

Edentata

The Newsletter of the IUCN/SSC Edentate Specialist Group

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Alexis Rockman '*Big Game*' 2000, Oil and acrylic on wood, 68x80 inches.
Artist Alexis Rockman kindly gave permission to reproduce his painting.
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EDITORIAL

The Conservation of Xenarthra Will Be Vital for the Preservation of Mammalian Phylogenetic Diversity

Mammalian standing diversity may reach 5,000 species, currently divided into 26 orders, 135 families and 1135 genera. The edentates (Xenarthra) contribute with a meager 29 species. The 2000 IUCN Red List of Threatened Animals has eight species of edentates classified in one of its categories, out of a total of 1,130 mammals, not a single (fortunately) yet considered critically endangered. This might lead one to believe that the fate of sloths, armadillos and anteaters represents a negligible portion of the challenge of preserving mammalian evolutionary diversity (compare this with the 223 primate taxa considered threatened, 51 of which Critically Endangered!).

However, recent molecular evidence (Madsen *et al.*, 2001; Murphy *et al.*, 2001) strongly supports the long-suspected notion of Xenarthra being an ancient, basal group within the placental mammals, and one of its only four extant superordinal clades, with origins being traced back to Gondwanaland. What such results suggest is that the four families of living edentates retain a disproportional amount of the evolutionary history of placental mammals, immediately making the plight of these 29 species a great priority for conservation. Unfortunately, as a group, edentates are very poorly studied when compared with other mammals, in particular regarding their conservation status in the field. Most species are notoriously difficult to investigate in the wild, which presumably drives away potential students.

Hoping to stimulate additional work focusing on sloths, armadillos and anteaters, particularly those suspected to be threatened by habitat destruction and hunting, the Edentate Specialist Group has created an Action Fund to support studies that will help elucidate their status in the wild. The fund is being financed by Conservation International's Center for Applied Biodiversity Science. We will hope to make the turn-around time for the funding of proposals as fast as possible, and we especially invite students from developing countries of the western hemisphere, home of the edentates, to apply for funding. There is a more detailed description of this opportunity in this issue of *Edentata*.

Gustavo Fonseca
Chair
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References

- Madsen, O., *et al.* 2001. Parallel adaptive radiations in two major clades of placental mammals. *Nature* 409: 610-614.
- Murphy, W. J. *et al.* 2001. Molecular phylogenetics and the origins of placental mammals. *Nature* 409: 614-618.