

most complex minds (great apes, dolphins?), down to animals with no minds at all. I support the Great Ape Project in its plan to give basic legal rights to chimps, bonobos, gorillas and orangutans, but I must also admit that this sliding scale is not entirely logical. How do I know that dogs, for example, suffer less than gorillas, and if they don't, how do I justify giving their suffering lesser consideration? Most people in Hong Kong, I suspect, support an even weaker version: animals have the right to avoid unnecessary suffering, but this can be overridden by human needs, such as cheap eggs and pork, or drugs and vaccines that have been tested on primates. There is also a very long western religious and philosophical tradition that animals are there for human use and have no rights at all.

I have emphasized suffering as the criterion for assessing rights violations, since at least the more mentally complex mammals undeniably do suffer in a way that is recognizable to us. It is not entirely logical – who could enter a Hong Kong fish market if we were similarly sensitive to suffering in fish? – but it is a start. Other issues are much harder to deal with. Do animals have a right to life, or is it O.K. to kill them painlessly? Do they have a right to freedom, even if freedom risks suffering and death? To me both these appear to be ascribing human concerns to animals without any evidence, but I could perhaps be similarly accused of denying them without any evidence.

Conservation biologists have long dismissed people concerned about the welfare of individual animals as “bunny-huggers”, whose views can be safely ignored. But membership in animal welfare and rights organisations has skyrocketed world-wide over the last few decades. Even their – to conservationists – most extreme beliefs are supported by respected philosophers. I am not suggesting that we should stop controlling invasive vertebrates or that we should ban all intrusive research. However, conservationists have to start taking the ethical issues involved in causing harm to individual animals more seriously. We cannot continue to give purely scientific answers to ethical questions: projects must be justifiable on both ethical and scientific grounds. Failure to respond to ethical concerns will erode our public support and, ultimately, our ability to save species from extinction.

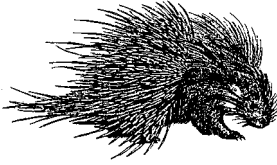
Finally, to put research and conservation killings into perspective: factory farming in the USA alone kills over 100 million mammals and 5 billion birds every year, after short, very unnatural, lives. Your diet is almost certainly causing a lot more suffering than your research.

Further reading:

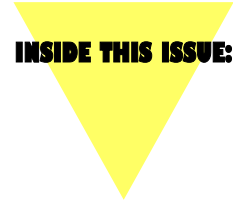
DeGrazia, B. 2002. Animal rights: a very short introduction. Oxford University Press. *A readable overview of the field from an advocate of “equal consideration”.*

Richard T. Corlett

Porcupine!



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Editorial

Welcome to our new approach to Porcupine! We have done away with bulk mailings in favour of using a leaflet (which has been circulated separately), designed to highlight the flavour of each issue, in combination with our web-based version. I hope that you enjoy our new look, and would welcome feedback.

The delay in getting *Porc!* 32 out is largely my fault, but I have as one of my excuses some good news to round out Professor Dudgeon's ‘Year of Biodiversity’. Some of my leave last year was spent on preparations for a CITES conference in which, among other things, several species of interest to Hong Kong were listed on Appendix II. Important among these was the Humphead Wrasse (So Mei), part of the live fish trade and a star turn at Ocean Park. The listing is an important acknowledgement that some fishes, like other vertebrates, can be seriously threatened by exploitation, and will hopefully lead to a more sustainable trade in the future.

On whether or not fish, threatened or otherwise, may suffer pain in the same way as their back-boned relatives, however, is not so clear, according to the lead article of this issue (see also the two papers below by Sneddon and Sneddon et al. – thanks to Kenny

Leung for alerting me to these). An increasing number of publications suggest there is little reason to doubt that they probably do, but since we may never know for sure, we certainly can't rule out the possibility. The lead article, on animal rights and conservation, helped me to make a new year's resolution; in deference to the Rooster (or at least to his hen), I will only buy free-range eggs from now on.

