment and care of an appropriate quality can be provided. We believe that this should occur as a matter of urgency.
6. The “conservation message” of the museum is seriously undermined and compromised by the activities of the associated pet-store operation.
7. The obviously (to us) miserable condition of many of the animals, including those with open wounds, deformities and other injuries, and the distressing sight of animals in overcrowded cages that are, by any standards, far too small, is in our opinion sufficient cause to recommend that schools and clubs avoid visiting this establishment until the problems highlighted in this report have been properly and adequately addressed.

ILLUSTRATIONS



An adult *G. sulcata*, one of several large tortoises maintained in an indoor “arena” that is entirely devoid of natural light and vegetation. This living-room-sized arena is in our view totally inadequate and unsuitable for the numbers and types of animals that it contains.



A Chaco tortoise, confined in an extremely small “fish tank” with an incorrect substrate and inadequate environmental qualities.



A Green iguana exhibit at the L.I. Reptile Museum. Note low level positioning of basking lamp (and its close proximity to the animal). The UV-B lighting is several feet distant. This enclosure was extremely dry, with humidity levels of no more than 20% (70-80% would be more appropriate).



This Green iguana displays open wounds and skin injuries consistent with burning and with mite infestation.



Two Seychelles giant tortoises in the mixed tortoise exhibit at the Long Island Reptile Museum. This accommodation is shared with Sulcata and Leopard tortoises - a highly unsatisfactory state of affairs in the view of the authors of this report.



Wild-caught *Testudo horsfieldii* (Russian) tortoises were on sale in the museum's associated pet-store business. This vivarium is far from ideal for the species.



A juvenile *G. sulcata* displaying obvious signs of abnormal shell development (Metabolic Bone Disease). This tortoise was also displayed in a very small, “fish-tank” type vivarium that is totally unsuitable in both space and environmental terms.



Juvenile *G. sulcata* on sale in the pet-store section. According to the Tortoise Trust and other leading reptile organizations, the sale of this species as pets is highly irresponsible due to the enormous size they attain as adults and the difficulty of feeding and maintaining them adequately.

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For and on behalf of:

THE TORTOISE TRUST



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