

## Policy piece

### Why should we conserve primates?

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The 21st Congress of the International Primatological Society will be held in Entebbe, Uganda from 25–30 June 2006 with the theme ‘Primate Conservation in Action’ (<http://www.ips2006uganda.org/>). For the first time, the society will be meeting in a country, which is home to species of the great apes other than *Homo sapiens*. Over 5 days, nearly 600 papers will be presented, demonstrating the huge interest in preservation of man’s closest relatives. The theme of the congress is timely. Many of Africa’s primate species are threatened and urgent action is needed to protect many of the rarer species, which are particularly vulnerable to habitat loss (Chapman, Lawes & Eeley, 2006).

But should the rallying call for primate conservation be taken up in a broader African ecological context? There are many threatened plants and animals in Africa, should we single out primates as a taxonomic group for special attention? The question is of particular interest because of the similarity of primates to humans, especially the great apes of the African rain forest. Here, we briefly look at the ecological importance of primates in forests, their potential as an indicator and conservation flagship, and conclude with a short discussion on ethical reasons for their conservation.

As large bodied, mobile, fruit eaters, many species of primates are potentially important seed dispersers, and thus a vital part of the maintenance of diverse tropical forests. Several species have been shown to play an active role in seed dispersal, and frugivorous primates are among the most important dispersers in tropical forests (Chapman, 1995). For example, a study in Kibale National Park found that tree seedling recruitment was reduced in forest fragments with fewer primate frugivores, suggesting that extirpation of primates might have a cascade effect on ecosystem dynamics (Chapman & Onderdonk, 1998).

Monkeys common in the African savanna, have even been credited with forest expansion by transporting seeds out of the forest and into favourable areas for germination such as termite mounds (Cowlishaw & Dunbar, 2000). However, not all primate species are key seed dispersers. Seeds may be broken down during mastication or digestion, as seen for guereza monkeys in Cameroon (Poulsen, Clark & Smith, 2001). Furthermore, a study of seed spitting by cercopithecines in Kibale showed that the seeds did not go very far (Dominy & Duncan, 2005).

Some species are useful indicators of diversity and can play the role of conservation flagships in the sense of Caro & O’Doherty (1999). Most primates live in tropical forests, so primate and tropical forest conservation are inextricably linked (Mittermeier *et al.*, 2005; Chapman *et al.*, 2006). For example, the recent discovery of new species of mangabey monkey in the Udzungwa and Rungwe mountains of Tanzania (Jones *et al.*, 2005) could be a key factor in promoting conservation in a region remarkable for the many new species of plant (Vollesen, 2000; Cheek, 2003; Davis & Mvungi, 2004) and animal (Stanley, Rogers & Hutterer, 2005) being discovered. But, it is worth noting that a humble toad from the Udzungwa mountains (Poynton *et al.*, 1998) is also attracting a great deal of interest due to its habitat being affected by a hydropower project (Pritchard, 2000; Quinn *et al.*, 2005; Krajick, 2006).

This leaves us with ethics. Nonhuman primates are special because they are genetically and behaviourally similar to humans. They deliberately use plants as medicines (Human, 1997; Human & Caton, 2001). Chimpanzees have been shown to possess distinctive community behaviour patterns that can be described as cultures (Whiten *et al.*, 1999; Biro *et al.*, 2003), they use tools (Humle & Matsuzawa, 2002; Hicks, Fouts & Fouts, 2005) and display altruism (Warneken & Tomasello, 2006). We might have an instinctive need to preserve our nearest genetic relatives through a selfish gene imperative, though the selfish gene idea as proposed by Dawkins (1989) has been comprehensively debunked (McGrath, 2005). It may be that we should preserve primates because they are closer to us on the ‘Great Chain of Being’, which is the concept of living forms being graded in order from the

lowest forms to the most complex and perfect (Lovejoy, 1960). Or perhaps, we should take a Kantian view and respect primates and their natural environment because our treatment of them mirrors the way that we behave towards other humans (Kant, 1873). Some people even suggest that we should go beyond Kant and establish legal rights for animals comparable with those enjoyed by humans:

'Once we ask why it should be that all humans-including infants, mental defectives, psychopaths, Hitler, Stalin and the rest-have some kind of dignity or worth that no elephant, pig, or chimpanzee can ever achieve, we see that this question is as difficult to answer as our original request for some relevant fact that justifies the inequality of humans and other animals' (Singer, 1976).

If primates were to have legal rights, then, they would have an inalienable entitlement to their natural environment for a life of dignity and freedom. The great apes in particular have been a focus of attention (Cavalieri & Singer, 1993), and a declaration has been proposed, which includes:

'We demand the extension of the community of equals to include all great apes: human beings, chimpanzees, bonobos, gorillas and orang-utans. The community of equals is the moral community within, which we accept certain basic moral principles or rights as governing our relations with each other and enforceable at law' (<http://www.greatapeproject.org/>).

Whatever the ethical reasons behind conservation, the practical aspects involve long-term support and some difficult decisions. A study on African rain forest protection indicated that success of conservation efforts is contingent on strong public support, effective law enforcement, low human population densities and substantial support from international donors (Strushaker, Struhsaker & Siex, 2005). The study also found that protected area success was not correlated with employment benefits for the neighbouring community, conservation education, conservation clubs or with the presence of integrated conservation and development programmes. In other words, if the habitat of the most threatened African primates, including the great apes, is to be effectively conserved it needs to be done with the interests of the forests as the primary management objective rather than the interests of the local human communities. This means that, despite the ecological importance of primates, their role as indicators and flagships for conservation, and the ethical reasons for focussing on primate conservation, there will be

conflicts between the needs of local people and conservation interests. This will require responsible commitment, trust and reliable sources of funding to solve.

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