

### How baby ants are taught – posted 24/07

We are constantly learning that animal behaviour is far more complex and organised than we suspect. We tend to think of Homo sapiens as a uniquely superior animal and forget that ours is an evolutionary story. Most of the time we greatly underestimate the abilities of other animal species.

A cutting I once took from London's Daily Telegraph newspaper reported that University of Bristol scientists had found that ants not only make use of teaching techniques to instruct young ants, but also bring them on at their own pace by making sure that they have fully grasped earlier instructions before moving on to more complex ones.

The team's article in the top scientific journal, Nature, described how adult ants teach young ants how to find food by running with them in tandem. Professor Nigel Franks commented that "true teaching involves feedback in both directions between the teacher and the pupil. The teacher provides information at a rate suited to the pupil's abilities, and the pupil signals to the teacher when parts of the lesson have been assimilated". They found that the methods they were observing in ants met these teaching criteria.

They found that ants laid trails of chemicals called pheromones to guide other ants to food. The leader, a female ant, finds a young ant willing to follow her to food. "The follower frequently pauses to get her bearings before tapping the hind legs and abdomen of the leader to let her know that they can proceed." If the leader moves too far ahead, she will slow down, and the follower will increase its pace.

Professor Franks said that any competent teacher would recognise that the leader ant's process is similar to good learning style in a classroom: the leader makes sure that the follower is understanding the process; she follows a specific plan; she adapts the pace to the followers' needs.

The Daily Telegraph editorial for that day recommended that human teachers could not do better than "follow the practices of the ants". Classroom teaching pace is too often at the pace of those learners who grasp new material quickly. Overlong syllabuses often do not allow for proper exploration, creative input, questioning, and general discussion. If children are able to understand the basics thoroughly, they are able to proceed at a faster pace, instead of falling behind.

### "As dead as a dodo" – posted 30.07.19

One of the mysteries of the human species is why so many people take pleasure in wanton killing of animals. Author Bill Bryson wrote that only human beings, "for no purpose at all", ruthlessly exterminate creatures that do them no harm. He happened to be talking about the dodo, wiped out in Mauritius between 1683 and 1693 and said that the dodo's "millions of years of peaceful isolation had not prepared it for the erratic and deeply unnerving behaviour of human beings". "As dead as a dodo" actually became a simile in our language to emphasise the finality of animal extinction.

About seventy years after the last dodo died, the director of the Ashmolean Museum in Oxford decided to throw out the museum's stuffed dodo because it had, he said, become mouldy. It was at the time the only dodo in existence. A museum employee, appalled that such a treasure was to be thrown out, managed to save no more than its head and one limb, so we don't know what a dodo really looked like and have to rely on old drawings.

The dodo was the largest-ever member of the pigeon family, although it apparently looked quite different. It was over 30cm tall. Since it was flightless, it nested on the ground. This made it extremely vulnerable, not only to human beings, but to the dogs, pigs and monkeys they brought to Mauritius. After its millions of years of existence, human beings wiped out the dodo in just seventy years, yet it was totally harmless to them, and they were not even interested in eating its flesh. They killed it just because it was there.

What has always been difficult to understand about human beings is why so many of them can be thoughtlessly cruel. One sees this even in some children, which is one of the reasons why young people need to be educated regarding compassion. People tend to assume that kindness cannot be taught, but this is not so. As an educator myself, I know there is plenty of opportunity for educators to talk about the value of compassion and how this quality enriches one's life and adds value to the world. In fact, no matter what subject a teacher or lecturer teaches, they are ideally placed to emphasise the value of kindness and integrity.

#### Dogs react to owners' stress levels – scheduled to post 06.08.19

The London Guardian newspaper recently reported that a research team led by ethologist Dr Lina Roth at Linköping University, Sweden, had found that stress levels in canine pets matched high cortisol levels in their owners, especially if the animals live inside their owners' homes and in close contact with them.

The researchers chose 25 border collies and 33 Shetland sheepdogs, along with their female owners, for their project. Cortisol levels were measured by taking hair samples from dogs and their humans. They divided the dogs into two groups. One group was enrolled in regular training schedules and competitions that tested qualities like obedience and loyalty. The other dogs were all companion pets.

In findings published in Scientific Reports, the researchers reported that stress in companion dogs closely mirrored stress levels in their owners. They found that this stress was not environmentally linked, like whether dogs had a garden in which they could run around, whether they had dog companions, or how long they were separated from their owners during the working week.

One factor that emerged was the effect of owner neuroticism, but it was found that dogs with neurotic owners actually had lower hair cortisol. Dr Roth suggested that it might be that neurotic owners seek more comfort from their pets and that hugging and giving them attention would be likely to lead to a reduced level of canine stress. One can't help wanting further evidence, because, as every dog lover knows, not only neurotic people hug dogs. People who love their dogs hug them.

Most owners know that their dogs do pick up emotional signals from them... and we also know that loving one's pets and hugging them reduces our own stress level, and that our animals respond to hugs with obvious pleasure. Dogs are very physical in the ways they show pleasure.

The researchers concluded that they had established that dogs definitely empathise with their owners and are affected by their owners' personalities and their levels of stress. This sounds like common sense, but what the university project usefully achieved was to produce empirical evidence that lines up our feelings about animal empathy with evidence based on research.

Human beings have interacted with dogs for more than 15,000 years. Dr Lina Roth and her team are interested in trying to establish how our lifestyle choices and our behaviour affects our pets.

#### VICTORY FOR NSPCA IN LION BONES EXPORT CASE – posted 13.08

It was a sad day for South Africa when market forces encouraged lion breeders to promote an appalling industry: the export of lion bones to the East, which led to lions being bred ruthlessly for profit under cruel circumstances.