Bibliography

Sneddon LU (2003) The evidence for pain in fish: the use of morphine as an analgesic. *Applied Animal Behaviour Science* 83 (2): 153-162.

Sneddon LU, Braithwaite VA, Gentle MJ (2003) Do fishes have nociceptors? Evidence for the evolution of a vertebrate sensory system. *Proceedings of the Royal Society of London Series Biological Sciences* 270 (1520): 1115-1121.

YS

News from DEB

2005 seems set to become the 'Year of Biodiversity' if present indications are anything to go by. Already we have faced the invasion of the killer Fire Ants (*Solenopsis invicta*), which is already well established on the mainland New Territories, and faced the spectre of Giant Anteaters wandering down Nathan Road. But seriously, the idea that we should introduce exotic anteaters to control invasive ants makes little sense, especially when we have ant-eating Pangolins existing locally. Perhaps this suggestion reflects a broader lack of awareness about Hong Kong's native biodiversity, as I doubt many senior government officials would recognise a Pangolin if they were fortunate enough to meet one on a dark night. My initial reaction to the *S. invicta* scare was to assume that someone had made an error, and confused exotic *S. geminata* with its more obnoxious relative. *Solenopsis geminata* was first recorded in Hong Kong in the 1930s, and was still here when John Fellowes studied local ants for his PhD in the 1990s, so it is safe to assume that it has become naturalized. After some delay, however, the identification of *S. invicta* was confirmed. My second reaction to the invasion was to wonder if we could study the impacts of Fire Ants on native biodiversity. Such an investigation would require a comparison of infested and ant-free areas, and I doubt that we could justify allowing an infestation to persist just so that we could look at its effects. So, could government have done anything to prevent the invasion? I think the answer is 'not much'. The Fire Ants were in Guangdong for some time before their presence was announced and, given the number of colonies detected here, it seems likely that they were transported into Hong Kong with ornamental plants well before the alarm was raised in the run-up to Chinese New Year. A quick response from government aimed at eradicating established colonies was what was needed and what, in fact, happened.

A second biodiversity issue that has been receiving some attention is government's ongoing consultation process on measures to protect local marine fisheries. Views on this vary: some feel that the annual summer moratorium on fishing should be lifted (although there are no signs that China will make such changes to fishery regulations that apply to neighbouring waters) while, at the other end of the spectrum, there have been suggestions that all of Hong Kong's territorial waters be designated a 'no take' zone. There is an almost

infinite variety of compromise positions that might or might not involve licensing schemes for commercial fishers. The key point is that debate has been initiated because (at last) someone in authority has not only noticed that the existing situation is unsustainable but has decided that something must be done to improve things.

And then there is the recently-announced Lantau Concept Plan ... With regard to that, space (and, perhaps, politesse) does not allow me to comment. Instead, I have one other thing to report. At the end of 2004, a new Research Assistant Professor, Dr Yixin Zhang, joined DEB. Yixin did his PhD at Umea University in Sweden, and has since worked at the University of California in Santa Barbara and the University of British Columbia. He is a stream biologist, and will be spending his three years with us looking at land-water interactions, and their relevance for conservation and management. Yixin introduces himself elsewhere in this issue of *Porcupine!*

All that remains is for me to wish readers of *Porcupine!* a healthy and prosperous – albeit belated - Year of the Rooster.

David Dudgeon



Fire ant nest in Long Valley: the nests are unique in Hong Kong. (Photo: Billy Hau)

All about Yixin Zhang, "newtest" Research Assistant Professor in DEB

by Yixin Zhang

I got my M.Sc. and Ph.D. in Department of Animal Ecology at Umeå University in Sweden. After graduation, I received a Post-Doctoral Fellowship of Swedish Foundation for International Cooperation in Research and Higher Education and worked in the Department of Ecology, Evolution and Marine Biology at the University of California at Santa Barbara in USA. After that, I worked in the Department of Forest Sciences at the University of British Columbia in Canada as a postdoc and research associate.