

Saimiri Sciureus; resilience in the face of trade.

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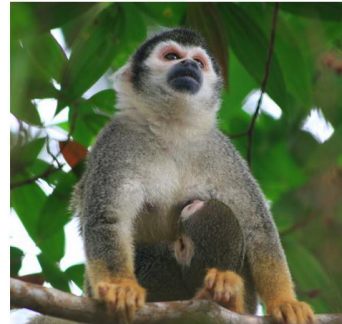
Introduction

Wildlife trade is one of the leading threats to biodiversity conservation. While international trade is regulated and monitored through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), data on domestic trade is often difficult to obtain. In South America the off-take of primates for bush meat has been estimated to involve millions of individuals a year but levels of primates traded alive are not readily available.

Animal rescue centres offer refuge to fauna rescued from trade yet little data are available on the composition or turnover of these populations. With potentially significant numbers of globally threatened species, rescue centres have the potential to make a significant contribution to species conservation. Ecuador is one of the most biodiverse countries in the world and it has many centres full of neo-tropical animals rescued from trade.

Methods

In this study data on live animal intake from 23 rescue centres in Ecuador were collected between 2003 and 2008. In order to place the numbers in context, data were also obtained from records on primates held in South American zoos (International Species Information System – ISIS – for 2010) and on the number of primates exported from Ecuador (CITES trade database, 2003-2010). Prevalence of primates, age at intake and mortality rates compared to other species were analysed. Data were collected from one Amazonian rescue centre over an 18 year period (1992 to 2010) with 765 primates brought into the centre.



Results

The data demonstrated that 46% of mammalian intake across the centres were primates. Of these, 66% were less than 2 years old upon arrival at the centres and 75% died within the first year. The majority of primates were *Saimiri Sciureus* [457 individuals]. This species also showed the greatest resilience with the lowest mortality rates. Only 13% died in the first year. This species were not traded internationally during the same period and ISIS registered zoos only hold 12% of the number of squirrel monkeys in captive populations in Ecuadorian rescue centres.

Discussion

The preponderance of primates arriving at the rescue centres points to their popularity as pets and as well as the large pressure that the pet trade exerts on wild populations. The pet primate trade has been argued to be a bi-product of the bush meat trade, and the bias toward primate babies arriving at the centres corroborate this. High mortality upon arrival at rescue centres is indicative of the unsuitability of wild primates to be kept as pets. *Saimiri Sciureus* numbers in zoos were not significantly higher than other species implying that their popularity as an exhibition animal does not exceed that of many other species. Therefore the low mortality rates of the squirrel monkeys under the same adverse conditions as other species points to their resilience, versatility and adaptability as a species but also implies the off-take of species with high mortality rates may be equally as abundant in trade, but they do not survive long enough to be rescued.

	IUCN Status	Population trend	CITES	Trade	South America Zoos	RC Intake
<i>Alouatta palliata</i>	LC	Unknown	I	0	0	21
<i>Alouatta seniculus</i>	LC	Unknown	II	4	13	7
<i>Aotus lemurinus</i>	Vulnerable	Decreasing	II	0	2	2
<i>Aotus vociferans</i>	LC	Decreasing	II	6	0	7
<i>Ateltes belzebuth</i>	E	Decreasing	II	117	7	32
<i>Ateltes fusciceps</i>	CR	Decreasing	II	0	35	15
<i>Catlocercus cupreus</i>	LC	Unknown	II	10	2	19
<i>Catlocercus torquatus</i>	LC	Unknown	II	0	0	5
<i>Callithrix pygmaea</i>	LC	Decreasing	II	0	33	45
<i>Cebus albifrons</i>	LC	Decreasing	II	3	37	155
<i>Cebus apella</i>	LC	Unknown	II	0	101	21
<i>Cebus capucinus</i>	LC	Decreasing	II	0	13	30
<i>Lagothrix lagotricha</i>	Vulnerable	Decreasing	II	150	27	76
<i>Pithecia monachus</i>	LC	Decreasing	II	26	1	8
<i>Saguinus fuscicollis</i>	LC	Decreasing	II	0	18	31
<i>Saguinus nigricollis</i>	LC	Decreasing	II	0	3	51
<i>Saguinus tripartitus</i>	T	Decreasing	II	0	0	12
<i>Saimiri sciureus</i>	LC	Decreasing	II	0	54	457
Total				316	346	994

Species	RC Intake	Intake <1yrs old	Intake <1yrs old (%)	Dead <1yrs old	Dead <1yrs old (%)
<i>Saimiri sciureus</i>	457	257	56	58	13
Total	994	656	66	492	75