On 6 August 2019, the Gauteng High Court made a judgement that the 2017 and 2018 lion skeleton quotas made for those years were “unlawful and constitutionally invalid”, although they had already been fulfilled. The court strongly rejected the attitude that the “management” of wild animals can totally disregard ethics. Ross Harvey of the Conservation Action Trust covered the story.

The National SPCA had brought the case against the Minister of Environmental Affairs and the South African Predators’ Association on the grounds that the quota process had initially “ignored welfare considerations”.

In November 2018, the National Assembly adopted a report that called for an ending to South Africa’s predator breeding industry and required that current legislation be reviewed “with a view to ending the industry”. Curiously, this was sidestepped via the suggestion by the then Minister of the Environment that the matter be reviewed by a “high-level panel”.

Judge Jody Kollapen noted that the way in which conservation decisions were taken had “ongoing implications” for conservation. He ruled that “the treatment of lions in captivity was an environmental issue” that could not be separated from commercial activities and from the right of present and future generations to an environment “that Section 24 of the Constitution articulates”.

The NSPCA’s “placing intrinsic value on animals as individuals” has important implications for animal welfare. This legal victory is momentous, “because the government is now legally obliged to consider animal welfare in all its wildlife conservation decisions”.

Karen Trendler of the NSPCA notes that this “precedent-setting judgement” establishes that “one cannot simply use, abuse and trade wildlife without considering their welfare and well-being”.

Judge Kollapen clearly ruled on “the unlawfulness of the establishment of the 2017 and 2018 quotas” and unequivocally declared “the captive lion industry” to be “abhorrent and repulsive”. This does not mean that quotas are at an end. Widespread public rejection is vital. Speak out against canned lion hunting where “animals are shot in a fenced enclosure”. Speak out against supplying lion bones which “masquerade” as tiger bones, because tigers have been wiped out. Only public outrage can protect our animals.

#### ANIMAL ANGLE by Shirley Bell – posted 27.08

##### Abuse of animals often develops into abuse of humans

Our long-term education programme - now some fourteen years old - which teaches children about the work of the SPCA and how to care properly for animals has an orientation that might surprise some, yet it is something that all schools should be teaching.

Teachers of any subject are particularly well placed to encourage compassion. Whatever subject is being taught, teachers can pass on valuable comments on 'living one's life in the best possible way' and can lead by example and by the stories they tell and the discussions they encourage. Teaching and lecturing were my own professional career, so I know that there are plenty of opportunities to talk about the role of compassion towards all life.

It is heart-breaking that many people all over the world still do not accept that animals are sentient beings and experience pleasure and pain, anxiety and tranquillity, and a wide range of emotions, just as we do. Our sharing of many feelings is not surprising, since we all evolved from a common source. Animals also have abilities that we do not possess and that developed out the struggle by species for long-term survival.

It is hard to understand why human beings can often be so cruel, but childhood experience can have a strong influence. Research has shown that adult abusers were often abused as children and that they themselves abused animals. Many serial killers were cruel to animals when they were children. Animals are generally helpless and easily fall victim to cruel human beings.

One would expect abused children to be more kindly towards others because of their own painful experiences, but the opposite is frequently true. When children are taught compassion, it is far more likely that they will feel deep sympathy for the suffering of both humans and animals because they have been taught sensitive awareness.

I have produced *The Animal Angle* for almost twenty years and am still amazed at the dedication of the SPCA management and staff and the courage and devotion of the Inspectorate. There are even times when Inspectors' lives are at stake when animals are in hazardous situations.

The evidence is that children who abuse animals often later abuse humans as well and also commit other crimes. Never hesitate to report abuse of both animals and humans.

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#### WORLD RHINO DAY – 22 SEPTEMBER

I was thinking about World Rhino Day and the distressing slaughter of our rhino when I came across an article from *The Conversation* headed "We asked people in Vietnam why they use rhino horn. Here's what they said". *The Conversation* generously allows its information, written by experts, to be used freely as long as acknowledgement is given. Vietnam contributes enormously to the killing of wild rhino. In 2018, 1,100 rhino were slaughtered by poachers. Some months ago, it was estimated that there were only about 29,500 left in the world.

The Vietnamese government has made some efforts to curb the demand for rhino horn and in 2015 increased sanctions on illegal trade, but superstition triumphs over legal threats, and the use of rhino horn is blatant. Conservation organisations have tried to educate Vietnamese purchasers by emphasising that rhino horn plays no role whatsoever in either healing or in sexual prowess. Their appeals have had little effect.

Multiple reasons are given for the purchase of rhino horn, social status being a leading one, as the horn is so expensive. It is used to treat hangovers, gout and serious illnesses.

Purchasers believe that feeding seriously ill people powdered rhino horn will make them feel that everything possible is being done to help them.

Superstition that rhino horn has magical qualities is so firmly entrenched that there is no concern about eliminating Africa's rhino population. It is so powerful a status symbol that it is widely used among professional people and given as a reward in business deals. Whole rhino horns are often donated as a way of gaining favours from powerful people.

Baby rhino are doomed when their mothers are slaughtered as they are totally unable to look after themselves and die either from lack of nourishment or fall prey to predators.

There is absolutely no stigma in Vietnam attached to using rhino horn. Africa is a long way from Vietnam, and users feel uninvolved because they are not personally involved in killing the rhino. (We can't say the same about hunters who come to our country to engage in 'canned hunting' and pay vast sums to kill lions raised on ranches for that purpose. Shame on us.)

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