

## **Animals and us: Forward to the revolution**

PICTURE the Earth 200 years from now. For mile after mile the fields are a vibrant green, the trees covered in spring bloom and the streams are sparkling clean. But something is wrong. Where are all the animals? The sheep, the lambs, the cows? Why is no one out walking their dog? What happened to all those anglers who used to sit for hours on the river bank? And who got rid of the zoos, the race tracks?

Welcome to life on Earth after the animal revolution. A glass dome over the humans separates us from what are now all officially "wild" animals. Beef steaks are grown from cell cultures, and robotic pets are good at everything from minding the kids to caring for the elderly. And we have supercomputers to simulate all the drugs and medical advances anyone could ever dream of.

So what happened? The "Animals have Intrinsic Worth" lobby won out, that's what happened. After a century of gently running down the stock, all animals were left outside the glass dome to find their own level: survive, evolve or die.

But it could never actually happen, could it? Don't be too sure. Various strands in our incredibly convoluted relationship with other animals could all too easily create this situation. Our relationship with animals is complex, interdependent, even perverse, and it has spawned a million paradoxes.

We certainly have a lot to thank animals for. Without food, fur and bone we would in all likelihood never have made it past the early Stone Age. Certainly there would have been fewer of us and we'd have settled in smaller, more scattered communities. Without working donkeys and horses, large-scale agriculture would probably never have developed at all.

Without the huge aggregations of people in towns and cities and international cultural exchange, technology and science could well have been a stunted affair. In short, every single kind of domesticated animal, from the silkworm to the buffalo, has had a profound effect on the world in which we live.

And there's more. A lot more. They provide us with food, labour, clothes and drugs testing, and these are just the beginning. In purely utilitarian terms, animals have provided us with ingredients for cosmetics, the raw materials for jewellery and drugs such as insulin. But domestication of animals such as dogs and goats, which dates back 12,000 to 15,000 years, has confused the picture, creating a tangled inter-species relationship.

Animals have become pets and sources of entertainment in zoos and circuses, and in sports from cockfighting to horse racing. We hunt them, shoot them and ride them for leisure. We gamble on them, sacrifice them for religious purposes, have sex with them, dissect them. We weave stories around them - think Greek myths, Brothers Grimm, *Black Beauty*, *Finding Nemo* - and paint pictures of them. All of which creates jobs for vets, handlers, taxidermists and hundreds of thousands more. Animals and the industries that surround them generate billions of dollars globally.

Our attitudes to animals over history have always been confused (see "It's a dog's life"). But in the past few decades, the way we think about them has been completely transformed. Science has provided us with compelling evidence that animals are more like humans than we previously thought - at the very least, they are sentient. Where animals were seen as

"agricultural products", now they are seen as creatures with feelings. This has been accepted by the European Union, which has put a definition of sentience in its animal welfare legislation: "A sentient animal is one for whom feelings matter." In deciding that they are sentient and have feelings, science has blurred the line between "them" and "us" even more.

Why all the fuss? What's wrong with the way we interact with animals at the moment? Nothing, if you don't accept that animals have their own feelings and emotions, or accept it but still don't care. But if you do care, then you will realise that the moral relationship we have with animals is deeply troubled. It becomes impossible to maintain moral blindness to the way we treat them.

Whether this translates into coherent action is another matter. There is some evidence that some societies are becoming more compassionate. This was only too apparent at an unusually high-profile Compassion in World Farming two-day conference held in London earlier this year, an event that could never have happened even a decade ago. In some of the richer countries, the demand for organic meat is increasing, as are the number of organic farms and the number of vegetarians and vegans. Through the work of welfare scientists such as Temple Grandin, the slaughterhouses of big corporations such as McDonald's now employ higher welfare standards (see "Practical passions").

There is even a name for the scientific study of human-animal interactions: anthrozoology. The discipline has its own international society and journal called *Anthrozoös*. Its next conference is to be held in July.

Breakthroughs in the study of behaviour have helped recognise animal talents and skills as never before. Grandin has even described animal skills in terms of those of autistic savants.

Attributing human characteristics to animals is no longer automatic career death (see "Close encounters") and some believe that by not attributing human characteristics to animals, we may miss something fundamental about both ourselves and them (see Frans de Waal on "Suspicious minds").

But there are others such as Gary L. Francione (see "Our hypocrisy") who worry that invoking the idea that animals have "similar minds" makes it look as though we are evolving in our moral relationship with other species, but this is just a facade. If we did accept them for their intrinsic worth, then we would stop bringing domestic animals into existence for human use completely.

For Simon Blackburn (see "Getting into their heads"), science can only tell us so much. We may never know if they have similar minds or not. So what do you do? There's the rub.

As always, however, there is a darker side to the gifts science offers. Advances in genetics and allied disciplines have given us the power and skill to exploit animals in more intrusive ways than ever before. Think of genetic modification, cloning, xenografts.

Hardly surprising, then, that faced with these paradoxes, humans are exhibiting paradoxical behaviour.

We treat our pets (see "Me and my pet") like members of the family while hardly sparing a thought for the billions of animals slaughtered globally for meat, science and cosmetics.

There is a rush towards vegetarianism and veganism in the UK, while Americans are eating as much meat as ever. We don't want animals to suffer in horrible conditions on farms, yet we are not prepared to pay the premium for higher-welfare meat. We are killing off many animal species through over-hunting and logging while people, too, are being killed by poachers or rebel groups as they struggle to protect animals.

Perhaps we have no choice but to go forward and find some new settlement that works better for both them and us. To stand a chance of thinking this one through - and it does affect every one of us - we need to ponder awhile.

That's the purpose of these special articles. In these pages, we shine a spotlight on some of the extraordinary ways we think about and treat animals, explore some of the shifts going on in our attitudes and behaviours - and expose some of our darkest secrets.

**From issue 2502 of New Scientist magazine, 04 June 2005, page 42**