

FVE presentation October 2012

Public health risks related to keeping of exotic animals

The details are based on a UK perspective of the issues.

Exotic Animal Keeping as pets, by the general public, is increasing. The trade is regulated but insufficiently and often unsupervised. It is only at pet shop level that any inspection or control occurs. The sale via hobbyists, clubs and internet is largely un-inspected.

As the variety of species grows, the potential for problem increases. The primary concern from a Public Health standpoint is the lack of knowledge. We simply do not know what we are dealing with and this is reflected in the concerns for the animal welfare issues.

The presentation will look at the risks to public health from the keeping of exotic animals

Zoonoses

Whilst we have a fairly substantial list of known zoonotic diseases that have been recorded in the wide range of exotics species, we are only on the tip of the iceberg when it comes to understanding the pathology and risks associated with these various bacteria, viruses, and other pathogenic organisms.

The research is lacking and there is huge array of potential diseases that may be transferable between species including humans.

There is a big blank in our knowledge especially with some new species on the pet list.

For example the increasingly popular pygmy hedgehog. We know of a neurological disorder that is invariably fatal in these animals. We have no idea what causes it or whether it is a genetic disorder or an infectious disorder. We can only hope that it is not zoonotic.

Tortoises, we have now identified a near epidemic of infection with herpes virus. This is particularly prevalent in the horsfield species being "farmed" in large numbers via Slovenia to supply the European pet trade.

It is highly likely that the mixing of animals and the poor transport conditions into the pet wholesalers are weakening these animals. Further distribution to retail shops and then to new owners is causing high levels of disease with high levels of mortality. Research is very rudimentary and so far 4 types of Herpesvirus have been isolated from various tortoise species with further herpes viruses found in lizards snakes, crocodilians.

We know little about their variation, species predilection and pathogenic potential. Fortunately herpes is usually very species specific but it highlights the fact that even when commonly encountered as a disease entity, there are more questions than answers.

We now have well populated lists of known zoonotic that we can arrange into lists. These obviously give cause for concern.

It should be acknowledged that our current or traditional pet species have the potential for a wide range of zoonotic diseases, we have a longer tradition of ownership and closeness with these species. Further we know a great deal about those risks and how to mitigate them.

It is just not so with the exotic pets.

Owners can't help but love them in the same way we do our dogs and cats.

It must be remembered that there is not the tradition of domestication and contact is close and risk is high.

Most exotic species are quite simply wild animals kept at home. A snake will not develop a co-dependent bond with its owner. It may respond to the presence of a human and may look for food from them but there are likely to be simple learned reflexes. For people who own mamba snakes, one day it will bite.

Bites, scratches & envenomations

The risks are simply higher. We know that dog and cat injuries are well documented and common. They can be extremely serious,

We know that a bite from an Iguana will be nasty. Now believed to be toxic/vemonus

We know that a bite from a mamba will be extremely dangerous if not fatal.

Treatment is invariably urgent and aggressive. Most hospitals in Europe will be poorly equipped to deal with the problem and they will often resort to surgical fasciectomy if lucky enough to be bitten on an extremity.

We should not have to deal with a bite from these animals.

For scratches, the range of potential infections is vast, they spend most of their day paddling in this and the influence of husbandry will contribute to the cocktail stored under the nail.

Escapes and releases

Risks to environments from release.

In UK & Northern Europe, largely mitigated by climate. The warmer southern climates and perhaps with increasing general temperatures, these boundaries will shift north, have different risks. Exotic species may start to establish.

In UK we already have a problem with red eared sliders in Southern ponds and rivers. They risk unbalancing the natural ecosystems and some terrapin species pose a direct human threat.

It is the smaller species that are of concern. For example released crocodilian can be dangerous but perhaps easier to spot and control, therefore preventing established populations. Smaller species may avoid detection until it is too late.

Snake species are more worrisome due to the secretive nature of the group.

In UK it is not uncommon to encounter released boa and python species. These don't survive the winter.

The increasing interest in Dangerous Wild Animal (DWA) species
Caiman are almost cute when young. They become impossible when adult at 2 metres plus

Do we really want venomous snakes and crocodiles living in our towns and villages?

We must not forget the influence of poor husbandry on the Public Health risks

Keeping any animal in substandard conditions is bad for welfare and disastrous for disease control

An example of the transport of turtle species. Overcrowded, unmanaged temperature control, lack of water & food.

An example of a Pet Fair. Animals amassed from a variety of suppliers hobbyists and traders. Poorly enclosed and subject to all manner of stress triggers.

The problems of increasing species diversity and difficulty in knowledge base for such diversity

One of the greatest challenges would be the lack of data to build a coherent welfare strategy for each and every exotic species now available in the pet trade.

We need:

- Better hygiene understanding by the exotics trade. There is an alarming indifference to this issue in the trade.
An example from a pet fair and ignoring the appalling enclosures for these lizards. They are freely handled by potential customers with no warnings or control.
- Better control of dangerous Exotic Species.
A strict licence or a black list
- To ensure high welfare standards for production and transport of exotics.
- We need better enforcement of existing welfare codes.
- To be able to prove captive bred animals truly are captive bred and not wild caught.
To remove the “disposable” price tag from exotic animal purchases. There needs to be a higher investment fee relating to the ease of keeping these animals so that the impulse purchase is reduced. This, I believe will happen if better welfare enforcement occurs